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CURRENT AFFAIRS

NATIONAL NEWS

RECENTLY, THE SUPREME COURT (SC) HAS EXPRESSED ITS VIEWS ON EXTRA-JUDICIAL KILLINGS (EJK) IN INDIA, AFTER AN ENCOUNTER IN UTTAR PRADESH -

- Recently, the Supreme Court (SC) has expressed its views on Extra-Judicial Killings (EJK) in India, after an Encounter in Uttar Pradesh, stating that the right to life as a Fundamental Right enshrined in the Constitution and EJKs are a violation of this right.
- The SC also said that in recent years, there have been several cases of encounters and extra-judicial killings in India, which have raised concerns about the misuse of power by the police.
- Extra judicial killing refers to the killing of a person by the state or its agents, without any judicial or legal proceedings. This means that the person is killed without a trial, due process, or any legal justification.
- Extra judicial killing can take various forms, such as extrajudicial executions, summary executions, and enforced disappearances. These acts are illegal and violate human rights and the rule of law.
- They are often carried out by law enforcement agencies or security forces in the name of maintaining law and order or Combating Terrorism.
- The Constitution guarantees the Right to Life and Personal Liberty under Article 21, which is non-negotiable and applicable to everyone. It is the responsibility of the police to follow the Constitution and protect the Right to Life of every individual, regardless of innocence or guilt.



Rights of Police-

- The police can use force, including lethal force, in self-defense or to maintain peace and order.
- Every person has the right to self-defense under Section-96 of the Indian Penal Code.
- Section-46 of the Criminal Procedure Code allows the police to use force, including lethal force, to arrest someone accused of a serious crime.

Status of EJKs in India-

- While India has seen a 15% decline in encounter killing cases registered in the six years between 2016-'17 and 2021-'22 – till March 2022 – the cases shot up by 69.5% in the last two years. India has registered 813 cases of encounter killings in the last six years.
- In the six years since April 2016, Chhattisgarh recorded the most extrajudicial killing cases at 259, followed by Uttar Pradesh at 110 and Assam with 79.

PM MODI FLAGS OFF RAJASTHAN'S FIRST VANDE BHARAT EXPRESS TRAIN -

- Prime Minister Narendra Modi launched Rajasthan's first Vande Bharat Express train via video conferencing, which is the 15th such train in the country.
- The prime minister emphasized that the Vande Bharat Express symbolizes development, modernity, self-reliance, and stability, enriching the spirit of 'India First, Always



First'. He also mentioned that the train will greatly benefit Rajasthan's tourism industry.

- Modi highlighted that this was the sixth Vande Bharat Express launched in the past two months, and that in the past, the modernization of the railways had been hindered by selfish and corrupt politics.
- The regular service of the Vande Bharat train will begin on April 13, and it will operate between Ajmer and Delhi Cantonment with stops in Jaipur, Alwar, and Gurgugram.

ELECTION COMMISSION GRANTS NATIONAL PARTY STATUS TO AAM AADMI PARTY -

- In a significant development, the Election Commission has granted national party status to the Aam Aadmi Party (AAP).
- The party's recognition as a national party is based on its electoral performance in four states- Delhi, Goa, Punjab, and Gujarat.
- With this recognition, the AAP joins the list of national parties in India such as the Bharatiya Janata Party, Congress, Bahujan Samaj Party, and Communist Party of India (Marxist).
- The recognition also means that the party can contest elections in all states and union territories of India.
- On the other hand, the national party status of the All India Trinamool Congress, Nationalist Congress Party (NCP), and Communist Party of India (CPI) has been withdrawn by the Election Commission.
- Additionally, the state party status of RLD in Uttar Pradesh, BRS in Andhra Pradesh, PDA in Manipur, PMK in Puducherry, RSP in West Bengal, and MPC in Mizoram has been revoked.
- The decision was taken based on the performance of these parties in the recent Assembly elections and Lok Sabha polls. As per the rules laid out by the Election Commission, a political party is recognised as a national party if it secures at least 2% of the total votes polled in Lok Sabha elections in at least three states or wins at least 6% of the total seats in the Lok Sabha from at least three states. The party should also have at least four members in the Lok Sabha.



INDIA AND MALAYSIA AGREE TO SETTLE TRADE IN INDIAN RUPEES -

- India and Malaysia have agreed to settle trade in Indian rupees. This mechanism is expected to enhance India-Malaysia bilateral trade which touched USD 19.4 billion during 2021-22.
- Malaysia is the third largest trading partner of India in the ASEAN region, after Singapore and Indonesia that account for USD 30.1 billion and USD 26.1 billion bilateral trade with India respectively.
- In July 2022, the Reserve Bank of India (RBI) allowed the settlement of international trade in Indian rupees. In December 2022, India saw its first settlement of foreign trade in rupee with Russia – as part of the 'International Settlement of Trade in Indian Rupee' mechanism initiated by the RBI.
- In March 2023, banks from 18 countries were allowed by the RBI to open Special Rupee Vostro Accounts (SRVAs) to settle payments in Indian rupees. It includes: Botswana, Fiji, Germany, Guyana, Israel, Kenya, Malaysia, Mauritius, Myanmar, New Zealand, Oman, Russia, Seychelles, Singapore, Sri Lanka, Tanzania, Uganda, and the United Kingdom.



Benefits of Trading in Indian Rupees-

Controlling Depreciation of Rupees-

- India is a net importer and the value of the Indian rupee has been declining consistently.
- Using the rupee for international trade transactions will help check the flow of dollars out of India and slow the depreciation of the currency albeit to a "very limited extent."

Better Pricing for Goods and Services:

- With the ability to invoice trade in Indian rupees, Indian traders can achieve better pricing for their goods and services.
- Also, this mechanism is expected to benefit both sides of the trade by reducing currency conversion spreads.

Vostro Account-

- It is an account that domestic banks hold for foreign banks in the former's domestic currency, in this case, the rupee.
- Domestic banks use it to provide international banking services to their clients who have global banking needs.
- The bank holding the Vostro account acts as a custodian of the foreign bank's funds and provides various services such as currency conversion, payment processing, and account reconciliation.

RECENTLY, THE MINISTRY OF HEALTH AND FAMILY WELFARE HAS LAUNCHED THE NATIONAL RABIES CONTROL PROGRAMME (NRCP) FOR PREVENTION AND CONTROL OF RABIES -

Objectives of NRCP-

- Provision of rabies vaccine & rabies immunoglobulin through national free drug initiatives;
- Training on appropriate animal bite management, prevention and control of rabies, surveillance and intersectoral coordination;
- Strengthening surveillance of animal bites and rabies deaths reporting;
- Creating awareness about rabies prevention.
- Rabies is a vaccine-preventable, zoonotic, viral disease. It is caused by a Ribonucleic Acid (RNA) virus that is present in the saliva of a rabid animal (dog, cat, monkey, etc).
- It is invariably transmitted following a bite of an infected animal that leads to deposition of the saliva and the virus in the wound. Once clinical symptoms appear, rabies is virtually 100% fatal. The death invariably occurs in four days to two weeks due to cardio-respiratory failure.
- In up to 99% of cases, domestic dogs are responsible for rabies virus transmission to humans. The incubation period varies from 2-3 months but may vary from 1 week to 1 year, or rarely even more.
- Rabies can be prevented by vaccinating pets, staying away from wildlife, and seeking medical care after potential exposures before symptoms start.
- The first symptoms of rabies may be similar to flu and may last for a few days, which includes- Fever, Headache, Nausea, Vomiting, Anxiety, Confusion, Hyperactivity, Difficulty swallowing, Excessive salivation, Hallucinations, Insomnia.
- India is endemic for rabies, and accounts for 36% of the world's rabies deaths.
- It causes 18,000-20,000 deaths every year. About 30-60% of reported rabies cases and deaths in India occur in children under the age of 15 years as bites that occur in children often go unrecognized and unreported.
- In India, dogs are responsible for about 97% of human rabies, followed by cats (2%), jackals, mongooses and others (1%). The disease is endemic throughout the country.



SUPREME COURT VERDICT ON ECI APPOINTMENTS -

- A five-judge bench of the Supreme Court (SC) unanimously ruled that the appointment of the Chief Election Commissioner and the Election Commissioners shall be made by the President on the advice of a Committee consisting of the Prime Minister, the Leader of the Opposition of the Lok Sabha and Chief Justice of India (CJI).
- In case no leader of Opposition is available, the leader of the largest opposition Party in the Lok Sabha in terms of numerical strength will be a part of such committee.
- SC stated that a reading of the debates of the Constituent Assembly (CA) on the appointment of ECI makes clear that all the members were of the clear view that elections must be conducted by an independent Commission.
- The government had argued that in the absence of such a law by parliament, the President has the constitutional power and asked the SC to exhibit Judicial restraint.
- As the constitution places the power to make any law on appointment of ECI in the hands of Parliament, SC ruling on this issue poses a question of Separation of Power.
- However, SC has stated that this ruling will be subject to any law made by parliament, which means parliament can bring a law to undo it.
- Another view is that since there is no law made by parliament on this issue, the Court must step in to fill the "constitutional vacuum."
- Originally the commission had only one EC but after the Election Commissioner Amendment Act 1989, it was made a multi-member body (1 CEC & 2 other ECs.).



PRIME MINISTER NARENDRA MODI DEDICATED WORLD'S LONGEST RAILWAY PLATFORM OF 1.5 KILOMETRES AT SRI SIDDHAAROODA RAILWAY STATION IN HUBBALLI IN THE STATE OF KARNATAKA-

- The inauguration of the platform was done during the PM's Karnataka visit in the presence of Union Minister Pralhad Joshi. It is to be noted that Indian Railways, South Western Railway Zones Hubballi is now registered in the Guinness Book of World Records for having the longest platform.
- The world's longest railway platform will cater to the transportation needs of the Hubballi-Dharwad region and will help in enhancing the operational capacity of the yard. Furthermore, it will enable the operations of trains in both directions.
- Gorakhpur platform in Uttar Pradesh is the second longest at 1,366.33 meters, and Kollam Junction in Kerala has the third longest platform at 1,180.5 meters.
- Meanwhile, Prime Minister Narendra Modi also inaugurated the 118-km long Bengaluru-Mysuru expressway. This new project is expected to aid the social and economic growth in the region.
- The new e-way built at a cost of Rs 8,480 crore will reduce the travel time between the cities from 3 hours to around 75 minutes.



SEVEN PM MITRA (PRADHAN MANTRI MEGA INTEGRATED TEXTILE REGION AND APPAREL) PARK SITES ANNOUNCED -

- Ministry of Textiles, has issued a notification to set up 7 Mega Integrated Textile Region and Apparel (PM MITRA) Parks with a total outlay of Rs. 4,445 crore.
- Seven sites were chosen out of 18 proposals for PM MITRA parks which were received from 13 States.
- The Parks will come up in Tamil Nadu, Telangana, Gujarat, Karnataka, Madhya Pradesh, Uttar Pradesh and Maharashtra.



KEY FEATURES of PM MITRA Parks-

- These Parks will offer an opportunity to create an integrated textiles value chain right from spinning, weaving, processing/dyeing and printing to garment manufacturing at 1 location.
- Intended to generate 1 lakh direct and 2 lakh indirect employment per park.
- Proposals of State Governments having ready availability of contiguous and encumbrance-free land parcel of 1,000+ acres along with other textiles related facilities & ecosystem are welcome.

About PM MITRA Scheme-

- It will offer the opportunity to create an Integrated Textiles Value Chain right from spinning, weaving, processing/dyeing and printing to garment manufacturing etc. at one location and will reduce the logistics cost of the Industry.
- A Special Purpose Vehicle owned by the Centre and State Government will be set up for each park which will oversee the implementation of the project.

‘OPERATION DOST’: INDIA WENT ALL OUT TO HELP QUAKE-HIT TURKEY, SYRIA-

- As part of “Operation Dost,” India is deploying a field hospital, supplies, and rescue personnel to the earthquake-stricken countries of Turkey and Syria, the foreign minister S Jaishankar tweeted.
- A 7.8-magnitude earthquake that occurred on Monday while people were asleep destroyed thousands of buildings, trapped an undetermined number of people, and may have affected millions of people.
- Time is running out for the thousands of injured people and others who are still believed to be trapped, World Health Organization director Tedros Adhanom Ghebreyesus cautioned.
- Adana witnessed the landing of a fourth Indian Air Force C17 bearing aid for Turkey’s earthquake victims.
- Turkey hadn’t experienced an earthquake of this size since 33,000 people died in the eastern region of Erzincan in 1939.



INTERNATIONAL NEWS

APPLE'S FIRST STORE IN INDIA OPENS IN MUMBAI -

- Apple opened its first official store in Mumbai, India. Located at the Jio World Drive mall in the Bandra Kurla Complex area, the store is the first of the two outlets Apple to open in India.
- Apple CEO Tim Cook threw open the gates to the 28,000 sq ft store. An Apple store is aimed at providing a top-notch experience to customers by functioning as a one-stop destination for product sales, services and accessories.
- These stores are also architectural marvels, adding to an unrivalled customer experience. The opening of Apple's two retail stores in India has generated much public excitement, especially among users of the tech giant's products. People have travelled from as far as Gujarat and Rajasthan to attend the grand opening of the store. 2023 marks 25 years of Apple presence in India.
- The opening of its retail stores underlines Apple's growing plans for India. The tech giant currently has a share of about 4 per cent in India's huge smartphone market dominated by Chinese and South Korean manufacturers, primarily due to high prices of its products.
- The company is now focusing on a retail push in what is the world's second largest mobile phone market. It has also started expanding its local manufacturing footprint. Apple's focus on India as a key market is also aimed at reducing its dependence on China at a time when relations between Washington DC and Beijing are strained.
- Apple's history in India can be traced back to the 1990s when the company first started selling its products in the country. However, it wasn't until the 2000s that Apple began to focus more on the Indian market.
- In 2007, Apple opened its first retail store in India, which was located in Mumbai. However, the company faced several challenges in expanding its retail presence in the country, including restrictions on foreign investment in the retail sector.



CHINESE DUAL-USE FACILITIES RAISE SECURITY CONCERNS IN INDIA-

- Recent satellite images showing the construction of a military facility on Coco Islands in Myanmar and a proposed remote satellite receiving ground station system in Sri Lanka, both coming up with Chinese help, have raised concerns in India of possible surveillance across the region.
- Coco Islands of Myanmar located very close to India's Andaman and Nicobar Island chain are strategically important for India.
- China, which has been eyeing to encircle India in the Indian Ocean Region with its aggressive 'String of Pearls' policy is developing a military facility on the islands.
- The island is being connected to the southern landmass using a new bridge which can anytime be used by the Chinese military.
- Because of its critical location, the proposed remote satellite receiving ground station in Sri Lanka can be used to spy on Indian assets and intercept sensitive information across the region.
- Satellite tracking facilities are inherently dual-use in nature which means they can be used for both civil and military activities.

- It's also apprehended that India's satellite launch facilities in Sriharikota and the missile test range in Odisha could come under the scanner of the ground station and launches from there could be tracked to obtain sensitive data.
- Recently, a Chinese ship was seen docking at Hambantota port in Sri Lanka, the forementioned stations are likely to work in coordination with such vessels to gather vital information in the region.

What is India doing to Counter China-

- "Necklace of Diamonds" Strategy- This strategy aims at garlanding China or in simple words, the counter encirclement strategy. India is expanding its naval bases and is also improving relations with strategically placed countries to counter China's strategies. India's strategic bases are:
 - Chabahar port – Iran
 - Sabang port – Indonesia
 - Sittwe port – Myanmar
 - Mongla port – Bangladesh
 - Changi naval base – Singapore

GUN VIOLENCE & MASS SHOOTING -

- In March 2023, a mass shooting occurred in a school in Nashville (in Tennessee, United States) killing 7 people. The attack was America's 129th mass shooting of 2023.
- No other developed country in the world has anywhere near the same rate of gun violence as the US.
- 48,830 people died from gun-related injuries in the US during 2021. While mass shootings and gun murders (homicides) generally garner much media attention, more than half of the total in 2021 were suicides.
- In each of the last three years, there have been more than 600 mass shootings in the US, almost two a day on average. Mass shooting is defined as an incident in which four or more people are injured or killed. This includes shootings that happen in homes and in public places.
- The Punjab government has been under pressure over "worsening" law and order after the murders of kabaddi player Sandeep Nangal Ambian in March 2022 and singer Sidhu Moosewala in May 2022. According to official data, there are more than 3.5 Lakhs arms licenses in Punjab.
- In November 2022, the Punjab government ordered a complete ban on the public display of weapons and songs glorifying violence.

Indian Arms Act of 1959-

- Under this Act, no person can acquire or carry any ammunition unless he holds a licence.
- An amendment to the Act in 2019 reduced the number of permitted firearms from three to one and provided a period of one year to deposit the excess firearms. The amendment also increased the duration of validity of a firearm license, from three to five years.
- Individuals who violate the Act can face at least seven years of imprisonment which may be extended to life.

VIENNA CONVENTION-

- After pro-Khalistan people took down the Indian flag at the High Commission in London, the Indian government summoned the "senior-most" UK diplomat, Deputy High Commissioner and reminded her of the basic obligations of the UK Government under the Vienna Convention.
- The Convention was adopted on 14th April 1961 by the United Nations Conference on Diplomatic Intercourse and Immunities held in Vienna,

Vienna Convention on the Law of Treaties

The Vienna Convention on the Law of Treaties is an international agreement regulating treaties between states. Known as the "treaty on treaties", it establishes comprehensive rules, procedures, and guidelines for how treaties are defined, drafted, amended, interpreted, and generally operated. [Wikipedia](#)

Signed: 23 May 1969

Languages: Arabic, Chinese, English, French, Russian and Spanish

Condition: Ratification by 35 states

Effective: 27 January 1980

Location: Vienna

Depositary: UN Secretary-General

Signatories: 45

Austria. India has ratified the convention.

- It entered into force on April 24, 1964, and is nearly universally ratified, with Palau and South Sudan being the exceptions.
- It sets out the special rules – privileges and immunities – which enable diplomatic missions to act without fear of coercion or harassment through enforcement of local laws and to communicate securely with their sending Governments.

ONE YEAR OF RUSSIA-UKRAINE CONFLICT -

- A year after start of Russia-Ukraine conflict, there are still signs of escalation everywhere. Calculations on both sides that this would be a short, swift war have proved wrong.
- The anniversary of war comes in the backdrop of Russia's withdrawal from New START treaty.
- The West has recently announced the supply of more advanced weapons to Ukraine, deepening its involvement in the conflict.
- In response, Russian President Vladimir Putin has already reinforced Russian positions along the 1,000-km long frontline in Ukraine.
- Risks of a direct confrontation between Russia and the North Atlantic Treaty Organisation (NATO), both nuclear powers, are also on the rise as the war is extended.
- Russia wanted to install a Moscow friendly regime and to take the whole of Ukraine's east and south, stretching from Kharkiv in the northeast through the Donbas in the east (which comprises Luhansk and Donetsk) to Odesa, the Black Sea port city in the southwest, turning the country into a land-locked rump. Russia has failed to meet any of these objectives.
- Nevertheless, Russia has taken substantial portions of Ukrainian territories, including Mariupol. Russia's territorial gains in Ukraine peaked in March 2022, when it controlled some 22% of pre-2014 Ukraine.
- Ukraine recaptured some land in Kharkiv and Kherson. But still, Russia controls some 17% of Ukraine. Focused fighting has been going on in some flashpoints along the frontline including Bakhmut, Donetsk and Zaporizhzhia.
- The U.S. is Ukraine's biggest aid provider — it has pledged military and financial assistance worth over USD 70 billion. The EU has pledged \$37 billion and among the EU countries, the U.K. and Germany top the list.



SAUDI, IRAN AGREE TO RESTORE DIPLOMATIC TIES-

- Recently, Saudi and Iranian officials held bilateral talks that concluded with an agreement to restore diplomatic ties which have been severed since 2016.
- The major diplomatic breakthrough negotiated by China in Beijing.
- It comes as diplomats have been trying to end a long war in Yemen, a conflict in which both Iran and Saudi Arabia are deeply entrenched.
- The two countries plan to reopen their respective embassies in Tehran and Riyadh.
- They also vowed to respect countries' sovereignty and not interfere in internal affairs. They also agreed to activate a 2001 security cooperation agreement, as well as a general economy, trade and investment agreement signed in 1998.

Conflict between Iran and Saudi Arabia-

- Saudi Arabia broke off ties with Iran in 2016 after protesters invaded Saudi diplomatic posts after Saudi Arabia had executed a prominent Shiite cleric days earlier.
- Saudi Arabia has long portrayed itself as the world's leading Sunni nation while Iran views itself as the protector of the Islam's Shiite minority.
- Since US's withdrawal from Iran's Nuclear deal, Iran was blamed for a series of attacks including one targeting the heart of Saudi Arabia's oil industry in 2019.
- Western nations and experts have blamed the attack on Iran though the latter has denied launching the attack.
- Iran and Saudi Arabia exploited these upheavals to expand their influence, notably in Syria, Bahrain and Yemen, further heightening mutual suspicions.

ICC ISSUES ARREST WARRANT FOR VLADIMIR PUTIN-

- The International Criminal Court (ICC) issued an arrest warrant for war crimes for President Vladimir Putin and a second Russian official.
- This is the first time that the ICC has issued an arrest warrant against one of the five permanent members of the United Nation Security Council.
- ICC issued an arrest warrant against Russian President Vladimir Putin for the alleged war crime of unlawfully deporting and transferring children from occupied areas of Ukraine to the Russian Federation.



What is ICC-

- On 17 July, 1998 Rome Statute was adopted by 120 States in direction of creating a more just world.
- On 1 July, 2002 Rome Statute took effect upon ratification by 60 states, officially establishing the ICC. Since it has no retroactive jurisdiction, the ICC deals with crimes committed on or after this date.

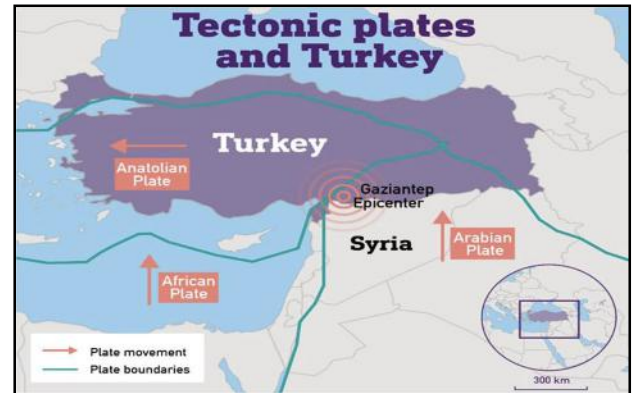
The Rome Statute, grants the ICC jurisdiction over four main crimes

- A. The crime of Genocide
 - B. Crimes against Humanity
 - C. War crimes
 - D. Crime of Aggression
- Currently, 123 countries are party to the Rome Statute, India is not a party to Rome Statute along with US and China.
 - The ICC was established to prosecute the most heinous offenses only when a country's own legal machinery fails to act. Unlike the International Court of Justice (ICJ), which deals with countries and inter-state disputes, the ICC prosecutes individuals.
 - Unlike the International Court of Justice, the ICC is not part of the United Nations system, with the UN-ICC relationship being governed by a separate agreement.
 - The ICJ, which is among the UN's 6 principal organs, mainly hears disputes between nations. It was established in 1945 and is seated at The Hague (Netherlands).

RECENTLY, POWERFUL TREMORS WERE FELT IN TURKEY AFTER AN EARTHQUAKE OF MAGNITUDE 7.8 STRUCK ALONG A WELL-KNOWN FAULT LINE CALLED THE ANATOLIA TECTONIC BLOCK-

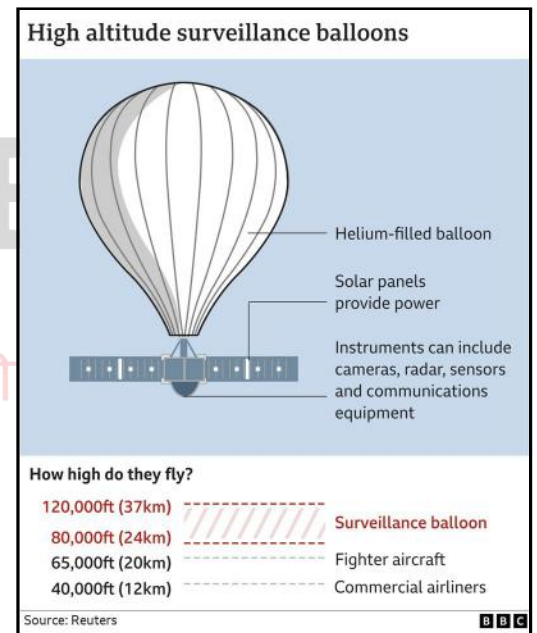
- The earthquakes emerged from relatively shallow depths and were a "strike-slip quake".
- It is being described as the strongest Earthquake that Turkey has experienced in over a century and the worst disaster since 1939. The 1939 earthquake was the Erzincan Earthquake that had caused "extreme damage in the Erzincan Plain and the Kelkit River Valley.

- In the Eastern Mediterranean region comprising Turkey, Syria and Jordan, tectonics are dominated by complex interactions between the African, Arabian, and Eurasian tectonic plates, and the Anatolian tectonic block.
- In addition to this, the Aegean Sea Plate, located in the eastern Mediterranean Sea under southern Greece and western Turkey, is also a source of seismic activity in the region.
- According to one estimate, almost 95% of Turkey's land mass is prone to earthquakes, while about a third of the country is at high risk, including the areas around the major cities of Istanbul and Izmir and the region of East Anatolia.



THE UNITED STATES (US) SHOT DOWN A CHINESE SURVEILLANCE BALLOON THAT HAS BEEN SPOTTED OVER US AIRSPACE FOR A COUPLE OF DAYS -

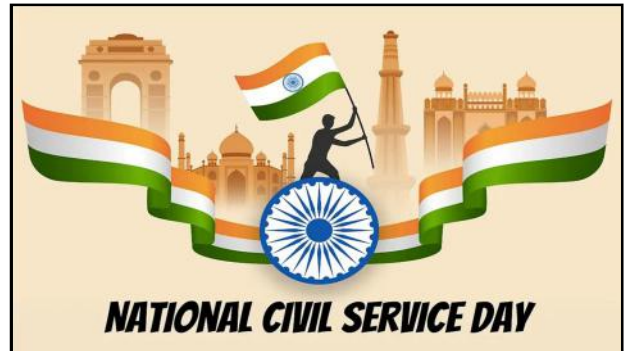
- These cheap, quiet and hard-to-reach balloons have been used for reconnaissance purposes, including in conflicts like the American Civil War.
- The practice became widespread during World War I and was used extensively during the Cold War when the US launched hundreds of balloons to gather intelligence on the Soviet Union and China.
- While their use has declined with the rise of unmanned drones and satellites, many countries still employ spy balloons.
- China has for decades complained about US surveillance by ships and spy planes near its own territory, leading to occasional confrontations over the years. According to China, the balloon was for research but got off track.
- Air space, in international law, is the space above a particular national territory, treated as belonging to the government controlling the territory.
- It does not include outer space, which, under the Outer Space Treaty of 1967 is declared to be free and not subject to national appropriation.
- The treaty, however, did not define the altitude at which outer space begins and air space ends.



IMPORTANT DATES AND EVENTS

NATIONAL CIVIL SERVICES DAY 2023 CELEBRATES ON 21ST APRIL-

- In India, April 21 is celebrated as National Civil Service Day, to recognize and appreciate the vital role played by civil servants in the advancement and betterment of the nation.
- This day offers a chance to express gratitude towards the contributions made by civil servants to society. The prime minister of the country presents awards of excellence on this occasion, to encourage civil servants to continue their efforts towards serving the public effectively.
- Civil Services Day is an occasion for civil servants to rededicate themselves to the cause of citizens and renew their commitments and excellence in work. The theme of this year's Civil Service Day is very apt- Viksit Bharat (विकसित भारत) aimed at 'Empowering Citizens and Reaching the Last Mile'. The theme underscores the Government's resolve and firm commitment to achieving a more equitable and prosperous India for all its citizens by engaging in inclusive growth.
- The inaugural National Civil Service Day was celebrated on April 21, 2006, at Vigyan Bhawan in New Delhi. This particular date was chosen to honour the occasion in 1947 when Sardar Vallabhbhai Patel, the first home minister of independent India, addressed Administrative Services Officers' probationers. During his motivational speech, Sardar Vallabhbhai Patel recognised civil servants as the "steel frame of India."
- National Civil Service Day serves as a platform to appreciate the exceptional services rendered by government workers in the country. On this day, the administration also acknowledges the accomplishments of experienced civil servants and presents medals to select individuals for their contributions towards the development of the nation.



THE INTERNATIONAL COUNCIL ON MONUMENTS AND SITES (ICOMOS) DECLARED APRIL 18TH AS THE INTERNATIONAL DAY FOR MONUMENTS AND SITES, ALSO KNOWN AS WORLD HERITAGE DAY-

- The International Council on Monuments and Sites (ICOMOS) declared April 18th as the International Day for Monuments and Sites, also known as World Heritage Day, in 1982.
- The theme for this year is "Heritage Changes," which focuses on the role of cultural heritage in climate action and its importance in protecting vulnerable communities.
- India is currently home to 40 UNESCO World Heritage Sites, making it the country with the sixth-largest number of sites in the world.
- Out of these, 32 are cultural sites, 7 are natural sites, and one is a mixed-type site, the Khangchendzonga National Park.
- The cultural heritage sites in India include ancient temples, forts, palaces, mosques, and archaeological sites that reflect the rich history and diversity of the country.
- The natural heritage sites in India include national parks,



wildlife reserves, and natural landscapes that showcase the country's unique biodiversity and ecological significance.

- The mixed-type site in India, the Khangchendzonga National Park, is known for its cultural significance as well as its biodiversity, as it is home to several rare and endangered species.
- In the six years since April 2016, Chhattisgarh recorded the most extrajudicial killing cases at 259, followed by Uttar Pradesh at 110 and Assam with 79.

INDIA CELEBRATES BIRTH ANNIVERSARY OF DR. BHIM RAO AMBEDKAR ON APRIL 14, 2023-

- Dr. Bhimrao Ramji Ambedkar was a prominent Indian jurist, economist, social reformer, and politician. He was born on April 14, 1891 in Mhow, Madhya Pradesh.
- His father, Subedar Ramji Maloji Sakpal, was a well-read person and follower of Sant Kabir.
- Ambedkar earned his Bachelor's degree from Bombay University and went on for further studies to Columbia University in New York and London School of Economics.
- In 1924, he started an Association for the welfare of the depressed classes and in 1927, he started the Bahishkrit Bharat newspaper to address the cause of the depressed classes. He also led the Mahad Satyagraha in March 1927.
- He participated in all three Round Table Conferences.
- In 1932, Dr. Ambedkar signed the Poona pact with Mahatma Gandhi, which abandoned the idea of separate electorates for the depressed classes (Communal Award).
- In 1936, he formed the Independent Labour Party to safeguard the interests of the depressed classes.
- In 1942, Dr. Ambedkar was appointed to the Executive Council of the Governor General of India as a Labour member and elected to the Constituent Assembly from Bengal in 1946.
- He was the Chairman of Drafting Committee and remembered as the Father of the Indian Constitution.
- In 1947, Dr. Ambedkar became Minister of Law in the first Cabinet of independent India. He resigned from the cabinet in 1951, over differences on the Hindu Code Bill.
- He was also awarded India's highest civilian honour the Bharat Ratna in 1990.



JALLIANWALA BAGH MASSACRE 104TH ANNIVERSARY-

- On April 13, 1919, the Jallianwala Bagh massacre took place in Amritsar, Punjab, which is remembered as a tragic event and a symbol of the atrocities committed against the Indian people during the British colonial era.
- The massacre played a significant role in India's fight for independence, as it increased the nation's determination to achieve self-rule and break free from British subjugation.
- Jallianwala Bagh Massacre Day 2023 marks 104 years since the tragic incident that is seen as a turning point in Indian History. It was this that led to Gandhi's full commitment to the cause of Indian nationalism and independence from Britain.
- The British military officer, General Dyer, on April 13, 1919 entered the Jallianwala Bagh (Amritsar) with his troops, where people had gathered to peacefully protest against the arrest of the two nationalist leaders, Satya Pal and Dr Saifuddin Kitchlew.
- Without so much as a warning to the people to disperse, he



ordered his troops to fire at the unarmed crowd. The onslaught lasted ten minutes till their ammunition was exhausted, after which the British soldiers left. A total of 1,650 rounds were fired, and more than 500 people were killed and murdered. The exact number of casualties remains unknown.

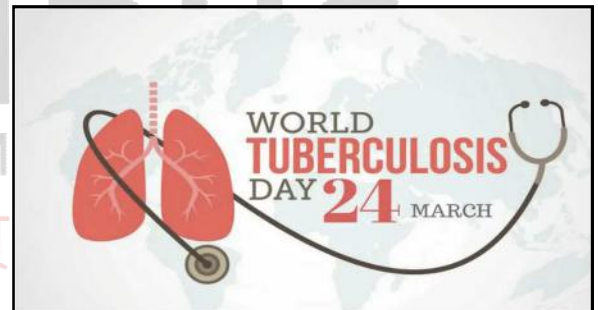
- On the morning of Baisakhi, Colonel Reginald Dyer had announced the implementation of a curfew throughout Amritsar and a ban on all processions that even prohibited a group of 4 or more people to meet publicly. At about 12:40 PM, Dyer received confidential information about the meeting taking place at Jallianwala Bagh that may result in riots and protests.

Who take revenge of Jallianwala Bagh massacre

- After the tragedy, Sardar Udham Singh avenged his people by killing the British officer serving as Governor General of Punjab, Michael O'Dwyer. He was Born on December 26, 1899, Udham Singh was a member of the Ghadar Party and the Hindustan Socialist Republican Association (HSRA).
- The assassination of Michael O'Dwyer, the ex-lieutenant governor of Punjab, brought him widespread notoriety. Singh carried out the murder in retaliation for the 1919 slaughter at Jallianwala Bagh in Amritsar.
- The recognized martyr (born Sher Singh) was born to Tehal Singh, a manual laborer, and Narain Kaur, a housekeeper, in the vicinity of Pilbad, some 130 miles from British India's Lahore. His older brother Sadhu was two years older than him, making him the youngest. They lost both parents at an early age, both to separate mishaps.

WORLD TUBERCULOSIS DAY 2023 OBSERVED ON 24 MARCH -

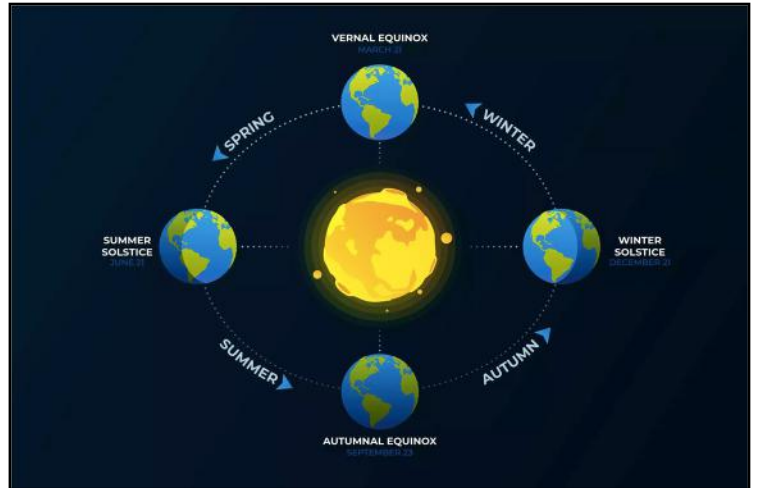
- World Tuberculosis Day is observed on March 24th every year to raise awareness about the global epidemic of tuberculosis (TB) and efforts to eliminate the disease. The World Health Organization (WHO) aims to end the TB epidemic by 2030.
- The organization works with governments, non-governmental organizations, and other partners to increase access to TB prevention, diagnosis, and treatment, and to develop new tools and strategies for TB control.
- On World Tuberculosis Day, organizations and individuals around the world organize events and activities to raise awareness about TB, its causes, symptoms, and treatment, and to promote efforts to eliminate the disease. The day provides an opportunity for people to come together and take action to help end the TB epidemic.
- The theme for this year's World Tuberculosis Day is "Yes! We can end TB!" and it focuses on urging leaders from around the world to take action to stop the TB epidemic.
- World Tuberculosis Day has been observed annually on March 24th since 1982, commemorating the date when Dr. Robert Koch announced his discovery of the tuberculosis (TB) bacterium in 1882. Koch's discovery paved the way for diagnosing and treating TB, which had been a major cause of illness and death in Europe at the time.
- In 1982, the International Union Against Tuberculosis and Lung Disease (IUATLD) and the World Health Organization (WHO) established World TB Day to raise public awareness about the global epidemic of TB and the efforts needed to control and eliminate the disease.



THE VERNAL EQUINOX IS OBSERVED ON MARCH 21ST 2023 -

- Equinox happens twice a year when the sun is directly above the equator, and it occurs on approximately 21st March and 23rd September.

- During an equinox, both the Northern and Southern Hemispheres have equal day and night time. The vernal equinox (spring equinox) takes place in the Northern Hemisphere around 20th or 21st March, while in the Southern Hemisphere, it happens on 22nd or 23rd September.
- Conversely, during the autumn season in the Northern Hemisphere on 23rd September (autumn equinox), it is springtime in the Southern Hemisphere, and on 21st March, it is the opposite.
- As a result, the Sun is located directly above the equator, and both hemispheres receive an almost equal amount of sunlight.



- After the spring equinox, the northern hemisphere tilts closer to the sun in March, resulting in more hours of daylight, with earlier sunrises and later sunsets.
- According to Hindu astrology, Vernal Equinox is known as Vasant Vishuva or Vasant Sampat.
- The Spring equinox brings earlier sunrises, later sunsets, and sprouting plants in the northern hemisphere.
- Later sunrises, earlier sunsets, chillier winds, and dry and falling leaves are observed in the south of the equator (southern hemisphere).

GLOBAL RECYCLING DAY 2023 OBSERVED ON 18TH MARCH -

- Every year on March 18th, Global Recycling Day is celebrated to increase people's comprehension about the harmful effects of plastic on the environment.
- This day also promotes recycling as a crucial concept and encourages people to organize events throughout the year to spread awareness about this cause.
- The theme of Global Recycling Day 2023 is "Creative Innovation". When it comes to recycling, we all have to be creative.
- In order to do it effectively, we need to think outside the box. Putting our recyclables in the bin is not sufficient – we need to be proactive and find new ways to reduce, reuse, and recycle.
- Global Recycling Day is a relatively new event that was established on March 18th, 2018, by the Global Recycling Foundation.
- The purpose of this day is to raise awareness about the importance of recycling and encourage people to adopt sustainable practices in their daily lives.



PULWAMA ATTACK ANNIVERSARY: 14TH FEBRUARY 2023 TRIBUTE AND SALUTE MARTYRED CRPF JAWANS-

- On February 14, 2023, the world is celebrating Valentine's Day and India will mark the fourth anniversary of the horrifying Pulwama terrorist assault that claimed the lives of 40 CRPF soldiers.
- A suicide bomber targeted a convoy of vehicles transporting security personnel on the Jammu Srinagar National Highway near Lethpora in the Pulwama area of Jammu and Kashmir.

- 40 Central Reserve Police Force (CRPF) jawans were killed in the attack. Adil Ahmad Dar, a young local of Pulwama who was associated with the terrorist organisation Jaish-e-Mohammed located in Pakistan, was the perpetrator of the incident (JeM).
- The attack, which provoked considerable indignation and condemnation throughout India, was claimed by JeM.
- In response to the incident, which raised tensions between India and Pakistan, the Indian government took a range of diplomatic, economic, and military measures against Pakistan.
- The launch of airstrikes by India against Pakistan-controlled terrorist facilities in Kashmir was seen as a significant escalation of hostilities between the two countries.
- Additionally, the incident was condemned by the international community, with several countries expressing their support for India and calling for action against terrorism.
- The United States and the United Nations both condemned the incident and asked that those responsible be held accountable.



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SPORTS NEWS

PT USHA BECOME FIRST WOMEN PRESIDENT OF INDIAN OLYMPIC ASSOCIATION-

- PT Usha was elected to become the president of the Indian Olympics Association (IOA).
- The Minister of Law and Justice of India announced on Twitter to congratulate the legendary Indian athletes. PT Usha becomes the first woman president of the IOA.
- She also expressed her intentions to run for IOA on 26th November 2022. She was the only contender for the election of the top position in the sports organization.
- PT Usha is one of the most accomplished athletes in India. She has won 11 medals including four gold at the Asian Games between 1982 and 1994.
- She also won four gold medals at the Seoul Asan Games in 1986. She has participated in 200m, 400m hurdles, and 4×400 relays.
- PT Usha submitted her candidacy papers for the position of president on 27th November 2022.



WPL 2023 FINAL: MUMBAI INDIANS DEFEATED DELHI CAPITALS BY SEVEN WICKETS-

WPL 2023: Full list of award winners

Awards	Player/Team	Cash Prize/Awards
WPL 2023 Orange Cap winner (Most Runs):	Meg Lanning, Delhi Capitals	Rs 5 Lakh
WPL 2023 Purple Cap winner (Most Wickets)	Hayley Matthews, Mumbai Indians	Rs 5 Lakh
Most Valuable Player	Hayley Matthews, Mumbai Indians	Rs 5 Lakh
Best Catch of the Season:	Harmanpreet Kaur, Mumbai Indians	Rs 5 Lakh
FairPlay Award:	Mumbai Indians and Delhi Capitals (Shared).	Trophy
Emerging Player of the Season:	Yastika Bhatia, Mumbai Indians	Rs 5 Lakh
Power Striker of the Tournament:	Sophie Devine, Royal Challengers Bangalore	Rs 5 Lakh
Player of the Match in Final	Natalie Sciver, Mumbai Indians	Rs 5 Lakh

- In the Women's Premier League (WPL) 2023 final, held at the Brabourne Stadium in Mumbai, the Mumbai Indians won against the Delhi Capitals by seven wickets.
- The Delhi Capitals chose to bat first after winning the toss, and set a target of 132 runs. In response, the Mumbai Indians achieved the target by scoring 134/3 in 19.3 overs.

AWARDS & RECOGNITIONS

VETERAN ACTOR-DIRECTOR SATISH KAUSHIK PASSES AWAY AT 67 -

- Veteran actor-writer-director Satish Kaushik has passed away at the age of 67. He was born on April 13, 1965, in Haryana, Kaushik was an alumnus of the NSD and the FTII, and started his film career in the early 1980s. He was an Indian actor, comedian, screenwriter, director and producer. He acted in theatres before finding his break in Bollywood.
- He directed Sridevi's film, "Roop Ki Rani, Choron Ka Raja" and later "Prem", both disasters, but he got his big hit with "Hum Aapke Dil Me Rehte Hain" and also "Tere Sang", among many others.
- As a film actor, Satish Kaushik was known for his roles as Calendar in the 1987 superhero film, Mr India, as Pappu Pager in Deewana Mastana (1997), and as Chanu Ahmed in the British film Brick Lane (2007), directed by Sarah Gavron.
- Satish Kaushik also won the Filmfare Best Comedian Award in 1990 for Ram Lakhan and in 1997 for Saajan Chale Sasural. He penned the dialogues for the 1983 classic "Jaane Bhi Do Yaaron", which acquired a cult following over the years. He is known for his comic roles as 'Calendar' in "Mr. India", "Pappu Pager" in "Deewana Mastana" among many others.



OSCARS 2023: RRR'S "NAATU NAATU" WINS BEST ORIGINAL SONG / THE ELEPHANT WHISPERERS WINS IN BEST DOCUMENTARY SHORT CATEGORY -

- The 95th Academy Awards (Oscars 2023) have announced that RRR's "Naatu Naatu" won Best Original Song.
- The song had to beat out songs like "Applause" from Tell It Like a Woman, "Hold My Hand" from Top Gun: Maverick, "Lift Me Up" from Black Panther: Wakanda Forever, and "This is Life" from Everything Everywhere All At Once.
- The Oscars 2023 was accepted by lyricist Chandrabose and composer Keeravani.
- The Elephant Whisperers, a Netflix documentary short from Kartiki Gonsalves and Guneet Monga, has won the 95th Academy Awards' Best Documentary Short award.
- The movie was up against 'Stranger At The Gate', 'Haulout', and 'How Do You Measure a Year?' The award is an honour of "my motherland, India," said director Gonzalves.
- The 41-minute short documentary, which was produced by Achin Jain and Guneet Monga and was directed by Kartiki Gonsalves, centres on a Tamil Nadu family who adopts two orphaned baby elephants from the Mudumalai Tiger Reserve.



DEFENCE NEWS

INDIA'S DEFENCE EXPORTS TO REACH RS 40,000 CRORE BY 2026: RAJNATH SINGH-

- India is set to become a major exporter of defense equipment and materials, with exports projected to be worth Rs 35,000 to Rs 40,000 crore by 2026.
- The announcement was made by Union minister Rajnath Singh during a speech at Symbiosis International University, where he emphasized the importance of self-reliance and creating an ecosystem that fosters self-confidence.
- Since adopting the Indianization program, India's defense exports have increased from Rs 900 crore in 2014 to Rs 15,000 crore to Rs 16,000 crore today. Singh expressed his pride in the country's defense forces, which are now meeting 80% of their needs through indigenous procurement.



FIRST BATCH OF AGNIVEERS PASSES OUT OF INS CHILKA-

- On a recent occasion, 2,585 Agniveers, including 272 women from the Indian Navy, successfully completed their training at INS Chilka, located in Odisha.
- The parade was reviewed by the Chief of the Naval Staff, Adm R Hari Kumar, and also attended by PT Usha, a Member of Parliament, and notable sports personality Mithali Raj, along with eminent naval veterans.
- Khushi Pathania, a 19-year-old from Pathankot, was honored with the General Bipin Rawat Trophy for Best Female Agniveer at the first passing out parade of Agniveers held at INS Chilka. Khushi's grandfather was a Subedar Major, and she is the daughter of a farmer.
- The "Agnipath" scheme is a defence recruitment initiative in India that aims to reduce the increasing salary and pension expenses by hiring short-term soldiers on a contract basis.
- These soldiers, known as 'Agniveer', will be initially recruited for four years, after which some of them may be retained. The scheme offers Indian youth an opportunity to serve in the Armed Forces and aims to achieve an optimal balance between youth and experience in the Army.
- Women will also be recruited into the armed forces under this scheme. Previously named "Tour of Duty", the initiative was launched in the presence of the Chiefs of the three Services. Currently, the Army recruits youth under Short Service Commission for an initial tenure of 10 years, which can be extended up to 14 years.
- Those recruited under the Agnipath scheme, known as Agniveers, will receive a monthly salary ranging from Rs 30,000 to Rs 40,000, along with applicable allowances. The Seva Nidhi, which is their salary package, will be exempt from Income Tax. However, they will not be entitled to receive gratuity and pensionary benefits.



INDIAN ARMY TO BUY 310 INDIGENOUS ADVANCED TOWED ARTILLERY GUN SYSTEM -

- The Ministry of Defence received a proposal from the Indian Army to buy 310 Advanced Towed Artillery Gun Systems (ATAGS) for deployment along the borders with China and Pakistan, marking a significant step towards 'Make-in-India' in the defense sector. The Indian Army has submitted a proposal worth more than USD 1 billion, which is currently being discussed.

- This would be the first order for the indigenous howitzer, which can strike targets at distances of up to 50 kilometers and is thought to be the best gun in its class.
- The forces have been testing the gun at various altitudes and terrain. They have been upgraded based on user suggestions.
- Defence Research and Development Organisation (DRDO) has shared raw howitzer technology and know-how with two private firms, Tata Advanced Systems, and Bharat Forge Group, and they will supply the system to the forces, which will include over 320 high mobility vehicles.
- The 155mm/52 caliber Advanced Towed Artillery Gun System (ATAGS) trials were completed at the Pokhran Field Firing Range (PFFR) between April 26 and May 2.
- The ATAGS is an indigenous towed artillery gun system project undertaken in mission mode by the DRDO as part of the Indian Army's artillery modernization program.
- The Armament Research and Development Establishment (ARDE) in Pune is the DRDO's nodal laboratory for the design and development of ATAGS.
- The development was carried out in collaboration with two industry partners, Tata Advanced Systems Ltd, and Bharat Forge Ltd, as well as active participation from other industries.



GLOBAL FIRE POWER INDEX, NO CHANGE IN TOP 4 MILITARY RANKINGS-

- The Global Firepower Index ranks the countries based on their potential military strength. India is ranked fourth in the index. The Global Firepower Index ranked 145 countries. The countries were evaluated based on prolonged offensive and defensive military campaigns.
- The Global Firepower Index is calculated using fifty individual factors from geography to logistical capability.
- It also includes manpower, land forces, airpower, natural resources, naval forces, logistics and financials.
- Under manpower, the factors considered are total population, paramilitary, reaching military age annually, active reserves and active services.
- Under equipment, the factors considered are trainer fleet, aircraft fleet strength, helicopter fleet, attack fleets, rocket projectors, tank strength, towed artillery, aircraft carriers, naval fleet strength, destroyers, submarines, coastal patrol craft, frigates, mine warfare craft, coastal patrol craft and tanker fleets.
- The finance factors include external debt, defence budget, reserves of foreign exchange and gold and purchasing power parity.
- The Global Firepower Index, 2022, puts the US at the top, Russia at the second spot, China at No. 3, and India at No. 4.



AGNI-5 BALLISTIC MISSILE-

- Agni-5 is an ingeniously built advanced surface-to-surface ballistic missile developed under the Integrated Guided Missile Development Programme (IGMDP). It is a fire-and-forget missile, which cannot be stopped without an interceptor missile.

- The missile has the capability of hitting targets beyond the range of 5000 km and is crucial for India's self-defense systems.
- The Agni missile class is the backbone of India's nuclear launch capability, as are Prithvi short-range ballistic missiles, submarine-launched ballistic missiles, and fighter aircraft.

Other Ranges of Agni Missiles-

- A. Agni I:** Range of 700-800 km.
- B. Agni II:** Range more than 2000 km.
- C. Agni III:** Range of more than 2,500 Km
- D. Agni IV:** Range is more than 3,500 km and can fire from a road mobile launcher.
- E. Agni-V:** The longest of the Agni series, an Inter-Continental Ballistic Missile (ICBM) with a range of over 5,000 km.
- Integrated Guided Missile Development Programme IGMDP was the brainchild of renowned scientist Dr. APJ Abdul Kalam.
- It was intended to attain self-sufficiency in the field of missile technology.
- The IGMDP formally got the approval of the Indian government in 1983.
- It brought together the country's scientific community, academic institutions, R&D laboratories, industries and the three defence services in giving shape to the strategic, indigenous missile systems.

The missiles developed under IGMDP are-

- Short-range surface-to-surface ballistic missile – Prithvi
- Intermediate-range surface-to-surface ballistic missile – Agni
- Short-range low-level surface-to-air missile – Trishul
- Medium-range surface-to-air missile – Akash
- Third generation anti-tank missile – Nag

AGNI-V MISSILE

Test-fired from Abdul Kalam Island, Odisha

OPERATIONAL RANGE
5,500-8,000* km

WEIGHT **50,000 kg** SPEED **24 MACH**

LENGTH **17.5 m** ENGINE **3 STAGE SOLID**

DIAMETER **2 m** NUCLEAR WARHEAD **1,500 kg**

TESTS CONDUCTED	AGNI-I	AGNI-II	AGNI-III	AGNI-IV
	APR 19, 2012	SEP 15, 2013	JAN 31, 2015	NOV 9, 2015
RANGE	700 km	2,000 km	3,500 km	4,000 km

*5,550 km with full payload of 1.5-tonne warhead, 8,000 km with a lighter warhead

ICBM ZONE Agni-V is classified as an inter-continental ballistic missile (ICBM), having a range of 5,500 km or more. The US, Russia, China, France and Israel already possess such missiles

SCIENCE & TECHNOLOGY

REUSABLE LAUNCH VEHICLE-TECHNOLOGY-

- Recently, Indian Space Research Organisation (ISRO) and its partners successfully demonstrated a precise landing experiment for a Reusable Launch Vehicle (RLV) at the Aeronautical Test Range (ATR), Chitradurga, Karnataka.
- An Indian Air Forces (IAF) Chinook helicopter was used to drop the RLV-TD from a 4.5 km altitude and ISRO executed the landing experiment of the RLV-TD as planned.
- According to ISRO, the series of experiments with the winged Reusable Launch Vehicle-Technology Demonstration (RLV-TD) are part of efforts at “developing essential technologies for a fully reusable launch vehicle to enable low-cost access to space”.
- In the future, this vehicle will be scaled up to become the first stage of India’s reusable two-stage orbital (TSTO) launch vehicle.
- ISRO’s RLV-TD looks like an aircraft. It consists of a fuselage, a nose cap, double delta wings, and twin vertical tails.
- The RLV-TD will be used to develop technologies like hypersonic flight (HEX), autonomous landing (LEX), return flight experiment (REX), powered cruise flight, and Scramjet Propulsion Experiment (SPEX).
- With the costs acting as a major deterrent to space exploration, a reusable launch vehicle is considered a low-cost, reliable, and on-demand mode of accessing space. By using RLVs the cost of a launch can be reduced by nearly 80% of the present cost.



ISRO LAUNCHES LVM3-M3/ONEWEB INDIA-2 MISSION IN SRIHARIKOTA-

- The Indian Space Research Organisation (ISRO) successfully launched its heaviest rocket, LVM3, for the sixth consecutive time from the Sriharikota spaceport.
- The rocket successfully placed 36 satellites belonging to the UK-based OneWeb group company into their intended orbits.
- The launch took place at 9 a.m. from the second launch pad situated approximately 135 kilometres away from Chennai, following a 24.5-hour countdown.
- This marks the 18th launch for the OneWeb Group, while it is ISRO’s second mission of 2023, with the SSLV/D2-EOS07 mission in February being the first.
- The upcoming launch will be the 18th for OneWeb, and it will expand the UK-based company’s existing constellation of 582 satellites.



- As per the contract signed between ISRO's commercial arm NSIL and OneWeb, a total of 72 satellites are set to be launched in two phases. The first phase, which included 36 satellites, was successfully launched on October 23, 2022, in the LVM3-M2/OneWeb India-1 mission.
- This marks the second OneWeb fleet that India is launching, paving the way for the country's foray into the commercial heavy lift-off space.
- The OneWeb Constellation operates in a Low Earth Orbit (LEO) Polar Orbit, where the satellites are arranged in 12 rings, also known as orbital planes.
- Each orbital plane consists of 49 satellites, and they are inclined to be near-polar at an inclination of 87.9 degrees.
- The satellites are placed at an altitude of 1200 km above the Earth's surface, and each satellite completes a full trip around the Earth every 109 minutes.

US HANDS OVER NISAR SATELLITE TO ISRO-

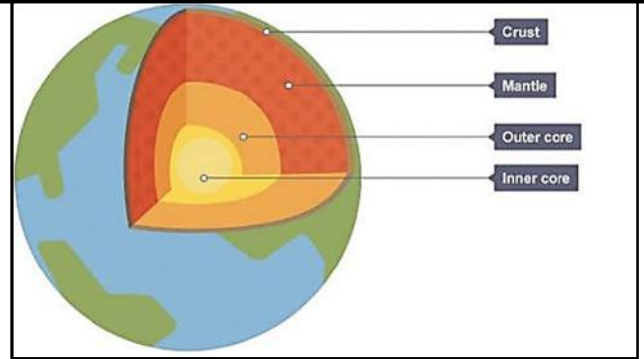
- The Indian Space Research Organisation (ISRO) has received the NASA-ISRO SAR (NISAR) satellite from the U.S. space agency. A US Air Force C-17 aircraft carrying the NASA-ISRO synthetic aperture radar (NISAR) has landed in Bengaluru.
- NISAR was envisioned by NASA and ISRO eight years ago in 2014 as a powerful demonstration of the capability of radar as a science tool and help us study Earth's dynamic land and ice surfaces in greater detail than ever before.
- NISAR is a Low Earth Orbit observatory jointly developed by NASA and ISRO.
- NISAR carries L and S dual-band Synthetic Aperture Radar (SAR), which operates with the Sweep SAR technique to achieve large swaths with high-resolution data. The SAR payloads mounted on Integrated Radar Instrument Structure (IRIS) and the spacecraft bus are together called an observatory.
- NISAR will be used by ISRO for a variety of purposes including agricultural mapping, and landslide-prone areas.
- NISAR will provide a wealth of data and information about the Earth's surface changes, natural hazards, and ecosystem disturbances, helping to advance our understanding of Earth system processes and climate change.
- The satellite is expected to be launched in 2024 from Satish Dhawan Space Centre in Andhra Pradesh, into a near-polar orbit. The satellite will operate for a minimum of three years. It is a Low Earth Orbit (LEO) observatory. NISAR will map the entire globe in 12 days.



RECENTLY, NEW RESEARCH SUGGESTED THAT EARTH'S INNER CORE HAS STOPPED SPINNING FASTER THAN ITS SURFACE AND MIGHT NOW BE ROTATING SLOWER THAN IT-

- The research analyzed seismic waves from repeating earthquakes over the last six decades.
- By analysing changes in the time and propagation of these signals, they could estimate the rotation of the inner core, which is believed to move independently from the mantle and rest of the planet.
- The inner core started rotating slightly faster than the rest of the planet in the early 1970s. But it had been slowing down before coming in sync with Earth's rotation around 2009.
- There has been a "negative trend", meaning the inner core is now rotating slower than the surface. Next change may occur in the mid-2040s.

- The results seem to indicate that the Earth's inner core changes its speed of rotation every 60-70 years on average.
- The slowdown could change how rapidly the entire planet spins, as well as influence how the core evolves with time.
- **How is the Earth's Inner Core-**
- It is the innermost layer of the Earth. It is a hot iron ball of the size of Pluto. The inner core is solid due to the pressure caused by the weight put on it by the Earth's other top layers.
- It is distinct from the outer core, which is a liquid. Roughly 5,000 kilometers (3,100 miles) below the surface we live on, the inner core can spin independently because it floats in the liquid metal outer core.
- Radius- The inner core has an average radius of 1220 km. The boundary between the inner and outer cores is located at approximately 5150 km below the surface of the Earth. This boundary is called the Lehman Seismic Discontinuity.
- Temperature- Between 7,200–8,500°F (4,000–4,700°C).



ACCORDING TO THE MINISTRY OF EARTH SCIENCE, THE SAMUDRAYAAN MISSION IS EXPECTED TO BE REALISED BY YEAR 2026-

- The mission is aimed at sending three personnel to 6000-metre depth in a vehicle called 'MATSYA 6000' for the exploration of deep-sea resources like minerals.
- 'MATSYA 6000' vehicle is being designed and developed by National Institute of Ocean Technology (NIOT), Chennai under Ministry of Earth Sciences.
- It has an endurance of 12 hours under normal operation and 96 hours in case of emergency for human safety.
- It is India's first unique manned ocean mission and is a part of the Rs 6000-crores Deep Ocean Mission.
- The manned submersible will allow scientific personnel to observe and understand unexplored deep-sea areas by direct intervention.
- It will also boost the Central government's vision of 'New India' that highlights the Blue Economy as one of the ten core dimensions of growth. India has a unique maritime position, a 7517 km long coastline, which is home to nine coastal states and 1,382 islands.
- For India, with its three sides surrounded by the oceans and around 30% of the nation's population living in coastal areas and coastal regions play a major economic factor.
- Deep Ocean Mission- It was approved in June 2021 by the Ministry of Earth Sciences. It aims to explore the deep ocean for resources, develop deep-sea technologies for sustainable use of ocean resources, and support the Blue Economy Initiatives of the Indian Government.
- The cost of the Mission has been estimated at Rs. 4,077 crores over a five-year period and will be implemented in phases.



ECONOMY AND FINANCE

TOP EXPORTING DISTRICT IN INDIA -

- Jamnagar in Gujarat is the top exporting district in India. It formed about 24% of India's exports in value terms in FY23 (till January).
- Surat in Gujarat and Mumbai Suburban in Maharashtra feature second and third by a distance, forming only about 4.5% of the country's exports in the period.
- The other districts in the top 10 are Dakshina Kannada (Karnataka), Devbhumi Dwarka, Bharuch and Kachchh (Gujarat), Mumbai (Maharashtra), Kancheepuram (Tamil Nadu) and Gautam Buddha Nagar (Uttar Pradesh).
- The merchandise trade deficit, which is the gap between exports and imports, increased by over 39% in 2022-23 to record USD 266.78 billion, as compared to USD 191 billion in 2021-22.
- Merchandise imports increased by 16.51% in 2022-23, while merchandise exports rose by 6.03%. Overall trade deficit, however, stood at USD 122 billion in 2022-23, as compared to USD 83.53 billion in the 2022, gaining support from trade surplus in services.

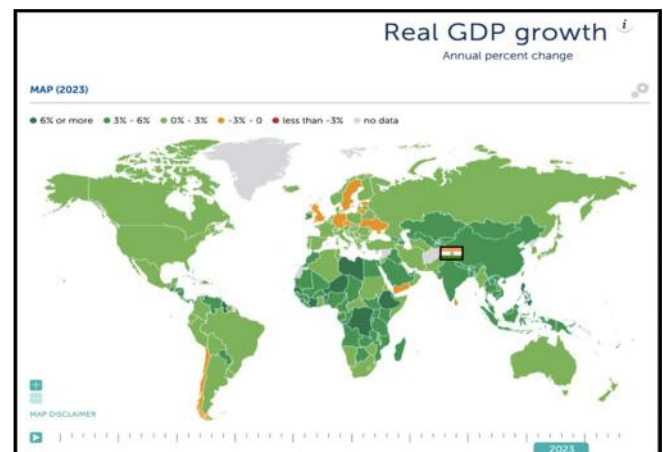


India's Major Export Arenas-

- Engineering Goods: They registered a 50% growth in exports, at USD 101 bn in FY22.
- Agriculture Products: Agricultural exports were buoyed by the government's push to meet global demand for food amid the pandemic. India exports rice worth USD 9.65 bn, the highest among agricultural commodities.
- Textile and Apparels: India's textile and apparel exports (including handicrafts) stood at USD 44.4 billion in FY22, a 41% increase on a YoY basis. Government's scheme like Mega Integrated Textile Region and Apparel (MITRA) Park are giving a strong boost to this sector.
- Pharmaceuticals and Drugs: India is the third-largest producer of medicines by volume and the biggest supplier of generic drugs. India supplies over 50% of Africa's requirement for generics, around 40% of generic demand in the US and 25% of all medicine in the UK.

INDIA SET TO GROW BY 5.9% THIS FISCAL: IMF -

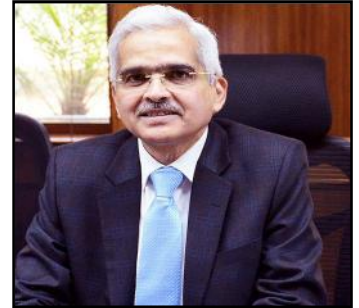
- The annual World Economic Outlook of the International Monetary Fund (IMF) has lowered India's economic growth projection for the current fiscal (2023-24) to 5.9% from 6.1% earlier.
- Yet India will continue to be the fastest-growing economy in the world.
- It has also lowered the forecast for 2024-25 to 6.3% from the 6.8% it had predicted in January 2023.
- IMF growth forecast is lower than projections by the RBI, which predicted a 6.4% in the current fiscal.



RBI'S DECISION TO PAUSE INTEREST RATE HIKES -

- Recently, The RBI's Monetary Policy Committee (MPC) decided to pause interest rate hikes and assess the impact of previous hikes.

- Since May 2021, RBI had been consistently raising interest rates to reduce inflation, which was far above its target level of 4%.
- Inflation targeting in India is a monetary policy framework that was adopted by the Reserve Bank of India (RBI) in 2016. Under this framework, the RBI sets a target for the inflation rate and uses monetary policy instruments to achieve it.
- Currently, RBI's primary objective is to achieve the 4% inflation target. RBI has a comfort zone of +/- 2% within which inflation must remain. This means that the RBI aims to keep the inflation rate between 2% and 6%.
- The last two readings of inflation (January and February 2023) were 6.5% and 6.4%, respectively.



Reasons to Pause Interest Rate Hikes-

- RBI's strategy of hiking interest rates to control inflation has limitations. According to the RBI, under the current circumstances, monetary measures alone may not be sufficient to control inflation.
- Fiscal policy (government's taxes and spending) may be more effective in bringing down current inflation.

INDIA WILL BE THIRD LARGEST ECONOMY BY 2027-28: PIYUSH GOYAL -

- In a recent address to the Indian diaspora community in France, Union Minister Piyush Goyal announced that India is set to become the third-largest economy in the world by 2027.
- Currently the fifth-largest economy, India has been experiencing an average annual growth rate of around 7% over the last decade, driven by factors such as a growing middle class and a focus on innovation and entrepreneurship.
- Goyal cited the country's export performance, which reached USD 750 billion in the 75th year of independence, as evidence of India's upward trajectory.
- He also highlighted India's role as a global pharmacy, food bowl and trusted partner, with the world looking to Prime Minister Modi's leadership to tackle current global challenges.
- With an ambitious target to become a 30-35 trillion-dollar economy by 2047, when India celebrates 100 years of independence, the country faces significant challenges such as infrastructure deficits and income inequality, but also boasts a vibrant startup ecosystem and a focus on sustainable development.



FOREIGN TRADE POLICY 2023 -

- Recently, Union Minister of Commerce and Industry, Consumer Affairs, Food and Public Distribution and Textiles launched the Foreign Trade Policy (FTP) 2023 which comes into effect from April 1, 2023.
- FTP 2023 is a policy document which is based on continuity of time-tested schemes facilitating exports as well as a document which is nimble and responsive to the requirements of trade.
- The policy is based on the principles of trust and partnership with exporters and aims at process re-engineering and automation to facilitate ease of doing business for exporters.

The Key Approach is based on Four Pillars:

- Incentive to Remission,
 - Export promotion through collaboration-** Exporters, States, Districts, Indian Missions,
 - Ease of doing business, reduction in transaction cost and e-initiatives, and
 - Emerging Areas-** E-Commerce Developing Districts as Export Hubs and streamlining Special Chemicals, Organisms, Materials, Equipment, and Technologies (SCOMET) policy.
- The government aims to increase India's overall exports to USD 2 trillion by 2030, with equal contributions from the merchandise and services sectors.

- The government also intends to encourage the use of the Indian currency in cross-border trade, aided by a new payment settlement framework introduced by the RBI in July 2022.
- This could be particularly advantageous in the case of countries with which India enjoys a trade surplus.

INDIA'S OVERALL EXPORTS CROSS ALL TIME HIGH OF 750 BILLION US DOLLARS -

- During the ASSOCHAM Annual Session 2023, Mr. Piyush Goyal, who serves as the Union Minister of Commerce and Industry, Consumer Affairs, Food and Public Distribution, and Textiles, declared that India's merchandise and services exports are expected to surpass US\$ 760 billion in the present fiscal year, which will end on March 31, 2023.
- Despite the global economic downturn, rising inflation, and high-interest rates, Mr. Goyal highlighted India's successful performance. He also stated that exports increased from US\$ 500 billion in 2020-21 to US\$ 676 billion in 2021-22.
- Furthermore, the minister noted that the industry has responded positively to the Free Trade Agreements (FTAs) with the UAE and Australia. He emphasized that while India's FTAs were negotiated quickly, the quality of the agreements was not sacrificed and was done after extensive stakeholder consultation.

INDIA AIMS TO BECOME TOP GLOBAL AVIATION MARKET BY 2030 -

- India is poised to become the world's leading aviation market, surpassing the United States and China by the end of the decade.
- India's Civil Aviation is among the fastest-growing aviation markets globally and will be a major growth engine to make India a USD 5 trillion economy by 2024.
- India is currently the world's 3rd-largest civil aviation market.
- Over the past 6 years, India's domestic passenger traffic has grown at a compound annual growth rate (CAGR) of around 14.5% and international passenger traffic at around 6.5%.
- India's domestic passenger traffic is projected to rise to 16 crores in the 2023-24 fiscal year and to 35 crores by 2029-30.



Challenges-

- **High Operating Costs-** One of the major challenges for the Indian aviation sector is the high operating costs. This is due to a number of factors such as high fuel prices, airport charges, and taxes.
- For airlines, the increase in jet fuel prices represents a major challenge as this cost typically accounts for 20% to 25% of total operational costs.
- **Infrastructure Constraints-** The Indian aviation sector also faces infrastructure constraints such as limited airport capacity, lack of modernized air traffic control systems, and inadequate ground handling facilities.
- **Regulatory Framework-** The Indian aviation sector also faces challenges related to the regulatory framework.

RECENT IMF BAILOUTS-

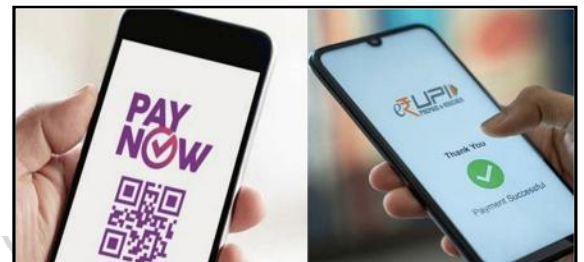
- The International Monetary Fund (IMF) recently confirmed a USD 3 billion bailout plan (under Extended Fund Facility (EFF)) for Sri Lanka's struggling economy.
- It is also negotiating with Pakistan for a USD 1.1 billion bailout plan on account of its severe economic crisis marked by falling currency and price rise.
- Bailout is a general term for extending financial support to a company/country facing a potential bankruptcy threat. It can take the form of loans, cash, bonds, or stock purchases.

- A bailout may (not) require reimbursement but is often accompanied by greater oversight and regulations.
- Countries seek help from the IMF usually when their economies face a major macroeconomic risk, mostly currency crisis (such as the ones Sri Lanka is facing).
- The IMF lends money to the troubled economies often in the form of Special Drawing Rights (SDRs).
- SDRs simply represent a basket of five currencies, namely the U.S. dollar, the euro, the Chinese yuan, the Japanese yen, and the British pound.
- This lending is carried out by a number of lending programs such as extended credit facility, flexible credit line, stand-by agreements, etc.
- Countries receiving the bailout can use the SDRs for various purposes depending on their individual circumstances.
- A country may have to agree to implement certain structural reforms as a condition to receive IMF loans.



RECENTLY, INDIA'S UNIFIED PAYMENTS INTERFACE (UPI) AND SINGAPORE'S PAYNOW HAVE BEEN INTEGRATED TO ENABLE FASTER REMITTANCES BETWEEN THE TWO COUNTRIES-

- UPI is India's mobile-based fast payment system, which facilitates customers to make round-the-clock payments instantly, using a Virtual Payment Address (VPA) created by the customer.
- PayNow is a fast payment system in Singapore. It enables peer-to-peer funds transfer service, available to retail customers through participating banks and Non-Bank Financial Institutions (NFIs) in Singapore.
- PayNow allows users to send and receive instant funds from one bank or e-wallet account to another in Singapore by using just their mobile number, Singapore National Registration Identity Card (NRIC)/Foreign Identification Number (FIN), or VPA.
- Linkage- With this facility, funds held in bank accounts or e-wallets can be transferred to /from India using just the UPI ID, mobile number, or VPA. This facility will eliminate the need for entering the details of beneficiaries, such as bank account numbers, bank codes etc.



INDIA TO CONTRIBUTE 15% OF GLOBAL GROWTH IN 2023: IMF-

- According to the International Monetary Fund (IMF), India will alone contribute 15% of the global growth in 2023 and continues to remain a relative "bright spot" in the world economy.
- India remains a bright spot at a time when the IMF is projecting 2023 to be difficult with global growth slowing down from 3.4% in 2022 to 2.9% in 2023.
- For FY 2023/24 (April 2023 to March 2024) India's growth rate is projected at 6.1% a bit slow like the rest of the world economy, but way above the global average. And in that way, India is providing about 15% of global growth in 2023.
- According to the IMF, India has turned digitalisation into a driver of overcoming the pandemic and creating job opportunities, while the country's fiscal policy has been responsive to economic conditions.
- The capital spending has increased, which would amount to 3.3% of gross domestic product, and will be the biggest such jump after an increase of more than 37% between 2020-21 and 2021-22.



- India does have a young population. 15 million people are added to the labour force every year. Strong investment climate that generates jobs is a great advantage for India. Women can be a fabulous driver for India's growth.

INDIA'S DIGITAL PAYMENTS MARKET WILL MORE THAN TRIPLE TO \$10 TRILLION BY 2026 -

- In a country witnessing rapid growth, it comes as no surprise that India also has one of the fastest-growing fintech landscapes in the world, driven primarily by the advancement in the digital payments segment.
- Boston Consulting Group (BCG), in collaboration with PhonePe, India's leading digital payments company, today unveiled a report titled, "Digital payments in India: A US\$10 trillion opportunity".
- India's digital payments landscape has witnessed phenomenal growth over the past five years. As per the report, India's digital payments market is at an inflection point and is expected to increase more than threefold from the current US\$3 trillion to US\$10 trillion by 2026.
- As a result of this unprecedented growth, digital payments (non-cash) will constitute 2 out of 3 payment transactions by 2026.



INDIA HAS GONE FROM BEING A MARGINAL SUGAR EXPORTER FIVE YEARS AGO TO NO. 2 IN THE WORLD, BEHIND ONLY BRAZIL-

- India has gone from being a marginal sugar exporter five years ago to No. 2 in the world, behind only Brazil. Between 2017-18 and 2021-22, exports have soared from USD 810.9 million to USD 4.6 billion.
- Sugar exports may cross USD5.5 billion in the current fiscal year.
- Sugar industry is an important agro-based industry that impacts the rural livelihood of about 50 million sugarcane farmers and around 5 lakh workers directly employed in sugar mills.
- In (Oct-Sep) 2021-22 India emerges as the world's largest producer and consumer of sugar and world's 2nd largest exporter of sugar.
- Sugar industry is broadly distributed over two major areas of production- Uttar Pradesh, Bihar, Haryana and Punjab in the north and Maharashtra, Karnataka, Tamil Nadu and Andhra Pradesh in the south.
- South India has a tropical climate which is suitable for higher sucrose content giving a higher yield per unit area as compared to north India.



Geographical Conditions for the Growth of Sugar-

Temperature: Between 21-27°C with hot and humid climate.

Rainfall: Around 75-100 cm.

Soil Type: Deep rich loamy soil.

- Out of India's total 110 lakh tonnes(lt) sugar exports in 2021-22, raws alone accounted for 56.29 lt.
- The biggest importers of Indian raw sugar were Indonesia (16.73 lt), Bangladesh (12.10 lt), Saudi Arabia (6.83 lt), Iraq (4.78 lt) and Malaysia (4.15 lt).

GST COUNCIL WILL SET UP APPELLATE TRIBUNAL FOR DISPUTE REDRESSAL -

- FM Nirmala Sitharaman announced that the GST Council adopted the Group of Ministers (GoM) report on the GST Appellate Tribunal with certain modifications.
- The GoM on Goods and Services Tax Appellate Tribunals was set up under the chairmanship of Haryana Deputy CM Dushyant Chautala in July 2022.
- The tribunals should consist of two judicial members. One technical member each from the Centre and States, besides a retired Supreme Court Judge as president.



PM MODI INAUGURATES GLOBAL INVESTORS SUMMIT 2023 IN LUCKNOW-

- Prime Minister Narendra Modi inaugurated the Uttar Pradesh Global Investors Summit 2023 in Lucknow. The 10-12 February event is expected to be attended by several ministers of the Union and the state government and a host of leading industrialists.
- Prime Minister Narendra Modi, Defence Minister Rajnath Singh, Uttar Pradesh Chief Minister Yogi Adityanath and State Industrial Development Minister Nand Gopal Gupta Nandi as well as industrialists Mukesh Ambani, K Chandrasekaran, Kumar Mangalam Birla and Anand Mahindra addressed the inaugural session of the summit.
- More than 300 renowned industrialists are expected to participate.
- The event is important for the state which initially set a target to attract investment proposals of Rs 10 lakh crore at the UPGIS-2023, and later revised it to Rs 17.3 lakh crore.



REPORTS & INDICES

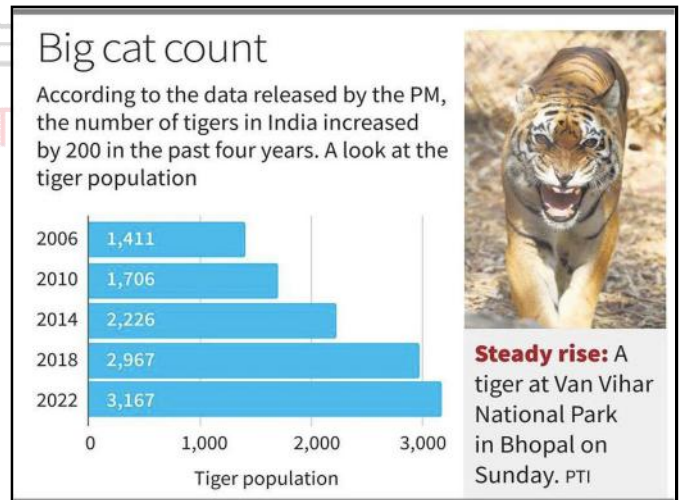
PM JAN DHAN YOJANA SEES RECORD ₹50,000 CRORE SURGE IN BALANCE -

- The basic bank accounts under the scheme have registered a record surge of ₹50,000 crores, with the total balance reaching ₹1.99 lakh crore, an increase from ₹1.49-lakh crore in the previous financial year. Additionally, there has been an addition of 5 crore new accounts under the scheme, bringing the total number of beneficiaries to 48.65 crores.
- The public sector banks are the key drivers of the scheme, holding ₹1.55-lakh crore with them as deposits, followed by Regional Rural Banks (RRBs) with ₹38,832 crores. Private sector banks hold the remaining deposits.
- Under the Jan Dhan scheme, the RuPay card comes with an inbuilt accident insurance cover of ₹1 lakh, valid for up to 90 days after the cardholder carries out a successful transaction at a merchant establishment, ATM, or e-commerce platform.
- However, the pace of issuing RuPay cards appears to have slowed down, with only 33 crore cards issued so far out of about 49 crore account holders. Additionally, about 8 percent of PMJDY accounts have zero balances, while the average balance is over ₹2,400, according to RBI data.



THE PRIME MINISTER OF INDIA HAS RELEASED THE FIGURES OF THE 5TH CYCLE OF INDIA'S TIGER CENSUS 2022, REVEALING 6.7% IN THE INCREASE IN THE PAST FOUR YEARS -

- The Prime Minister of India has released the figures of the 5th cycle of India's Tiger Census 2022, revealing 6.7% in the increase in the past four years.
- The tiger census covered forested habitats in 20 states of India. Camera traps were set up at 32,588 locations and generated 47,081,881 photographs.
- The PM has released the Census while inaugurating the International Big Cat Alliance (IBC) in Karnataka's Mysuru, organised to mark 50 years of Project Tiger.
- IBCA is launched for conservation of seven big cats namely Tiger, Lion, Leopard, Snow Leopard, Leopard, Cheetah, Jaguar and Puma harbouring our planet.
- Its members include 97 countries that are home to these big cats and other interested parties.



Highlights of the Census-

- Population has grown by 200 from 2018 to 2022. The current tiger population in India is 3,167, up from 2,967 in 2018.
- The growth rate slowed to 6.7% in the four years from 2018 to 2022, from around 33% during 2014-2018.
- There has been a significant increase in the tiger population in the Shivalik Hills and Gangetic Plains, while tiger occupancy in Jharkhand, Odisha, Chhattisgarh, and Telangana showed a decline.
- Tiger occupancy in the Western Ghats declined, the latest analysis showed. Significant declines were observed in the Wayanad landscape and in the Biligiriranga Hills.

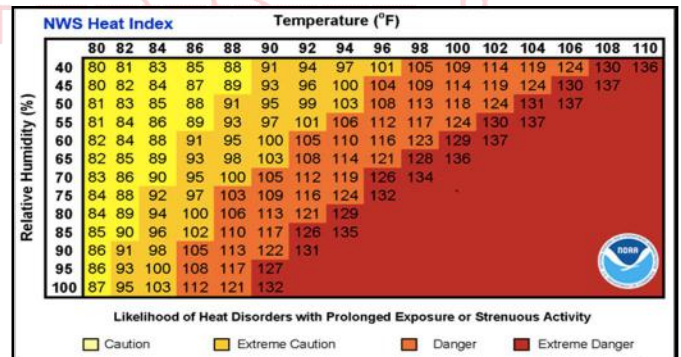
INDIA JUSTICE REPORT 2022: KARNATAKA TOPS AMONG 18 LARGE STATES -

- According to the India Justice Report (IJR) 2022, which assesses the performance of states in terms of justice delivery, the state of Karnataka has achieved the top rank among the 18 large and mid-sized states with populations over one crore.
- The report considers several parameters such as police, judiciary, prisons, and legal aid to assess the overall performance of each state.
- The state of Tamil Nadu has secured the second position in the rankings, while Telangana has secured the third position.
- The State of Gujarat has got the fourth position and Andhra Pradesh is at slot five as per the report which was released on April 4 in New Delhi.
- On the other hand, the state of Uttar Pradesh has been ranked at 18, which is the lowest among the states considered in the report.
- This report is based on 24-month quantitative research. The IJR 2022, like the previous two, has tracked the performance of States in capacitating their Justice delivery structures to effectively deliver mandated services.
- This report is based on overall data of 4 pillars of justice delivery namely Police, Judiciary, Prisons, and Legal Aid.
- The India Justice Report (IJR) was initiated by Tata Trusts in 2019, and this is the third edition. The foundation's partners include the Centre for Social Justice, Common Cause, Commonwealth Human Rights Initiative, DAKSH, TISS-Prayas, Vidhi Centre for Legal Policy and How India Lives, IJR's data partner.



THE INDIA METEOROLOGICAL DEPARTMENT (IMD) IS PLANNING TO INTRODUCE A 'HEAT INDEX' WARNING SYSTEM IN DELHI AND OTHER PARTS OF THE COUNTRY -

- The IMD has conducted a study on the impact of meteorological factors on heatwaves and the "heat wave hazard zonation" of the country.
- According to "Hot Weather Analysis over India," IMD revealed that the mechanism by which heat impacts humans is complex; it is a result of the interactions between temperature, radiation, wind, and humidity.
- There is strong experimental evidence that physiologic stress from high temperatures is greater if humidity is higher.
- Heat Index will calculate the temperature along with the humidity levels to provide a more accurate measure of what the temperature actually feels like.
- In the US, the heat index is color-coded to provide warnings based on the impact of the heat index.
- The IMD is planning to introduce a similar color-coded warning system in India.



Heatwave-

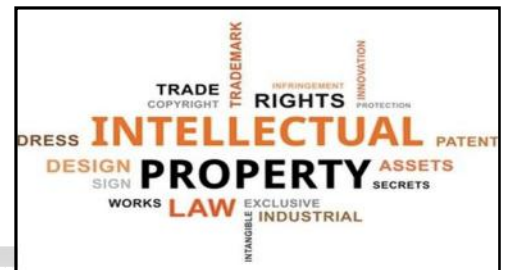
- A heatwave is a period of abnormally high temperatures, a common phenomenon in India during the months of May-June and in some rare cases even extends till July.
- The Heatwave is considered when the maximum temperature of a station reaches at least 40°C for Plains and at least 30°C for Hilly regions.
- In 2016, the National Disaster Management Authority (NDMA) issued comprehensive guidelines to prepare national level key strategies for mitigating the impact of heatwaves.

WORLD'S TOP 10 BILLIONAIRES LIST RELEASED BY HURUN RESEARCH PLATFORM -

- According to the recently released Hurun Global Rich List, Mukesh Ambani, the Chairman of Reliance Industries and the richest man in Asia, is the only Indian to be ranked among the top 10 billionaires in the world.
- Despite experiencing a 20 percent decline in his wealth, Ambani still managed to secure the ninth position globally, with a net worth of \$82 billion. The report, which was compiled by research platform Hurun in collaboration with real estate group M3M, is titled 'The 2023 M3M Hurun Global Rich List'.
- The Hurun Global Rich List for 2023 ranked a total of 3,112 billionaires from 69 countries and 2,356 companies, which is a decrease from last year's 3,384 billionaires.
- The number of billionaires dropped by 8 percent, and their total wealth dropped by 10 percent compared to last year.

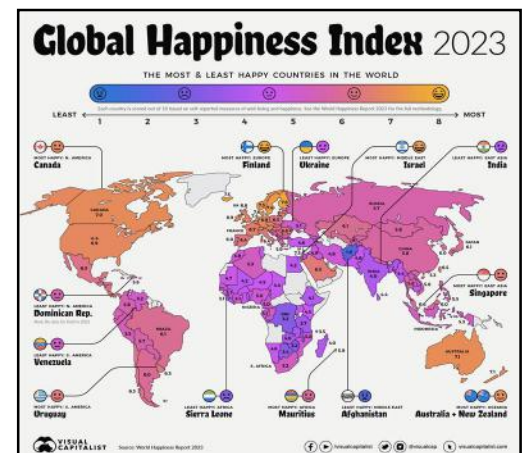
INTERNATIONAL INTELLECTUAL PROPERTY INDEX 2023 -

- Recently, India ranks 42nd among 55 leading global economies on the International Intellectual Property (IP) Index 2023 released by the U.S. Chambers of Commerce, according to which India is ripe to become a leader for emerging markets seeking to transform their economy through IP-driven innovation.
- US topped the International IP Index followed by United Kingdom and France.
- The Index evaluates the IP framework in each economy across 50 unique indicators which industry believes represent economies with the most effective IP systems.
- The indicators create a snapshot of an economy overall IP ecosystem and span nine categories of protection: Patents, Copyrights, Trademarks, Design Rights, Trade Secrets, Commercialization of IP Assets, Enforcement, Systemic Efficiency, Membership and Ratification of International Treaties.
- Intellectual Property (IP) refers to creations of the mind, such as inventions, literary and artistic works, symbols, names, and images used in commerce.
- These rights are outlined in Article 27 of the Universal Declaration of Human Rights. These legal protections allow the creators to control use of their work and prevent others from using or reproducing them without permission.
- The main types of IP include patents for inventions, trademarks for branding, copyrights for artistic and literary works, trade secrets for confidential business information, and industrial designs for product appearance.
- India is a member of the World Trade Organisation and committed to the Agreement on Trade Related Aspects of Intellectual Property (TRIPS Agreement). India is also a member of World Intellectual Property Organization. India on 108th Position in Electoral Democracy Index 2023 -



LIST OF 10 HAPPIEST COUNTRIES IN THE WORLD FOR 2023 -

- The World Happiness Report 2023 has been released. According to the World Happiness Index for 2023, Finland is the happiest country in the world for the sixth year in a row.
- Researchers looked at six important variables to determine where people are happy in the world: social support, money, health, independence, charity, and lack of corruption.
- The survey discovered that, despite a number of converging crises, overall life satisfaction is on par with levels prior to the epidemic.



- India has been ranked 125th out of 146 countries, which is an improvement of nine positions from its 2022 ranking.
- However, India's ranking is lower than even war-torn countries like Russia and Ukraine. Furthermore, India's neighboring countries such as Nepal, China, Bangladesh, and Sri Lanka have a higher ranking than India.

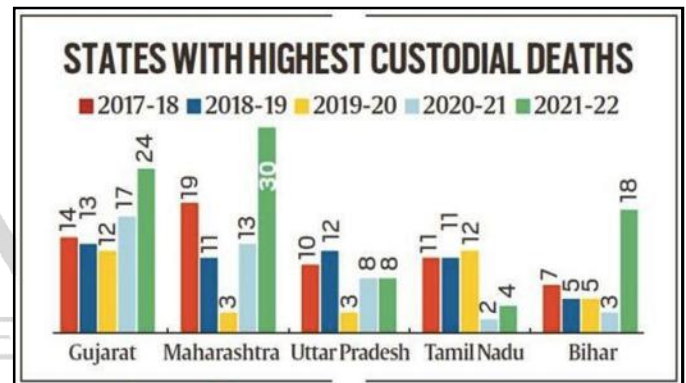
ACCORDING TO THE MINISTRY OF HOME AFFAIRS (MHA) IN THE LAST FIVE YEARS, THE HIGHEST NUMBER OF CUSTODIAL DEATHS HAVE BEEN REPORTED IN GUJARAT AT 80 -

- Custodial death is a death that occurs while a person is in the custody of law enforcement officials or in a correctional facility. It can occur due to various causes such as use of excessive force, neglect, or abuse by the authorities.
- According to the Law commission of India, the crime by a public servant against the arrested or the detained person who is in custody amounts to custodial violence.

Custodial Death in India-

- A. A total of 146 cases of death in police custody were reported during 2017-2018,
- B. 136 in 2018-2019,
- C. 112 in 2019-2020,
- D. 100 in 2020-2021,
- E. 175 in 2021-2022.

- In the last five years, the highest number of custodial deaths (80) has been reported in Gujarat, followed by Maharashtra (76), Uttar Pradesh (41), Tamil Nadu (40) and Bihar (38).



Possible Reasons for Custodial Deaths-

- Absence of Strong Legislation
- Institutional Challenges
- Excessive Force:
- Lengthy Judicial Processes:
- Not Adhering to International Standard:
- Medical neglect or lack of medical attention, and even suicide.
- Poor training or lack of accountability among law enforcement officials.
- Inadequate or substandard conditions in detention centers.
- Underlying health conditions or pre-existing medical conditions that are not adequately addressed or treated while in custody.

Provisions Available Regarding Custody-

- Article 21 states that "No person shall be deprived of his life or personal liberty except according to procedure established by law".
- Article 22 provides "Protection against arrest and detention in certain cases".
- Police and public order are State subjects as per the Seventh Schedule of the Constitution of India.
- The Central Government issues advisories from time to time and also has enacted the Protection of Human Rights Act (PHR), 1993.
- Section 41 of Criminal Procedure Code (CrPC) was amended in 2009 to include safeguards so that arrests and detentions for interrogation have reasonable grounds and documented procedures, arrests are made transparent to family, friends and public, and there is protection through legal representation.

ENVIRONMENT

INDIA HEATWAVE: MAHARASHTRA, BIHAR, ODISHA, WEST BENGAL, AND DELHI-NCR WITNESS SCORCHING TEMPERATURES -

- The India Meteorological Department (IMD) has announced that several states in the country, including Maharashtra, Bihar, Odisha, Andhra Pradesh, and Delhi-NCR, are currently experiencing heatwave conditions.
- According to the IMD, these conditions are likely to persist for the next few days. The weather agency has also predicted that Punjab and Haryana may experience a rise in temperatures over the next two days, with the situation expected to improve thereafter.
- Maharashtra has been hit particularly hard by the heatwave, with temperatures predicted to rise by 2 to 4 degrees Celsius over the next five days. During the past few days, more than 10 districts in the state have witnessed maximum daytime temperatures surpassing 40 degrees Celsius.
- Tragically, at least 11 people died due to sunstroke on Sunday after attending an event in Navi Mumbai. Reports suggest that lakhs of people attended the event in peak sun during the day, with around 125 individuals complaining of exhaustion and chest pain.



INDIA METEOROLOGICAL DEPARTMENT (IMD) PREDICTED A BORDERLINE-LEVEL NORMAL SUMMER MONSOON RAINFALL THIS YEAR -

- IMD is an agency of the Ministry of Earth Sciences. It is the principal agency responsible for meteorological observations, weather forecasting and seismology.
- IMD releases the long range forecast in two stages in April and June.

Predictions by IMD

- The rainfall during the June-September period is likely to be 96% of the long-term average period.
- The El Nino is the key factor responsible for the relatively less rainfall this year.
- Since 2019, India has been under the influence of the converse 'La Nina' and therefore is getting substantial monsoon rains.
- The El Nino event, triggered by warm water in the equatorial Pacific, can affect weather patterns worldwide and in India, El Nino linked to drier conditions and reduced rainfall.

Categories of Rainfall-

- Large Excess: $\geq 60\%$ of long period average (LPA).
- Excess: 20% to 59% of long period average (LPA).
- Normal: -19% to +19% of long period average (LPA).
- Deficient: -59% to -20% of long period average (LPA).
- Large Deficient: -99% to -60% of long period average (LPA).

SHRI BHUPENDER YADAV LAUNCHES ARAVALLI GREEN WALL PROJECT-

- At an event held in Tikli Village, Haryana to commemorate the International Day of Forests, the Union Minister for Environment, Forest and Climate Change, Bhupender Yadav, unveiled the Aravalli Green Wall Project, which aims to green the 5 km buffer area around the Aravalli Hill Range in four states.

Aravalli Green Wall Project-

- The Aravalli Green Wall Project is a significant undertaking aimed at afforesting the 5 km buffer zone around the Aravalli Hill Range in Haryana, Rajasthan, Gujarat and Delhi.

- The project is part of the Union Environment Ministry's efforts to create green corridors throughout the country to combat land degradation and desertification.
- The initiative will involve planting native species of trees and shrubs on wasteland, scrubland, and degraded forest land. Additionally, the project will focus on rejuvenating and restoring surface water bodies, such as ponds, lakes, and streams, as well as agroforestry and pasture development to improve the livelihoods of local communities.



A SEVERE EARTHQUAKE FOLLOWED BY AN ALMOST EQUAL MAGNITUDE AFTERSHOCK HIT SOUTHEASTERN TURKEY AND SYRIA ON FEBRUARY 6, 2023, CAUSING WIDESPREAD DESTRUCTION AND LOSS OF LIFE-

- The Turkey-Syria earthquake should motivate a review of India's earthquake preparedness, as poor enforcement of zoning and construction rules is prevalent in the country.
- India's terrain is prone to great earthquakes, particularly in the Himalayan plate boundary, which has the potential for large quakes (magnitude 7 and above).
- In India, earthquakes are primarily caused by the collision of the Indian Plate with the Eurasian Plate.
- This collision has resulted in the formation of the Himalayas, as well as frequent earthquakes in the region.



Steps can be Taken for Earthquake Preparedness in India-

- Building Codes and Standards- India has established building codes and standards for earthquake-resistant construction.
- Retrofitting and Reinforcement- Older buildings may not meet current earthquake-resistant standards, and many of them can be retrofitted or reinforced to improve their seismic performance.
- Emergency Response Planning- Planning for emergency response is critical for minimising the impact of earthquakes. This includes developing evacuation plans, establishing emergency shelters, and training personnel on how to respond to earthquakes.
- Research and Monitoring- Investing in research and monitoring can help improve our understanding of earthquakes and their causes, and can also help to develop better methods for predicting and mitigating their impact.

GOVERNMENT INITIATIVES

RECENTLY, THE GOVERNMENT HAS LAUNCHED THE FIFTH ROUND OF THE REGIONAL CONNECTIVITY SCHEME – UDAN (UDAN 5.0) -

UDAN (Ude Desh ka Aam Nagrik) Scheme-

- The scheme was launched by the Ministry of Civil Aviation for regional airport development and regional connectivity enhancement.
- It is a part of the National Civil Aviation Policy 2016. The scheme is applicable for a period of 10 years.

Objectives:

- Improve the air connectivity to remote and regional areas of India.
- Development of remote areas and enhancing trade and commerce and tourism expansion.
- Enable common people to access air travel with affordable rates.
- Employment creation in the aviation sector.

Key Features-

- Under the scheme, airlines have to cap airfares for 50% of the total seats at Rs. 2,500 per hour.
- This would be achieved through a financial stimulus in the form of concessions from Central and State governments and airport operators, Government grant provided to the airlines to bridge the gap between the cost of operations and expected revenue.



Previous Phases of the Scheme-

- Phase 1 was launched in 2017, with the objective of connecting underserved and unserved airports in the country.
- Phase 2 was launched in 2018, with the aim of expanding air connectivity to more remote and inaccessible parts of the country.
- Phase 3 was launched in November 2018, with the focus on enhancing air connectivity to hilly and remote regions of the country.
- Phase 4 of the UDAN scheme was launched in December 2019, with a focus on connecting islands.

Key Features of UDAN 5.0-

- It focuses on Category-2 (20-80 seats) and Category-3 (>80 seats) aircrafts.
- There is no restriction on the distance between the origin and the destination of the flight.
- The same route would not be awarded to a single airline more than once, whether in different networks or in the same network.
- This has been done to prevent exploitation of the monopoly on a route.
- Airlines would be required to commence operations within 4 months of the award of the route; earlier this deadline was 6 months.

UPI PROCESSES 8.7 BLN TRANSACTIONS IN MARCH, HIGHEST EVER SINCE INCEPTION -

- The Unified Payments Interface (UPI), India's flagship digital payment platform, set a new record at the end of the fiscal year 2022-23.
- In March 2023, the UPI processed a historic high of 8.7 billion transactions, worth Rs 14.05 trillion.



- This achievement marks yet another milestone for the UPI since its inception.
- As per the National Payments Corporation of India's (NPCI) data, UPI transactions in March 2023 witnessed a 60% increase in volume and a 46% increase in value compared to the same period in the previous year.
- In March 2022, the UPI had processed 5.4 billion transactions worth Rs 9.6 trillion.
- Since its launch with 21 banks in 2016, the Unified Payments Interface (UPI) ecosystem has grown to encompass 381 banks, facilitating billions of digital transactions every month.
- The participants in India's digital payments ecosystem, as per the National Payments Corporation of India (NPCI), include payers and payees, payment service providers (PSPs), remitter and beneficiary banks, NPCI, bank account holders, and merchants.
- In this value chain, the apps used to conduct UPI transactions, like Google Pay or PhonePe, are referred to as third-party app providers (TPAPs), while banks are called PSPs and typically serve as both remitters and beneficiaries in most transactions.

VIBRANT VILLAGES PROGRAMME –



- Recently, the Union Cabinet has approved raising of seven new ITBP (Indo-Tibetan Border Police) battalions and allocated Rs 4,800 crore under the Vibrant Villages Programme (VVP) to bolster the social and security framework along the China border.
- The Cabinet has also cleared a 4.1-km Shinku-La tunnel on the Manali-Darcha-Padum-Nimmu axis to allow all-weather connectivity to Ladakh.
- The decision to raise additional battalions was taken keeping an eye on the need for effective monitoring in the border areas and the battalion.
- The government's decision to approve a financial package for border villages and upgrade security comes at a time when issues with China are still to be resolved along the LAC in Ladakh.
- PLA troops are still squatting in the Depsang Plains and Demchok. China is also upgrading its infrastructure along the LAC.

Vibrant Villages Programme-

- It is a Centrally sponsored scheme, announced in the Union Budget 2022-23 (to 2025-26) for development of villages on the northern border, thus improving the quality of life of people living in identified border villages.
- It will cover the border areas of Himachal Pradesh, Uttarakhand, Arunachal Pradesh, Sikkim and Ladakh. It will cover 2,963 villages with 663 of them to be covered in the first phase.
- Vibrant Village Action Plans will be created by the district administration with the help of Gram Panchayats. There will not be overlap with Border Area Development Programme.
- The scheme aids to identify and develop the economic drivers based on local, natural, human and other resources of the border villages on the northern border.



APPOINTMENTS/PERSON IN NEWS

S JAISHANKAR INAUGURATES BUZI BRIDGE IN MOZAMBIQUE-

- Dr Jaishankar inaugurated the Buzi Bridge virtually, which is a part of the 132 km Tica-Buzi-Nova-Sofala Road project. The bridge has been constructed by India and is a symbol of the solidarity and friendship between India and Mozambique.
- According to the Indian High Commission in Mozambique, the bridge will make a difference to the lives of many people in Mozambique. The Buzi Bridge is an essential project that demonstrates India's commitment to the development of Mozambique's infrastructure.
- During his visit to Mozambique, Dr Jaishankar, along with Mr Magala, took a ride on a train made in India from Maputo to Machava, accompanied by CMD of Rail India Technical and Economic Service RITES Rahul Mithal.
- Dr Jaishankar also met with President of Assembly Esperança Bias and discussed the historic cooperation between India and Mozambique, with a focus on counter-terrorism and disaster resilience.



INDIA'S OLDEST BILLIONAIRE KESHUB MAHINDRA PASSES AWAY AT 99-

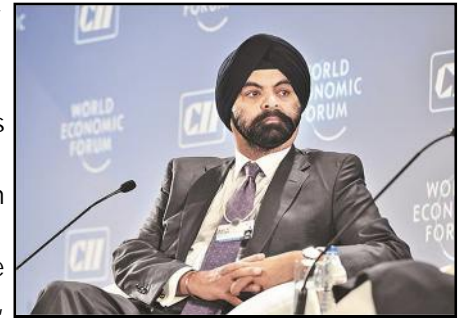
- Keshub Mahindra, the Chairman Emeritus of Mahindra & Mahindra and India's oldest billionaire, passed away at the age of 99. He had a net worth of \$1.2 billion as per Forbes. He retired as the Chairman of Mahindra Group on August 9, 2012, and passed on his responsibilities to his nephew, Anand Mahindra.
- Under his 48-year long tenure as Chairman, the Mahindra Group diversified from being solely an automobile manufacturer to expanding into other sectors such as IT, real estate, financial services, and hospitality.
- Keshub Mahindra played a crucial role in establishing strategic partnerships with global giants like Willys Corporation, Mitsubishi, International Harvester, United Technologies, British Telecom, among others.
- Keshub Mahindra was born on October 9, 1923, in Shimla and earned his degree from Wharton, University of Pennsylvania, USA. He joined the Mahindra & Mahindra Group in 1947 and eventually became its Chairman in 1963.
- Besides his role in the Mahindra Group, he served on various Boards and Councils, both in the private and public sectors. This included positions in SAIL, Tata Steel, Tata Chemicals, Indian Hotels, IFC, and ICICI.
- He was also the Founder Chairman of HUDCO (Housing and Urban Development Corporation Limited), Vice-Chairman of Housing Development Finance Corporation Ltd, Chairman of Mahindra UGINE Steel Co. Ltd, Director of Bombay Dyeing & Manufacturing Co. Ltd., and Bombay Burmah Trading Corporation Limited.



RECENTLY, INDIAN AMERICAN BUSINESS EXECUTIVE AJAY BANGA WAS NOMINATED BY US PRESIDENT TO HEAD THE WORLD BANK-

- If confirmed by the World Bank Board of directors, he will be the first Indian-American to head either of the two top international financial institutions: the International Monetary Fund (IMF) and the World Bank.

- World Bank was created in 1944, as the International Bank for Reconstruction and Development (IBRD) along with the IMF. The IBRD later became the World Bank.
- The World Bank is one of the United Nations' specialized agencies. It has 189 member countries.
- **Major Reports-** Ease of Doing Business (Stopped publishing), Human Capital Index, World Development Report.
- **Shareholding of WB-** The United States is the largest single shareholder, with 16.41% of the votes, followed by Japan (7.87%), Germany (4.49%), the United Kingdom (4.31%), and France (4.31%). The rest of the shares are divided among the other member countries.



RAJEEV RAGHUVANSHI APPOINTED AS NEW DRUG CONTROLLER GENERAL OF INDIA -

- Rajeev Singh Raghuvanshi has been appointed as the new Drug Controller General of India (DCGI), Central Drugs Standard Control Organization (CDSCO). Rajeev Singh Raghuvanshi is a former Indian Pharmacopoeia Commission secretary-cum-scientific director.
- The Union Public Service Commission (UPSC) has recommended to the government his name as the successor to Dr. V G Somani, whose extended tenure will end in mid-February.
- The recommendation was later approved by the Health Ministry, followed by approval of the Appointments Committee of Cabinet led by Prime Minister Narendra Modi.
- The DCGI heads the Central Drugs Standard Control Organisation (CDSCO) which is responsible for ensuring quality drug supply across the country. It also has the authority to give approval to new drugs and regulate clinical trials.
- He has more than 25 publications in peer-reviewed journals and has co-authored six chapters in books.



NEPAL ELECTS RAM CHANDRA PAUDEL AS ITS NEXT PRESIDENT -

- Ram Chandra Paudel has been elected to serve as the new president of Nepal. According to the Nepalese Election Commission, he received 33,800 electoral votes, while his opponent, Subash Chandra Nembwang, received 15,500 votes.
- Ram Chandra Paudel received votes from 352 members of provincial assemblies and 214 members of parliament.
- An electoral college made up of representatives from the federal parliament and the provincial assembly chooses the president.
- The overall number of electors in Nepal's presidential election is 882, including 550 representatives from each of the country's seven provincial assembly and 332 members of the parliament. As Nepal's new president, he will take over from Bidya Devi Bhandari.



ERIC GARCETTI APPOINTED AS US AMBASSADOR TO INDIA -

- The US Senate Committee has announced the appointment of Eric Garcetti as the new US Ambassador to India.

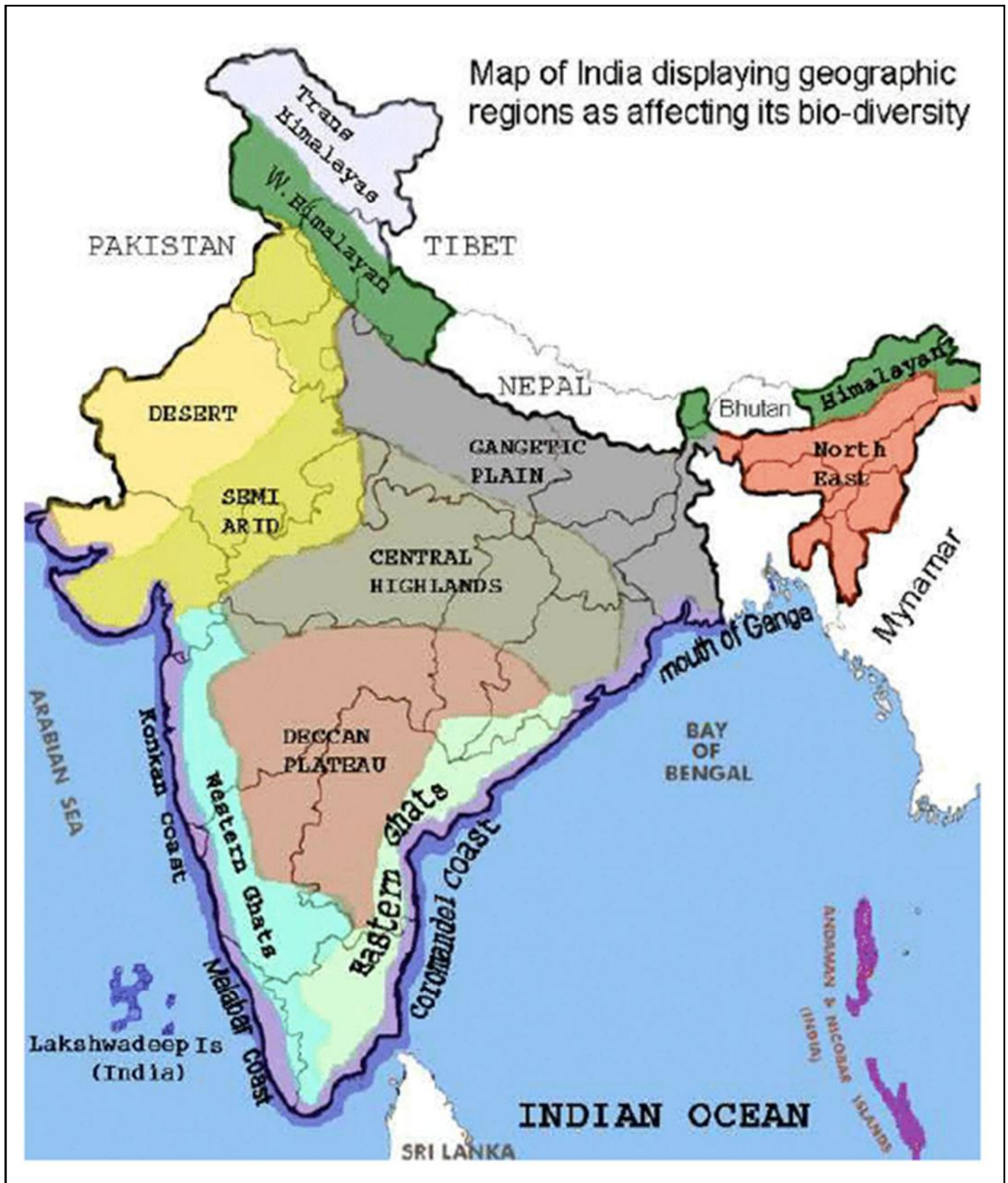
- Despite being nominated by President Joe Biden almost two years ago, Garcetti's appointment had been pending until now.
- Eric Garcetti served as the President of the City Council of Los Angeles for four consecutive terms and is known to be a close acquaintance of President Biden. He has also emerged as a leader within the Democratic Party.
- However, Garcetti's tenure as mayor of Los Angeles lasted for nine years and was not without controversy. In 2020, there was a controversial incident that occurred during his time in office.
- Eric Garcetti's nomination for the prestigious diplomatic posting as the US Ambassador to India had been pending before the US Congress since July 2021, when President Biden nominated him for the position.
- Prior to his confirmation, the position had remained vacant for more than two years. However, during President Biden's first two years in office, some lawmakers had expressed concerns about Garcetti's handling of sexual assault and harassment allegations against a former senior adviser, which led to his confirmation being delayed.



NIMBUS
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IMPORTANT MAPS & ARTICLES

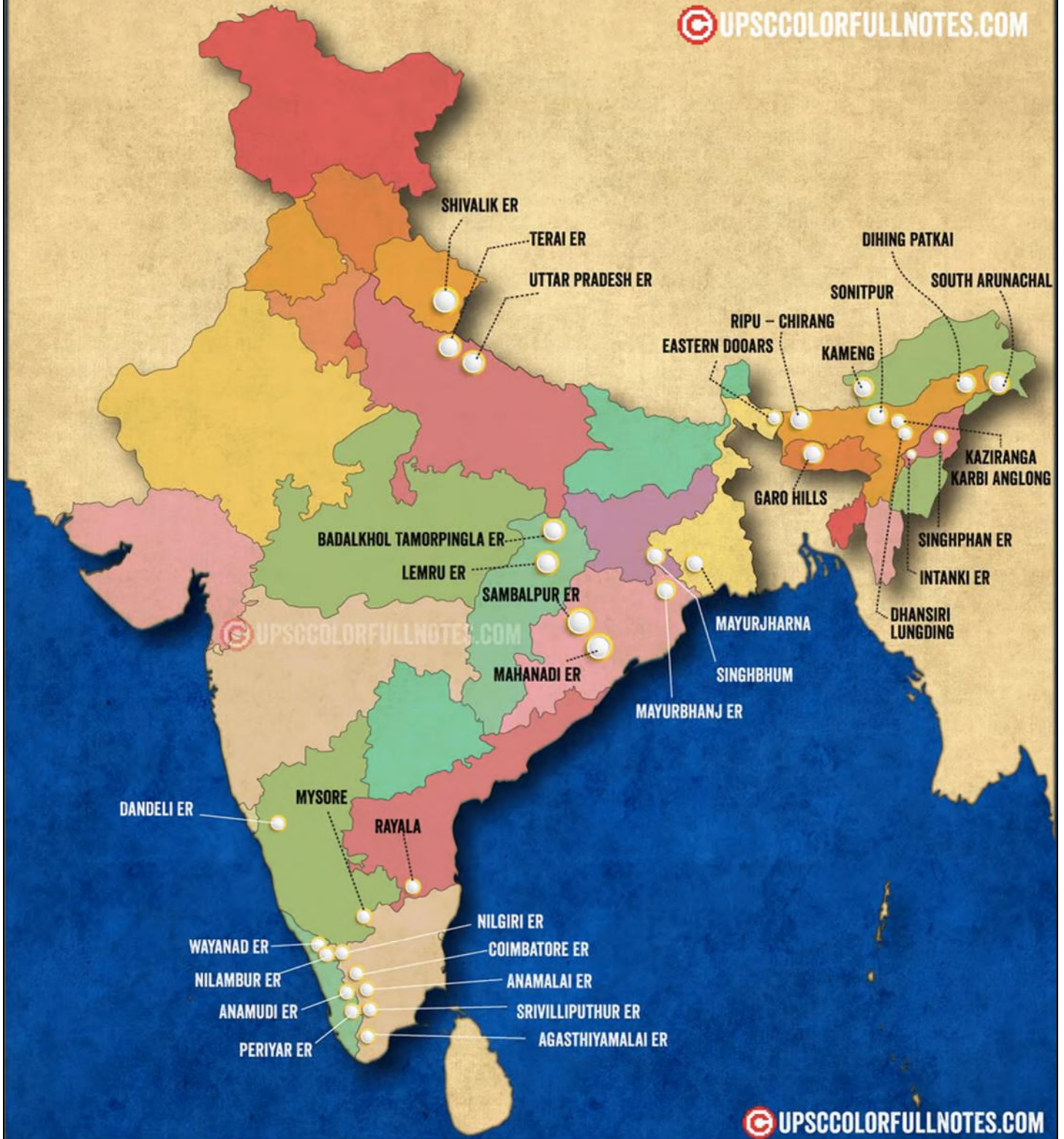




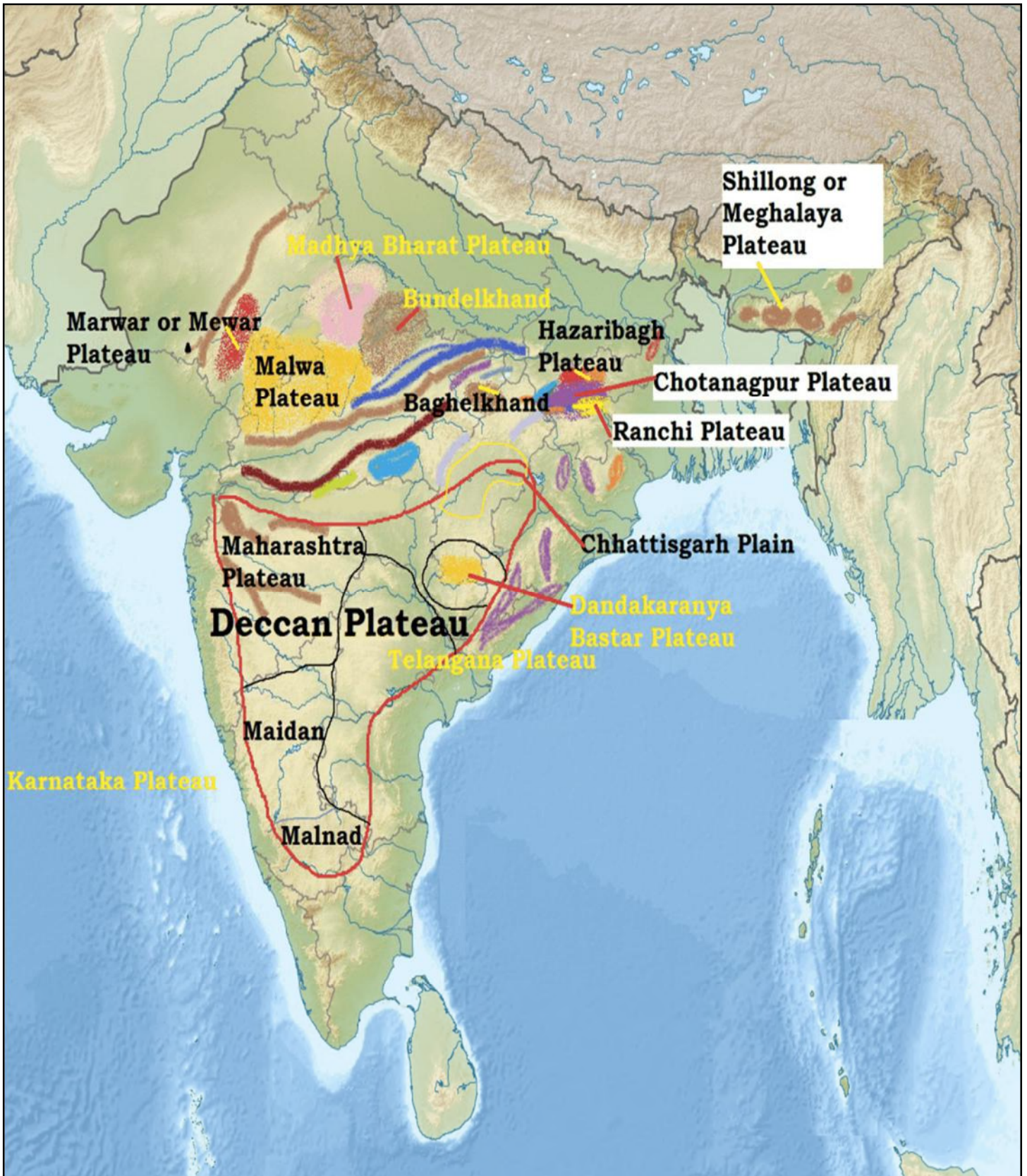


33 ELEPHANT RESERVES IN INDIA

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MEDIA BIAS AND DEMOCRACY

The media is the fourth pillar in the conception of the State, and thus an integral component of democracy. A functional and healthy democracy must encourage the development of journalism as an institution that can ask difficult questions to the establishment — or as it is commonly known, “speak truth to power”.

Article 19 of the Constitution of India guarantees the right to freedom of speech and expression and is typically invoked against the state. However, despite the constitutional protection, journalists and media outlets in India have faced a range of challenges, including threats, attacks, and intimidation from government officials, politicians, and non-state actors.

Media is the engine that drives democracy forward, based on the quest for truth, justice, and equality. In today's digital age, the need for journalists to uphold standards of accuracy, impartiality, and responsibility in their reporting is paramount to successfully overcome the challenges posed by the rapidly changing media landscape.

What Role does Media Play in Promoting Democracy?

- **Providing Information:**

- The media informs citizens about political issues, policies, and events, allowing them to make informed decisions about their leaders and government.

- **Holding Leaders Accountable:**

- The media acts as a watchdog, scrutinizing the actions of government officials and holding them accountable for their actions.

- **Encouraging Public Debate:**

- The media provides a platform for public debate and discussion about political issues, which is essential for a healthy democracy.

- **Representing Diverse Perspectives:**

- The media should represent a range of perspectives and viewpoints, giving citizens access to a variety of opinions and ideas.

- **Educating Citizens:**

- The media should educate citizens about the democratic process, helping them understand how government works and how to participate in it effectively.

What are the Challenges with the Role of Media in Democracy?

- **Media Bias:**

- Media bias can distort the information that is presented to the public, leading to a lack of objectivity and an imbalance in the information that is available. This can result in a polarized public opinion and a lack of trust in the media.

- The mainstream media in India is often indulged in either being pro-government or totally against them they are choosing extreme point of views and are not trying balancing out, rather ignoring issues related to common folks.

- **Fake News:**

- The rise of social media has made it easier for fake news to spread rapidly, often leading to confusion and misinformation among the public.

- This can undermine the credibility of the media and lead to a lack of trust in the information that is presented.

- Recently, two men in Haryana were killed on suspicion of illegal transportation, smuggling or slaughtering of cows by cow vigilantes highlight the issue of Mob Lynching.

- **Corporate Influence:**

- Media outlets are often owned by large corporations, which can influence the editorial policies and reporting of the media. This can lead to a lack of diversity of perspectives and a focus on profit over public interest.
- **Government Censorship:**
- Governments may use censorship to control the flow of information and suppress dissent. This can lead to a lack of transparency and accountability in the government and limit the ability of the media to act as a watchdog.
- **Issue of Legitimacy:**
- A diverse and representative newsroom is essential for media institutions to provide well-researched and complex stories that explore a multiplicity of perspectives and voices.
- The issue of legitimacy with media refers to the concern that media outlets may not always provide accurate, unbiased, or truthful information.
- This can arise due to various factors such as political biases, commercial interests, sensationalism, and lack of journalistic standards.
- **Gender Diversity:**
- The lack of gender diversity in the media is another important issue to consider. Women are underrepresented in both the ownership and workforce of media organizations, which limits the diversity of perspectives and voices in the media. It also perpetuates gender stereotypes and reinforces patriarchal norms.
- **Media Trial:**
- There have been instances when the media has carried narratives that make a person guilty in the eyes of the public, even before the court finds them guilty.
- **Example:**
- One example of a media trial in India was the 2008 Aarushi Talwar-Hemraj double murder case. The case received extensive media coverage and the media played a significant role in shaping public opinion and influencing the investigation and subsequent court proceedings.
- This can have long-lasting repercussions on the life of the affected individuals, as well as on due process.
- According to the Madrid Principles on the Relationship Between the Media and Judicial Independence, it is the job of the media to “convey information to the public and to comment on the administration of justice, including cases before, during and after trial, without violating the presumption of innocence.”

What Should be the Way Forward?

- **Promote Accuracy and Fact-Checking:**
- It is the collective responsibility of journalists as well as other stakeholders to weed out any element of bias or prejudice from the process of reporting events.
- A comprehensive fact-checking mechanism should be in place to verify all news items before reporting. Media houses are expected to act cautiously while publishing news.
- **Provide Diverse Perspectives:**
- The media should strive to represent diverse voices and perspectives to ensure that all viewpoints are heard and considered. This can help to promote a more informed and engaged citizenry.
- **Hold those in Power Accountable:**
- One of the key roles of the media is to hold those in power accountable by reporting on their actions and decisions. This includes investigating corruption and abuse of power.
- **Foster Public Discourse:**
- The media can play a key role in fostering public discourse by providing a platform for debate and discussion. This can help to promote understanding and dialogue between different groups, leading to more informed and inclusive decision-making.
- **Avoid Bias:**

- The media should strive to avoid bias in its reporting to ensure that it is perceived as fair and objective by all parties. This can help to build trust in the media and promote its role in democracy.
- **Addressing Online Harassment of Journalists:**
- Journalists are facing online harassment due to the rise of social media. This affects their safety and freedom of expression. India needs to take measures to address this issue and ensure the safety of journalists.
- **Encouraging Media Literacy:**
- While the media has an important role in promoting democracy, citizens also have a responsibility to consume news critically and discerningly. Media literacy programs can help citizens to better understand how the media works, how to distinguish between reliable and unreliable sources, and how to engage in informed public discourse.
- **Promoting Independent Journalism:**
- In addition to large mainstream media outlets, there is a need to support and promote independent journalism in India. This can include funding for investigative reporting, support for community-based media, and protection for freelance journalists and stringers who often face greater risks than staff journalists.
- **Strengthening Legal Protection for Journalists:**
- Often journalists and media outlets are subjected to threats, attacks, and intimidation from various sources. Therefore, the government could consider enacting a law that specifically protects journalists and media outlets from harassment and violence.
- While Article 19 of the Indian Constitution guarantees freedom of speech and expression, there are no specific provisions for the protection of journalists.
- **Adherence to Media Ethics:**
- It is important that the media stick to the core principles like truth and accuracy, transparency, independence, fairness and impartiality, responsibility and fair play.

GREEN HYDROGEN - SUBSTITUTE TO FOSSIL FUEL

Under the highly ambitious National Green Hydrogen Mission, India intends to be "the Global Hub for the Production, Use, and Export of Green Hydrogen" and "to assume technology and market leadership." The mission's goal is to generate 5 million tonnes of green hydrogen for domestic use.

Green hydrogen is a clean energy source produced through the electrolysis of water using renewable energy sources such as wind, solar, and hydro power. It has the potential to become a key player in the transition to a carbon-free economy and can help mitigate climate change. The hydrogen produced can be stored and used as a fuel for transportation, industry, and agriculture.

What are the Reasons to Develop Green Hydrogen?

- **Reducing Greenhouse Gas Emissions:**
- The primary reason for developing green hydrogen is to reduce greenhouse gas emissions and mitigate climate change. The use of fossil fuels for transportation and electricity generation is a major contributor to global emissions.
- Green hydrogen, produced from renewable sources, emits zero greenhouse gases, making it a sustainable and environmentally friendly energy source.
- **Energy Security and Independence:**
- Fossil fuels are a finite resource, and their prices can fluctuate due to global supply and demand. By developing renewable energy sources like green hydrogen, countries can become more energy-independent and less vulnerable to price shocks and supply disruptions.
- **Creating New Industries and Jobs:**

- The development of green hydrogen can create new industries and jobs, particularly in the renewable energy sector. The production, storage, and distribution of green hydrogen require specialized expertise and infrastructure, which can generate employment opportunities.
- According to the International Renewable Energy Agency (IRENA), the renewable energy sector employed 11 million people worldwide in 2018 and is expected to create more than 42 million jobs by 2050.
- Decarbonizing in Sectors which are Difficult-to-Decarbonize:
- The potential to substitute fossil fuels with green hydrogen is significant, especially in sectors that are difficult to decarbonize, such as heavy industry and aviation. These sectors contribute significantly to global emissions, and the use of green hydrogen can help reduce their carbon footprint.
- **Technological Advancements:**
- The development of green hydrogen can drive technological advancements and innovations in various sectors. The production, storage, and distribution of green hydrogen require new technologies and infrastructure, which can spur the development of new materials, processes, and systems.

What are the Applications of Green Hydrogen?

▪ **Agriculture Sector:**

- Green Hydrogen as Replacement to Fossil Fuel in Agriculture:
- Green hydrogen has the potential to replace traditional fertilizers in agriculture through the production of ammonia using renewable energy sources.
- Ammonia is a key ingredient in the production of fertilizers, and the current production process relies on natural gas, which is a fossil fuel and contributes to greenhouse gas emissions.
- Green ammonia produced with help of green hydrogen is carbon-free, green ammonia has other benefits over traditional fertilizers, including improved efficiency and reduced soil acidity.
- However, the production of green ammonia at scale will require significant investment in infrastructure and the development of new technologies. Currently, the production of green ammonia is more expensive than traditional ammonia production, which may limit its adoption in the short term.
- **Green Hydrogen-Powered Farm Machinery:**
- Farm machinery like tractors, harvesters, and irrigation systems require a lot of energy to operate. Green hydrogen-powered farm machinery can significantly reduce greenhouse gas emissions while still delivering the power required to carry out essential farm tasks.
- **Green Hydrogen for Water Management:**
- Water is a precious resource, and managing it efficiently is critical for sustainable agriculture. Green hydrogen can be used to power desalination plants that convert saltwater into freshwater, reducing our reliance on scarce freshwater resources.

▪ **Transport Sector:**

◦ **Hydrogen Fuel Cell:**

- A hydrogen fuel cell is a device that converts the chemical energy of hydrogen and oxygen into electricity, water and heat.
- Hydrogen fuel cell vehicles produce zero emissions, making them an attractive alternative to gasoline and diesel-powered vehicles. They have a longer range than battery electric vehicles and can be refuelled in minutes, making them more convenient for long-distance travel.

▪ **Industrial Sector:**

◦ **Cost Savings:**

- The production of green hydrogen can be done using excess renewable energy that is produced during off-peak hours. This excess energy can be used to produce green hydrogen, which can then be stored and used when the energy demand is high. This can help to reduce the cost of energy and promote sustainable development.
- Reliable:

- Green hydrogen can be produced and stored on-site, making it a reliable and consistent source of energy for industrial processes. This can help to reduce the dependence on the electricity grid and promote energy independence.
- **Reduction in Waste:**
- Green hydrogen production can be done using waste materials like municipal solid waste and agricultural waste. This can help to reduce waste and promote sustainable development.
- **Increase in Energy Efficiency:**
- Green hydrogen can be used to power fuel cells, which are more energy-efficient than traditional combustion engines. This can help to reduce energy consumption.

What are the Difficulties in Green Hydrogen Implementation?

- **Cost:**
- The cost of green hydrogen is currently high compared to traditional fossil fuels. The production, storage, and distribution of green hydrogen require specialized equipment and infrastructure, making it more expensive than conventional fuels.
- However, with advancements in technology and scaling up of production, the cost of green hydrogen is expected to decrease over time.
- **Infrastructure:**
- The widespread adoption of green hydrogen requires the development of a robust infrastructure for its production, storage, and distribution.
- The infrastructure must be developed in a way that is compatible with existing energy infrastructure to facilitate the transition to green hydrogen.
- **Energy Storage:**
- Green hydrogen production is dependent on renewable energy sources like wind, solar, and hydro power. However, these sources are intermittent, meaning that their output can fluctuate over time. The development of effective energy storage solutions is critical to enable the widespread adoption of green hydrogen.
- Energy storage solutions like batteries and hydrogen storage can store excess energy produced by renewable sources and provide a constant supply of green hydrogen.
- **Safety:**
- Green hydrogen is a highly flammable gas that requires special handling and storage.
- The development of proper safety protocols and regulations is crucial to ensure the safe handling and storage of green hydrogen.
- **Public Acceptance:**
- The public acceptance of green hydrogen is crucial to its adoption. The public must be educated about the benefits of green hydrogen and its role in mitigating climate change.

What are India's Initiatives to Promote Green Hydrogen?

- India has recognized the potential of green hydrogen to decarbonize its economy and achieve its climate goals. The country has launched several initiatives and policies to promote the production, utilization and export of green hydrogen.
- **Some of the key initiatives are:**
- **National Hydrogen Mission:**
- The mission was announced in the Union Budget 2021-22 and aims to make India a global hub for green hydrogen and its derivatives.
- The mission will also facilitate demand creation, pilot projects, R&D, skill development, standards and regulations, and policy framework for green hydrogen.
- **Green Hydrogen Consumption Obligations:**

- The Ministry of New and Renewable Energy (MNRE) has proposed to introduce green hydrogen consumption obligations for fertilizer and the petroleum refining industry, like the renewable purchase obligations for electricity distribution companies.
- The obligations will require these industries to consume a certain percentage of green hydrogen in their total hydrogen consumption.
- **Green Hydrogen Hubs:**
- The MNRE has identified regions that can support large scale production and/or utilization of green hydrogen and develop them as green hydrogen hubs.

What Should be the Way Forward?

- **High Cost of Production and Utilization:**

- Green hydrogen is currently more expensive than conventional hydrogen produced from fossil fuels or other low-carbon sources, such as nuclear or blue hydrogen. So, to address this issue, there is a need to develop efficient technologies that can reduce the production cost of green hydrogen.
- One promising approach is to use more efficient electrolysis systems that require less energy to produce the same amount of hydrogen. This can be achieved using advanced materials for the electrodes or the use of more efficient catalysts.
- Another approach is to integrate green hydrogen production with other renewable energy technologies such as wind or solar farms. This can reduce the cost of electricity used in the electrolysis process, making green hydrogen more competitive with conventional hydrogen.

- **Implement Regulatory Incentives:**

- The government can play a key role in promoting the adoption of green hydrogen by implementing regulatory incentives, such as tax credits and subsidies, to encourage the production and use of this technology.

- **Lack of Adequate Infrastructure and Supply Chain:**

- Green hydrogen requires dedicated infrastructure and supply chain for its production, storage, transport and distribution.
- The existing infrastructure and supply chain for conventional hydrogen are not sufficient or compatible for green hydrogen, efficient and cost-effective supply chain must be developed.

- **Coordination Among Various Stakeholders and Sectors:**

- Green hydrogen involves multiple stakeholders and sectors across the value chain, such as renewable energy producers, electrolyser manufacturers, hydrogen producers, transporters, distributors and end-users.
- There is a need for coordination among these stakeholders and sectors to ensure alignment of policies, standards, regulations, incentives and markets for green hydrogen.

- **Awareness and Capacity Building among Potential Users and Producers:**

- Green hydrogen is still a developing technology that requires awareness and capacity building among potential users and producers.
- There is a need to demonstrate the benefits, safety and feasibility of green hydrogen in various applications and sectors.
- There is also a need to develop skills and competencies for green hydrogen production and utilization.

BOOSTING INDIA'S TAX BASE

India has become the most populous country, with a quarter of the population below 15 years old, making it a youthful nation with a low share of elderly citizens and high fertility rates. The increasing working-age population is an advantage that can drive growth in the future.

With the rise in population, there are many broader policy implications that arise – harnessing this workforce effectively to contribute to GDP, providing them the right skill training, providing jobs, social security etc.

With rise in population, the workforce has grown but the income tax base has not increased, which needs to be addressed.

The Finance Ministry had revealed that the number of people who filed income tax returns stood at 6.8 crore in 2020-21. This means that only 4.8% of the total population filed IT returns in 2021. Of these, only 1.69 crore paid tax since 65% of the taxpayers earned less than Rs. 5 lakh. So effectively, only 1.2% of the population pays income tax as of now.

What are the Reasons for Low Tax Base in India?

▪ **Large Informal Economy:**

- India has a significant informal economy, which means that a significant portion of economic activity is not registered with the government, and therefore, not taxed.
- Many small businesses, street vendors, and daily wage workers operate in the informal sector, which makes it difficult for the government to track their income and collect taxes.

▪ **Low Participation of Women in the Workforce:**

- Another reason for the low tax base in India is the low participation of women in the workforce.
- According to the World Bank report released in June 2022, Indian women's labour force participation has been steadily declining since 2005 and is at a low of 19% in 2021.

▪ **Dominance of Agricultural Sector:**

- A dominant portion of India's workforce is employed in agriculture and agricultural income is exempt under income tax.
- This results in 45.6% of agri-workers not filing tax returns. So, only 23 crore of the workers in the non-agri segment are liable to pay tax.
- This results in a narrow tax base, which is heavily reliant on other sectors of the economy.

▪ **Income is not Taxable:**

- The tax incidence arises only if the income is above a certain threshold, and that a large percentage of Indian households have an annual income under Rs.6 lakh.
- This means that the potential taxpayer base is reduced to a smaller number.
- According to Statista, 67% of Indian households had annual income under Rs.6 lakh in 2021, which reduces potential income taxpayers to 7.6 crore.

How can India Harness the Increasing Working Age Population?

▪ **Formalisation of the Economy:**

- The informal sector accounts for a significant part of India's economy, but many businesses and workers operate outside the tax net.
- According to a paper, 'Measuring Informal Economy in India, Indian experience', out of the total workforce in 2017-18, 90.7% was employed by the informal sector.
- Formalising the economy by bringing these businesses and workers under the tax net can increase the tax base.
- This can be achieved by providing incentives for businesses to register themselves and comply with tax laws, and by simplifying tax laws to make compliance easier.
- Also, it can be done with some help from the GST system. One of the objectives of the GST regime in its original form was to nudge those in the unorganised sector to shift to the formal sector and file GST returns in order to avail input tax credits or to continue supplying to larger buyers.

▪ **Identifying High-Income Earners in the Informal Sector:**

- Many high-income earners operate in the informal sector, but they are not currently paying taxes.
- Identifying and bringing these individuals into the tax net can increase the tax base.

- This can be achieved by collecting data on income and assets through various means such as bank transactions, property purchases, etc. and using this data to identify potential taxpayers.
- **Bringing Agricultural Income into the Tax Net:**
- Currently, agricultural income is exempt from income tax in India. However, many wealthy farmers earn a significant income from agriculture, but they do not pay taxes.
- Bringing agricultural income into the tax net can increase the tax base.
- This can be achieved by setting a minimum threshold for agricultural income to be taxed, and by incentivising farmers to report their income.
- **Tax collection at source (TCS):**
- Collecting tax at source for purchase of certain goods and services is another way to identify those who earn a tidy sum every year but are not paying any taxes.
- As of now, TCS is collected for high value goods such as expensive motor vehicles, gold jewellery or overseas remittances.
- The ambit of TCS can be expanded to consumer durables, domestic luxury travel, stays in expensive hotels etc.
- This can help identify those operating in the informal sector and earning high income, yet evading tax.
- While this could hit honest taxpayers, they can reclaim the tax in their annual return.

A FRESH COVID-19 DATA INTERPRETATION APPROACH

According to the WHO, a pandemic is declared when a new disease for which people do not have immunity spreads around the world beyond expectations.

Epidemic:

- An epidemic is a large outbreak, one that spreads among a population or region.
- It is less severe than pandemic due to a limited area of spread.

Covid-19

- The novel coronavirus outbreak in 2019-2020 with the nickname COVID-19 is a new strain of viruses which can cause fever, cough, breathing difficulties, pneumonia and even death in humans.
- **WHO:** It declared COVID-19 infections as a public health emergency of international concern and later called it a pandemic.
- RNA virus: Coronavirus consists of an RNA genome and is one of the largest in the RNA family.
- Single stranded: Coronaviruses are enveloped and contain single-stranded positive-sense RNA.

Reasons for recent surge in COVID-19:

- 1.16 recombinant variant which has higher transmissibility in comparison to other circulating variants.
- Viral flu surge (H1N1 and H3N2 sub-types) which resulted in health-care providers recommending higher COVID-19 testing.
- Availability of COVID-19 testing at low cost, nudging people who have a cough and cold to get themselves voluntarily tested.

Situation around Covid-19:

- Epidemiological evidence shows that COVID-19 has become endemic in India.
- A disease becoming endemic does not mean zero cases or no seasonal surge.

Swine flu (H1N1) pandemic(2009-10):

- It was caused by influenza A virus new subtype H1N1.
- It was a pandemic that got over in 2010.
- H1N1 subtype is causing a seasonal rise in flu cases, and is the most commonly circulating influenza A virus subtype.

Impact of Ill-informed discourses:

- Any discussion about a fresh surge has a social impact in terms of
 - creating panic and fear
 - apprehensions in parents about sending their children to school (thus, causing learning loss)

Sub-variant XBB.1.16 (which essentially is a recombinant of the Omicron variant):

- It is one of 100-plus recombinant variants and one of 700-plus SARS-CoV-2 variants which have been reported in the last three years.
- It is not a variant of concern as Alpha, Beta, Gamma, Delta and Omicron were.
- On average, around four to five new variants of SARS-CoV-2 have been detected every week.

What steps need to be taken?

- Experts should arrive at a consensus on the number of COVID-19 cases which are expected even when the disease is endemic.
 - This could be in terms of absolute numbers or new cases per 1,00,000 people per week or month.
- There is a need for a more objective approach to define parameters to track COVID-19 situations.
- In public health, the approach should be to collect information to intervene.
- Targeted and voluntary testing, daily COVID-19 cases and test positivity rates are a very weak parameter as well as a flawed approach
 - Better parameter would be to focus on and track moderate to severe illnesses and hospitalization.
- Desegregation of data by those who were admitted after COVID-19 infections, and those who were already in hospitals and incidentally tested positive.
- Tracking, comparing and analyzing COVID-19 data on a monthly and weekly basis for the calendar year.
- New dashboard indicators should begin tracking for the year 2023 onwards
 - It will give an idea of trends — these were obliterated by cumulative data for the last three years.
- **Various forms of surveillance:**
 - Genomic, wastewater, influenza-like illness and Severe Acute Respiratory illness.
 - They are going to be integral tools for response in the long term.
 - Some of the datasets should be linked to clinical outcomes.
- The multiple agencies working in these systems should work with clinicians, data, and public health experts to make real time inferences.
- The government should put out this data in the public domain so that independent researchers and academicians can analyze and support the response process.
- Governments should focus on the public health aspects of:
 - rolling out new parameters to track the disease
 - develop strategies to fight misinformation and 'COVID-forevers'
 - launch sustained health communication messages about preventing all respiratory illnesses.

Way Forward:

- For citizens, it is important not to panic with every spike, not be influenced by unverified social media messages, and to learn to conduct individual self-assessment of risk and take preventive measures according to the health risk.
- **The response to the evolving COVID-19 situation needs to be determined by a holistic assessment of the situation through:**
 - careful examination and interpretation of ECG data
 - Epidemiological (trend in moderate to severe cases)
 - Clinical (change in symptoms, hospitalization and outcome)
 - Genomic and other surveillance (variants, etc.) data.
- The selection of data for decision making needs to be objective, factoring in the evolving epidemiology of COVID-19 and being solution oriented.

TACKLING INDIA'S ENERGY CRISIS

India's energy imports are projected to surge by 43.6% in FY2023, which would significantly impact the country's import bill. Energy imports, including coal, coke, crude oil, LNG, and LPG, account for a significant portion of India's merchandise import bill, representing 36.6%.

If the current import growth rate persists, the energy import bill will soon surpass that of all remaining merchandise imports, with projections indicating that it could exceed USD 1 trillion by December 2026, a troubling prospect. Additionally, the import value of items required for clean energy such as photovoltaic cells and Lithium Ion batteries would further exacerbate the situation.

However, India can cut its crippling import bill by boosting exploration of local oilfields and enhancing coal output.

What are the Reasons behind an Increase in the Price of Energy Sources?

▪ Disruption of Oil Supply Chains:

- The Covid-19 pandemic and geopolitical tensions (US sanctions on Russia post the Russian invasion of Ukraine) have led to disruptions in the global oil supply chain, which has increased demand for alternative energy sources.

▪ Weakening of the US-Saudi Arabia 1970s Deal:

- The United States and Saudi Arabia reached a deal in the 1970s that allowed the US to rely on Saudi oil in exchange for security guarantees.
- However, the US is now pursuing energy independence and is reducing its reliance on Saudi oil.

▪ High Inflation in Developed Countries:

- High inflation in developed countries can certainly lead to a surge in the price of oil, coal, and other energy sources.
- This can induce price increase of the oil all over the world including India and affects its buying power.

▪ US Effort to Create Alternate Supply Chains excluding China:

- The US efforts to create alternate supply chains excluding China can surge the prices of energy sources as China is a major producer and exporter of many critical minerals and metals, such as rare earth elements.
- China is also a significant consumer of energy, particularly fossil fuels like coal and oil.

What are the Challenges in Tackling India's Energy Crisis?

▪ Limited Energy Resources:

- India has limited energy resources such as coal, oil, and gas, and it depends on imports to meet its growing energy demands.
- The estimated values of petroleum imports for FY 2023 are USD 210 billion. This includes crude oil with an import value of USD 163 billion and LNG and LPG of USD 17.6 billion and USD 14 billion, respectively. Crude imports grew by 53% over the last fiscal.
- The country's coal reserves are of low quality and there are significant environmental concerns associated with their extraction and use.
- As a result, India is looking for alternative sources of energy, such as solar, wind, and hydro power.

▪ Poor Energy Infrastructure:

- India's energy infrastructure is inadequate to meet the growing demand for electricity. It suffers from frequent power cuts and blackouts, which can last for hours or even days.
- A rapid addition of solar farms has helped India avert daytime supply gaps, but a shortage of coal-fired and hydropower capacity risks exposing millions to widespread outages at night.
- India's power availability in "non-solar hours" in April, 2023 is expected to be 1.7% lower than peak demand.
- The poor energy infrastructure is also affecting the development of the country's rural areas, where many people do not have access to electricity.

▪ **Inadequate Investment:**

- India's energy sector requires significant investment to improve its infrastructure and expand its energy capacity.
- However, the government and private sector are not investing enough in the energy sector.
- India's low per capita income and high poverty rates also make it difficult for people to afford clean energy sources.

▪ **Political and Regulatory Barriers:**

- India's energy sector is heavily regulated, and there are significant political barriers to energy sector reforms.
- India has been slow to adopt renewable energy policies, and there is a lack of coordination among various government agencies and ministries.

▪ **Climate Change:**

- India is one of the largest emitters of greenhouse gases in the world, and its energy sector is a major contributor to these emissions.
- Climate change is also affecting the country's energy infrastructure, as extreme weather events such as floods and droughts are becoming more frequent and severe.

What Should be the Way Forward?

▪ **Invest in Domestic Exploration and Production:**

- India must evaluate its options to increase local production, including developing Category II sedimentary basins that have known hydrocarbon reserves but no commercial production yet. The government should provide incentives to attract investment in these areas.

• **India has 26 sedimentary basins divided into the following four categories:**

- Category I (7 Basins): Established commercial production
- Category II (3 Basins): Known accumulation of hydrocarbons but no commercial production as yet.
- Category III (6 Basins): Indicated hydrocarbon reserves considered geologically oil-bearing
- Category IV (10 basins): Uncertain potential may be prospective by analogy with similar basins worldwide; and deep-water reserves.

▪ **Improve Coal Quality:**

- India should focus on improving the quality of domestic coal to reduce the reliance on imports. This can be achieved by investing in technology to increase the calorific value of coal and reduce the ash content.

▪ **Encourage Renewable Energy:**

- India has vast potential for renewable energy sources like solar, wind, and hydro.
- The government should encourage the development of renewable energy projects through incentives and subsidies.
- Carbon pricing can help to incentivize the use of renewable energy by putting a price on carbon emissions.

▪ **Develop Energy Infrastructure:**

- India must invest in developing its energy infrastructure to ensure efficient transmission and distribution of energy.
- This can be achieved by upgrading the existing infrastructure and building new power plants, pipelines, and transmission lines.

▪ **Reducing Coal Imports:**

- India must also focus on reducing coal imports. There's not enough scope for reducing the import of coking coal as India does not have high-quality reserves but the import of thermal coal can be managed.
- Coal imports have increased mainly because of demand from new power plants that use only high-grade imported coal.

- The need to import arises because of the low quality (high ash content of 30-40%) of Indian coal, the inability of Coal India Ltd. to increase production and use technology to increase the calorific value of coal, and within-country transport restrictions.

EXTREME HEAT WAVES AND MITIGATION

For last few years, heat wave during the summer season is increasingly affecting morbidity and mortality in the country. Heat waves are a growing concern for disaster management in India, causing widespread health and environmental impact.

Extreme weather events have become more frequent globally, requiring communities to understand and cope with heat waves.

From the view of hazard mitigation, rising number of heat wave related deaths is expected to serve as danger signal and corroborate the need to develop innovative methods to control summer-time losses.

What is Heat Wave?

- Heat wave as a hazard causing disaster scenario, is little more than the physical phenomenon of high heat conditions and is characterized as a complex of hydro-climatic risks coupled with social, occupational and public health risks.
- **Definition:**
 - As such there is no universal definition for heat wave.
 - It is generally defined as a prolonged period of excessive heat.
- Indian Meteorological Department (IMD) Criteria:
 - Heat Wave need not be considered till maximum temperature of a station reaches at least 40°C for Plains and at-least 30°C for Hilly regions.
 - If the normal maximum temperature of a station is less than or equal to 40°C, then an increase of 5°C to 6°C from the normal temperature is considered to be heat wave condition.
- Further, an increase of 7°C or more from the normal temperature is considered a severe heat wave condition.
- If the normal maximum temperature of a station is more than 40°C, then an increase of 4°C to 5°C from the normal temperature is considered to be heat wave condition. Further, an increase of 6°C or more is considered a severe heat wave condition.
- Additionally, if the actual maximum temperature remains 45°C or more irrespective of normal maximum temperature, a heat wave is declared.

To What Extent Heat Wave is the Problem?

- **Heat Stress:**
 - 350 million Indians exposed to strong heat stress between April and May 2022
- **Temperature Trends:**
 - Summer temperatures have risen by 0.5-0.9°C across districts in Punjab, Haryana, Uttar Pradesh, Bihar, and Rajasthan between 1990 and 2019.
 - 54% of India's districts have seen a similar rise in winter temperatures.
 - Maximum temperature is expected to rise by 2-3.5°C in 100 districts and by 1.5-2°C in around 455 districts between 2021 and 2050.
- **Urban Heat Island Effect:**
 - Rising temperatures lead to urban heat island effect with temperatures 4-12°C higher than rural area.
 - Climate change exacerbates local weather patterns, leading to weather variability and losses in agriculture.

What are the Causes?

- **Sparse Pre-Monsoon Season Showers:**
 - Less moisture in many areas, leaving large parts of India arid and dry.

- The sudden end of pre-monsoon rain showers, an uncommon trend in India, has contributed to the heat waves.
- **El Nino Effect:**
- El Nino often increases temperatures in Asia, combined with the weather pattern to create record high temperatures.
- Trade winds coming from South America normally blow westward towards Asia during Southwest Monsoon and warming of the Pacific Ocean results in weakening of these winds.
- Therefore, moisture and heat content get limited and results in reduction and uneven distribution of rainfall across the Indian sub-continent.

What are the Impacts of Heat Waves?

▪ **Health Impacts:**

◦ **Heat rash:**

- Also known as sunburn phenomenon with pinkish skin resulting in burning of skin and pain sensation.

◦ **Heat syncope:**

- Giddiness, vertigo headache and sudden onset drowsiness/unconsciousness.

◦ **Heat Cramps:**

- Edema (swelling) and Syncope (Fainting) are generally accompanied by fevers below 39°C i.e., 102°F.

◦ **Heat Exhaustion:**

- Fatigue, weakness, dizziness, headache, nausea, vomiting, muscle cramps and sweating.

◦ **Heat Stroke:**

- Body temperatures of 40°C i.e., 104°F or more along with delirium, seizures or coma. This is a potentially fatal condition.

▪ **Impact on Labor and Productivity:**

- Heat exposure leads to a loss of 162 hours per year for laborers doing heavy work, impacting productivity.
- About 50% of India's workforce is estimated to be exposed to heat during their working hours, including marginal farmers, construction workers, and street vendors.

▪ **Impact on Agriculture Sector:** Crop yields suffer when temperatures exceed the ideal range.

- Farmers in Haryana, Punjab and Uttar Pradesh have reported losses in their wheat crop in the past rabi season.

- Livestock is also vulnerable to heatwaves.

▪ **Food Insecurity:**

- The concurrence of heat and drought events are causing crop production losses and tree mortality.
- The risks to health and food production will be made more severe from the sudden food production losses exacerbated by heat-induced labour productivity losses.
- These interacting impacts will increase food prices, reduce household incomes, and lead to malnutrition and climate-related deaths, especially in tropical regions.

▪ **Impact on Energy Demand:**

- Average Daily peak demand rises due to increased heat.

What Should be Mitigating Strategies?

▪ **Urban Greening:**

- Greener and more permeable urban surfaces can help reduce urban heat.
- Development plans for Tier 2 and Tier 3 cities can set up a mandate to increase the density and area of urban forests.
- Natural landscapes in urban areas, such as trees, parks, and vegetation, can help in cooling.

▪ **Infrastructure:**

- Greater usage of permeable materials in civic infrastructure and residential construction can reduce the urban heat island effect.

- Encouraging cleaner cooking fuels such as Biogas, Compressed Natural Gas, Liquefied Petroleum Gas will reduce indoor air pollution and urban heat.
- Improving public transportation and reducing personal vehicle usage can help in reducing extreme heat waves.
- **Waste Management:**
 - Reducing the size of landfills, waste segregation, and solid waste management at the source can reduce methane production and fires that exacerbate urban heat.
- **Policies and Guidelines:**
 - Policies and guidelines on weather variability and urban heat management are needed at various levels.
 - Expanding wetlands and restoring ponds and lakes may also help.
- **Building Design:**
 - Promoting the use of green roofs and cool roofs in buildings, increasing ventilation, and setting up green spaces.
 - Passive cooling techniques such as natural ventilation, shading, and thermal insulation can significantly reduce indoor temperatures and energy consumption.
 - High-albedo roofs and pavements in the buildings.
- **Renewable Energy:**
 - Promoting the use of renewable energy sources such as solar and wind energy for cooling and electricity needs.
- **Public Awareness:**
 - Educating the public about the risks of heatwaves, how to stay cool, and the importance of reducing carbon footprint.
- **Agricultural Adaptation:**
 - Supporting farmers with resilient farming practices that take into account the risks of heatwaves, droughts, and water scarcity.
 - Crop diversification, Agroforestry, mulching, crop rotation, and cover cropping, drip irrigation and sprinkler systems can be helpful.
- **Disaster Management:**
 - Developing emergency response plans for heatwaves, including providing cool shelters and adequate medical facilities.
- **In the short-term:**
 - It is essential to establish an effective early warning system that can provide timely and accurate information to people at risk.
 - This system should be integrated with public health services and local governments and should be able to mobilize resources quickly in response to a heat wave.
- **In the long-term:**
 - Structural infrastructure measures are required to help Indians adapt to extreme heat.
- **Green Transport:**
 - Encouraging the use of public transport and bicycles to reduce vehicle emissions and traffic congestion.
 - Bicycles, Electric Vehicles etc. can be helpful.

IMPORTANT MCQ FOR COMPETITIVE EXAMS

1. What is the National Heritage Animal of India ?
a) Panther
b) Lion
c) Tiger
d) Elephant
2. Where is the headquarters of the "United Nations Environment Programme" (UNEP) located ?
a) Montreal, Canada
b) Nairobi, Kenya
c) Cologne, Switzerland
d) London, United Kingdom
3. Indian Navy launched _____, the second in a series of eight indigenous ships built by Garden Reach Shipbuilders and Engineers (GRSE).
a) INS Satpura
b) INS Sahyadri
c) INS Suvarna
d) INS Androth
4. World Tuberculosis Day is observed every year on which day ?
a) March 21st
b) March 22nd
c) March 23rd
d) March 24th
5. Google Doodle celebrates 77th birth anniversary of late _____, the 'fastest woman in the world'.
a) Kitty O'Neil
b) Rochelle Okoye
c) Taryn Terrell
d) Jwaundace Candece
6. Which country recently joins BRICS bank as new member ?
a) Sweden
b) Turkey
c) Egypt
d) Bhutan
7. The annual bilateral maritime exercise called Konkan 2023 was conducted between the Indian Navy and the _____ from 20th to 22nd March 2023 off the Konkan coast in the Arabian Sea.
a) Royal Navy
b) French Navy
c) Japan Navy
d) US Navy
8. According to the 2023 M3M Hurun Global Rich List, what is the rank of India in terms of the number of billionaires ?
a) 1st
b) 2nd
c) 3rd
d) 4th
9. RBI Governor Shaktikanta Das laid the foundation stone of the central bank's data centre and an institute for computing and cybersecurity training in _____.
a) Lucknow
b) Kanpur
c) Bhubaneswar
d) Indore
10. The _____ government has given approval for a 75-foot tall 'Statue of Knowledge' dedicated to Dr. B. R. Ambedkar in Latur city.
a) Maharashtra
b) Madhya Pradesh
c) Gujarat
d) UP
11. Consider the following statements:
1. According to the Constitution of India, a person who is eligible to vote can be made a minister in a State for six months even if he/she is not a member of the Legislature of that State.
2. According to the Representation of People Act, 1951, a person convicted of a criminal offense and sentenced to imprisonment for five years is permanently disqualified from contesting an election even after his release from prison.
Which of the statements given above is/are correct ?
a) 1 only
b) 2 only
c) Both 1 and 2
d) Neither 1 and 2
12. Consider the following statements regarding Arunachal Pradesh.
1. It is India's largest state in the Northeast.
2. It has the lowest population density in the country.
3. It has international borders with three countries: Bhutan, Myanmar and Bangladesh.
Which of the statements given above is/are correct ?
a) 1 and 2 only
b) 2 and 3 only
c) 2 only
d) 1, 2 and 3
13. Which sector contributed the maximum to GDP at the time of Independence ?
a) Services
b) Agriculture
c) Manufacturing
d) None of the above
14. What is India's share in the global horticulture exports ?
a) 1%
b) 2%
c) 3%
d) 4%
15. "Dachigam National Park" is situated in which Indian state?
a) Manipur
b) Sikkim
c) Meghalaya
d) Jammu & Kashmir
16. In which part of India is the "Buddhist Monuments at Sanchi" situated ?
a) Madhya Pradesh
b) Gujarat
c) Bihar
d) Uttar Pradesh

17. What is the amount of finished steel exported from India in FY 22 ?
a) 10 million tonnes
b) 18 million tonnes
c) 13.5 million tonnes
d) 20.5 million tonnes
18. What is the location of India's first cable-stayed railway bridge, and when is its construction expected to be completed ?
a) Jammu and Kashmir
b) Himanchal Pradesh
c) Rajasthan
d) West Bengal
19. On March 26, which country in Central America signed a historic communique with China to establish diplomatic relations ?
a) Guam
b) Mexico
c) Panama
d) Honduras
20. Which of the following country has hosted SCO-National Security Advisors meeting recently ?
a) Pakistan
b) India
c) China
d) Bangladesh
21. What is the main objective of the National Rabies Control Program (NRCP) ?
a) To vaccinate all dogs in India
b) To provide treatment for all cases of rabies in India
c) To control and eliminate rabies in India by 2030
d) To conduct research on rabies in India
22. Where is the 1st joint conference of army chiefs of India and African countries being held ?
a) Pune, India
b) Lagos, Nigeria
c) Nairobi, Kenya
d) Cape Town, South Africa
23. When is the 'International Day of Zero Wastes' observed?
a) March 25
b) March 30
c) April 5
d) April 10
24. Who among the following India won gold medal at Middleweight category in 2023 IBA Women's World Boxing Championships ?
a) Nikhat Zareen
b) Nitu Ghanghas
c) Lovlina Borgohain
d) Saweety Boora
25. Consider the following Statements.
1. The Energy sector is the biggest contributor to greenhouse gases in India.
2. Nitrous Oxide has higher global warming potential than Carbon dioxide gas.
3. India is the second highest greenhouse gas emitter behind China.
Select the correct Statement(s) using the code given below
a) 1 and 2 only
b) 2 and 3 only
c) 1 and 3 only
d) 1, 2 and 3
26. Which of the following statements is/are correct regarding the solar power capacity in India ?
1. Rajasthan has the highest solar power capacity among all Indian states.
2. Tamil Nadu has emerged as the second state with the highest renewable power capacity in India.
Which of the statement/s given above is/are correct ?
a) 1 only
b) 2 only
c) Both 1 and 2
d) Neither 1 nor 2
27. If the cash reserve ratio is lowered by the RBI, its impact on credit creation will be to
a) increase it
b) decrease it
c) no impact
d) None of the above
28. Excise duty is a tax levied on the
a) import of goods
b) export of goods
c) production of goods
d) sale of goods
29. Where is the "International Hockey Federation" (FIH) headquartered ?
a) Lausanne, Switzerland
b) Paris, France
c) New York, United States
d) Kathmandu, Nepal
30. Where is the "North Atlantic Treaty Organization" (NATO) headquartered ?
a) Vienna, Austria
b) Brussels, Belgium
c) Geneva, Switzerland
d) Paris, France
31. Rajasthan Chief Minister Ashok Gehlot has announced the decision to carve out how many new districts in the states ?
a) 15
b) 14
c) 19
d) 18
32. Who has inaugurated the Global Millets Conference in New Delhi?
a) Narendra Modi
b) Amit Shah
c) Rajnath Singh
d) Droupadi Murmu
33. What is the rank of India in Global Terrorism Index 2023?
a) 10
b) 12
c) 5
d) 13
34. Which of the following place has featured in The TIME magazine's list of the 'World's Greatest Places' for the year 2023 ?
a) Mayurbhanj
b) Malkangiri

- c) Ahmedabad
d) Kalahandi
35. **International Criminal Court has issued an arrest warrant against the President of which country ?**
a) UK
b) Russia
c) North Korea
d) Sri Lanka
36. **Which Union Ministry launched the 'Women and Men in India 2022 Report' ?**
a) Ministry of Women and Child Development
b) Ministry of Statistics and Programme Implementation
c) Ministry of Health and Family Welfare
d) Ministry of MSME
37. **According to the Ministry of Education, which of the following state has the lowest literacy rate in India ?**
a) Himachal Pradesh
b) West Bengal
c) Assam
d) Bihar
38. **Which of the following countries has recently formally recognized the McMahon Line as the international boundary between India's Arunachal Pradesh and China ?**
a) France
b) Russia
c) UK
d) USA
39. **Consider the following statements about Production Linked Incentives (PLI)**
1. The PLI scheme aims to provide financial incentives to manufacturers who meet specific production targets.
2. The scheme is also applicable to the agriculture sector.
3. The PLI scheme is expected to reduce dependence on imports and promote domestic manufacturing.
- Which of the above statements is /are correct ?
a) 1 and 2 only
b) 2 and 3 only
c) 1 and 3 only
d) 1, 2 and 3
40. **Consider the following statements-**
1. India occupies about 2.4% of the total geographical area and consumes 4% of the total water resources.
2. Water is a subject of the Union list.
3. The Inter-State River Water Dispute Tribunal is a Constitutional body.
Which of the statements given above is/are incorrect ?
a) 1 and 2 only
b) 2 and 3 only
c) 3 only
d) 1, 2 and 3
41. **The term Financial Stability Board (FSB) is associated to which of the following organizations ?**
a) BRICS
b) G-20 Countries
c) APEC
d) SAARC
42. **Which is India's biggest nationalised enterprise today ?**
a) Tata Consultancy
b) Reliance Industries
c) Indian Railways
d) Coal India
43. **The headquarters of the "World Tourism Organization" (UNWTO) is located in ____.**
a) Montreal, Canada
b) Mandaluyong, Philippines
c) Geneva, Switzerland
d) Madrid, Spain
44. **Skopje is the capital of which country ?**
a) Uruguay
b) Macedonia
c) Seychelles
d) Romania
45. **How many places in Arunachal Pradesh have been 'renamed' by China ?**
a) 7
b) 9
c) 11
d) 13
46. **How many transactions were processed by UPI in March 2023?**
a) 5.7 billion
b) 7.7 billion
c) 8.7 billion
d) 9.7 billion
47. **What is Bastille Day ?**
a) French National Day
b) French Independence Day
c) French Republic Day
d) French Revolution Day
48. **What is the name of the rocket that will carry the crew to the Moon ?**
a) Saturn V
b) Delta IV
c) Falcon Heavy
d) SLS
49. **What is the current unemployment rate in India as of March 2023 ?**
a) 5.5%
b) 6.2%
c) 7.1%
d) 7.8%
50. **Who has been appointed as the new Vice-Chief of Indian Navy ?**
a) Sanjay Jasjit Singh
b) Manoj Pande
c) Ajay Kumar
d) Karambir Singh
51. **Which country is the host of the Bilateral Maritime exercise 'SLINEX-2023' ?**
a) India
b) Sri Lanka
c) France
d) Singapore
52. **ISRO conducted the 'Reusable Launch Vehicle Autonomous Landing Mission' along with which institutions ?**

- a) DRDO and IAF
b) DRDO and BEL
c) DRDO and HAL
d) DRDO and BARC
53. Consider the following statements regarding the Organization of the Petroleum Exporting Countries (OPEC).
1. It is an organization enabling the co-operation of leading oil-producing countries, in order to collectively influence the global market and maximize profit.
2. OPEC has 13 member countries, all from the Asian continent.
3. Recently Sudan has joined OPEC.
Which of the statements given above is/are correct ?
a) 1 only
b) 2 and 3 only
c) 3 only
d) 1, 2 and 3
54. Consider the following statements:
1. According to Census 2011, India has 104 million older people (60+years), constituting 8.6% of total population.
2. As per the NSO report, Kerala currently has the highest elderly population in India.
3. The old-age dependency ratio was 14.2 percent in 2011.
Which of the statements given above is/are correct ?
a) 1 only
b) 1 and 2 only
c) 3 only
d) 1, 2 and 3
55. How many banks were nationalized in 1969 ?
a) 16
b) 14
c) 15
d) 20
56. The economic liberalization was introduced in
a) 1991
b) 1990
c) 1985
d) 1988
57. Which Indian state is famous for the folk dance "Tamasha"?
a) Jharkhand
b) Uttar Pradesh
c) Maharashtra
d) Rajasthan
58. Where is the "Amarkantak Temple" located ?
a) Madhya Pradesh
b) Uttar Pradesh
c) Gujarat
d) Karnataka
59. What is the current status of India in terms of solar manufacturing?
a) India is the world's largest solar manufacturer
b) India is the world's second-largest solar manufacturer
c) India is the world's third-largest solar manufacturer
d) India is the world's fourth-largest solar manufacturer
60. Which company recently test-fired an advanced fully 3D-printed cryogenic engine ?
a) Skyroot Aerospace
b) ISRO
c) SpaceX
d) Blue Origin
61. Which Indian state topped the list of Geographical Indication (GI) tags in the fiscal year 2022-23 ?
a) Kerala
b) Tamil Nadu
c) Karnataka
d) Maharashtra
62. What is a currency swap ?
a) The exchange of one currency for another currency at an agreed-upon rate
b) The use of a foreign currency to purchase goods or services in another country
c) The use of a domestic currency to purchase goods or services in another country
d) The exchange of one type of currency for another type of currency
63. Who is RS Sodhi ?
a) A renowned cricketer
b) A Bollywood actor
c) An industrialist
d) A professional with experience in the dairy industry
64. When was the CBI established?
a) 1943
b) 1953
c) 1963
d) 1973
65. Which Asian country has been elected to UN Statistical Commission for a 4-year-term?
a) India
b) Sri Lanka
c) China
d) Bangladesh
66. Which Indian state organised the 'Food Conclave 2023' brainstorming event ?
a) Tamil Nadu
b) Telangana
c) Andhra Pradesh
d) Karnataka
67. Consider the following statements:
1. Galathea National Park is located on the Great Nicobar Island.
2. Sentinelese tribes are indigenous to Great Nicobar Island.
3. Ten Degree Channel separates Andaman and Nicobar Island.
Which of the statements given above is/are Incorrect ?
a) 2 only
b) 3 only
c) 1 and 3 only
d) All of the above
68. Consider the following statements:
1. Currently, India is the highest milk producer country in the world.
2. Milk production in India has registered a more than fifty per cent increase during the last eight years.

- Which of the above statements is/are Not correct ?
a) 1 only
b) 2 only
c) Both 1 and 2
d) Neither 1 nor 2
69. Paper currency first started in India in
a) 1861
b) 1542
c) 1601
d) 1880
70. Deficit financing implies
a) printing new currency notes
b) replacing new currency with worn out currency
c) public expenditure in excess of public revenue
d) public revenue in excess of public expenditure
71. "Vilasini Natyam" is an Indian classical dance form of which state of India ?
a) Manipur
b) Karnataka
c) Andhra Pradesh
d) Kerala
72. Nicosia is the capital of which country ?
a) France
b) Cyprus
c) Honduras
d) Finland
73. What is the current value of India's forex reserves ?
a) \$572.80 billion
b) \$578.78 billion
c) \$583.98 billion
d) \$589.66 billion
74. What is the target for India's exports by 2030, as per the newly unveiled Foreign Trade Policy ?
a) USD 1 trillion
b) USD 1.5 trillion
c) USD 2 trillion
d) USD 2.5 trillion
75. What is the target of the New India Literacy Programme ?
- a) To cover 1 crore non-literates in age group of 10 years and above
b) To cover 3 crore non-literates in age group of 15 years and above
c) To cover 5 crore non-literates in age group of 15 years and above
d) To cover 7 crore non-literates in age group of 20 years and above
76. Which state has become the first state in India to have 100% electrified railway network ?
a) Maharashtra
b) Gujarat
c) Haryana
d) Tamil Nadu
77. When was RBI Foundation Day observed in 2023 ?
a) 1st January
b) 1st February
c) 1st March
d) 1st April
78. How many members does NATO have after Finland's approval ?
a) 28
b) 29
c) 30
d) 31
79. What is the target of Swachhotsav 2023 ?
a) To make 1000 cities 3-Star Garbage Free by October 2024
b) To make 100 cities 3-Star Garbage Free by October 2024
c) To make 500 cities 3-Star Garbage Free by October 2024
d) To make 10000 cities 3-Star Garbage Free by October 2024
80. Which city is getting India's 2nd largest cricket stadium ?
a) Mumbai
b) Jaipur
c) Delhi
d) Bangalore
81. With reference to Gig Economy, consider the following statements:
1. It refers to the labour market characterized by the prevalence of short-term contracts or freelance work.
2. It only includes jobs that require high levels of education and technical skills.
3. The Gig Economy is limited to the technology industry.
Which of the statements given above is/are correct ?
a) 1 only
b) 1 and 2 only
c) 1 and 3 only
d) 1, 2, and 3 only
82. Consider the following statements:
1. According to Census 2011, India has 104 million older people (60+years), constituting 8.6% of total population.
2. As per the NSO report, Kerala currently has the highest elderly population in India.
3. The old-age dependency ratio was 14.2 percent in 2011.
Which of the statements given above is/are correct ?
a) 1 only
b) 1 and 2 only
c) 3 only
d) 1, 2 and 3
83. Deficit financing means that the government borrows money from the
a) RBI
b) local bodies
c) big businessmen
d) IMF
84. Since the inception of the co-operative movement, rural credits has been
a) institutionalized
b) rationalized
c) cheapened
d) All of the above
85. What is the capital of Lithuania?
a) Kuala Lumpur
b) Vilnius
c) Bishkek
d) Nicosia

86. Deodar is the state tree of which Indian state ?
a) West Bengal
b) Haryana
c) Himachal Pradesh
d) Uttar Pradesh
87. What is the Ambedkar Circuit?
a) A circuit of tourist destinations in India associated with Dr. B.R. Ambedkar
b) A circuit of religious places in India
c) A circuit of historical sites in India
d) A circuit of natural wonders in India
88. What is 'Vande Metro' ?
a) A new type of metro train developed by the Indian Railways
b) A metro line connecting different cities in India
c) A high-speed bullet train project in India
d) A metro station named after Sardar Vallabhbhai Patel
89. Who has been named in Time Magazine's '100 Most Influential People' list ?
a) Shah Rukh Khan
b) SS Rajamouli
c) Both a and b
d) Neither a nor b
90. What is Fasal ?
a) A government agency that provides agricultural subsidies
b) An NGO that works with farmers
c) A private company that provides agricultural technology solutions
d) A cooperative that provides seeds and fertilizer
91. Which country is set to host the maiden Global Buddhist meet?
a) Sri Lanka
b) Japan
c) India
d) Thailand
92. Which city's metro train has become the first in India to run under a river ?
a) Mumbai
b) Delhi
c) Kolkata
d) Chennai
93. Which city is home to India's first 3D-printed post office?
a) Mumbai
b) Delhi
c) Bengaluru
d) Hyderabad
94. What is the Food Conclave-2023 in Hyderabad ?
a) A summit of global leaders to discuss food security
b) An international trade fair showcasing food products
c) A conference on food processing and technology
d) A festival celebrating regional cuisine
95. Consider the following statement regarding PM SVANidhi.
1. It is a Central Sector Scheme and fully funded by the Ministry of Housing and Urban Affairs
2. The objectives are to enable working capital loans up to Rs 10,000, incentivize timely repayment, and provide rewards for digital transactions.
Which of the statement/s given above is/are correct ?
a) 1 only
b) 2 only
c) Both 1 and 2
d) Neither 1 nor 2
96. With reference to the Foreign Contribution (Regulation) Act, consider the following statements:
1. The FCRA was enacted in 1976 in order to maintain strict control over voluntary organizations and political associations that received foreign fundings.
2. FCRA is applicable to all associations, groups and NGOs operating in India.
3. The registration is initially valid for five years and it can be renewed subsequently if they comply with all norms.
Which of the statements given above is/are Incorrect ?
a) 2 only
b) 3 only
c) 1 and 3 only
d) 1, 2 and 3
97. Who is known as the 'Father of Economics' ?
a) Adam Smith
b) Chanakya
c) Machiavelli
d) None of these
98. When did India become a member of the IMF ?
a) 1945
b) 1956
c) 1960
d) 1951
99. "Shinku La Pass" is a mountain pass between which states of India ?
a) Ladakh-Himachal Pradesh
b) Uttarakhand- Himachal Pradesh
c) Ladakh- Uttarakhand
d) Sikkim-Mizoram
100. Mogadishu is the capital of which country ?
a) Turkmenistan
b) Venezuela
c) Somalia
d) Germany
101. What is the rank of UAE as an export destination for India ?
a) First
b) Second
c) Third
d) Fourth
102. What is Syria known as after recent reports ?
a) World's largest oil producer
b) World's largest agricultural producer
c) World's largest 'narco-state'
d) World's largest weapons producer

103. What is a Rupee Vostro Account system ?
a) An account opened by an Indian bank in a foreign bank to facilitate foreign transactions in Indian rupees
b) An account opened by a foreign bank in India to facilitate foreign transactions in Indian rupees
c) An account opened by the Reserve Bank of India to facilitate foreign transactions in Indian rupees
d) An account opened by the Indian government to facilitate foreign transactions in Indian rupees
104. Which space agency launched the Juice mission to search for life on Jupiter's moons ?
a) NASA
b) European Space Agency (ESA)
c) Russian Space Agency (Roscosmos)
d) China National Space Administration (CNSA)
105. Which country became a founding member of the International Big Cats Alliance ?
a) India
b) Nepal
c) Bangladesh
d) Sri Lanka

106. Which country has developed the 'Hwasong-18 ballistic missile' ?
a) USA
b) North Korea
c) Ukraine
d) Russia
107. Which armed force launched the Regional Pollution Response Exercise 'RPREX-2023' ?
a) Indian Army
b) Indian Navy
c) Indian Coast Guard
d) Indian Air Force
108. Which country has declared a drug named 'xylazine' as an emerging threat ?
a) India
b) USA
c) China
d) Sri Lanka
109. Which of the following is/are major developmental project(s) supported by India in Afghanistan ?
1. The construction of the Salma Dam
2. The construction of the Zaranj-Delaram highway
3. The construction of the Afghan Parliament building
Choose the correct answer using the code given below :
a) 1 and 2 only

- b) 2 and 3 only
c) 1 and 3 only
d) 1, 2 and 3
110. Consider the following statements:
1. Jupiter Icy Moons Explorer (JUICE) will make detailed observations of the giant gas planet Jupiter and its three large ocean-bearing moons.
2. Europa Clipper is an interplanetary mission in development by ISRO comprising an orbiter.
3. Jupiter is the fifth planet from the Sun and the largest in the Solar System.
Select the correct statements -
a) 1 and 2 only
b) 1 and 3 only
c) 2 and 3 only
d) 1, 2 and 3
111. The type of note issue system followed in India is ?
a) Maximum fiduciary system
b) Minimum reserve system
c) Proportional fiduciary system
d) Fixed fiduciary system
112. Inflation is caused by:
a) Increase in supply of goods
b) Increase in cash with the government
c) Decrease in money supply
d) Increase in money supply

ANSWER KEY

1-d	2-b	3-d	4-a	5-a	6-c	7-a	8-c	9-c	10-a	11-d	12-a	13-b	14-b	15-d
16-a	17-c	18-a	19-d	20-b	21-c	22-a	23-b	24-c	25-a	26-a	27-a	28-c	29-a	30-b
31-c	32-a	33-d	34-a	35-b	36-b	37-d	38-d	39-c	40-b	41-b	42-c	43-d	44-b	45-c
46-c	47-a	48-d	49-d	50-a	51-b	52-a	53-a	54-d	55-b	56-a	57-c	58-a	59-c	60-a
61-a	62-a	63-d	64-c	65-a	66-b	67-a	68-d	69-a	70-c	71-c	72-b	73-b	74-c	75-c
76-c	77-d	78-d	79-a	80-b	81-a	82-d	83-a	84-d	85-b	86-c	87-a	88-a	89-c	90-c
91-c	92-c	93-c	94-c	95-c	96-a	97-a	98-a	99-a	100-c	101-b	102-c	103-b	104-b	105-b
106-b	107-c	108-b	109-d	110-b	111-b	112-d								