

Current Affairs Update (Mar 3-9)

National

SC order on CEC appointment

A five-judge Constitution Bench of the SC **unanimously ruled that a high-power committee** consisting of the **PM, the Leader of Opposition in LS and the CJI** must pick the CEC and ECs.

SC's observations during its recent verdict:

- The judgment has brought the appointment process on par with that of the CBI Director.
- A CEC (like SC judges) can be removed from office only by way of a parliamentary process. However, **no such protection of tenure is available** to the ECs (removed by the President if CEC recommends).
- A person weak-kneed before the powerful (executive) cannot be appointed as an EC.
- Fierce independence, **neutrality and honesty** envisaged in the institution require an **end to government monopoly and "exclusive control"** over appointments.

The Election Commission (Conditions of Service of ECs and Transaction of Business) Act 1991:

- An amendment to the above act (in 1993) made the CEC and the ECs equal by giving all three the **status of an SC judge**, retiring at the age of **65 years/after 6 years** (whichever is earlier).
- This means, all three Commissioners now had **equal decision-making powers**, as both would act unanimously and **in case of difference of opinion, the majority view** would prevail.

Tea in India

- Tea is a popular beverage made from the **Camellia sinensis plant** and is the **second most consumed drink** in the world.
- Tea is believed to have originated in **northeast India, north Myanmar, and southwest China**, with evidence of consumption in China over **5,000 years ago**.
- Tea requires a **hot and humid climate**, temperatures of **20°-30°C**, and **150-300 cm** of well-distributed **annual rainfall**. It grows well in **slightly acidic soil with porous subsoil in the hill ranges**.
- India is the **second-largest producer of tea globally** (largest black tea producer), with the majority of its annual tea production coming from **Assam and West Bengal**.
- India is among the **world's top tea-consuming countries**, with 80% of its production consumed domestically.

- India is **4th largest tea exporter** globally and exports to over 25 countries. The majority of tea exported is black tea, with Darjeeling, Assam, and Nilgiri tea being among the finest in the world.
- **Darjeeling tea, known as the “Champagne of teas,”** was the first GI tag product.

Landslide Atlas of India

The **Landslide Atlas** of India was released by **Indian Space Research Organization (ISRO)** at the **“National Meet on Disaster Risk Management — Trends & Technologies”** held at Hyderabad.

All 12 districts of Himachal Pradesh have **figured on a list prepared by the National Remote Sensing Centre (NRSC)** of locations prone to landslides.

Key Findings:

- India is among the **top four countries with the highest landslide risk**, where every year the estimated loss of **life per 100 km² is greater than one**.
- This Atlas provides risk assessment in **landslide locations during the period of 1998-2022 and covers vulnerable regions in 17 states and 02 UTs of India** in the Himalayas and Western Ghats.
- Northwest **Himalayas contribute 66.5% of landslides in India**, followed by Northeast Himalayas (**18.8%**) and Western Ghats (**14.7%**).
- Top 5 districts based on their exposure to landslide: **Rudraprayag and Tehri Garhwal (Uttarakhand), Thrissur (Kerala), Rajouri (J&K), and Palakkad (Kerala)**

Importance of Green H2 for India

- The 2023 Union Budget has allocated ₹19,700 crore for the **National Green Hydrogen Mission**. This could help India establish itself as a green H2 superpower. India has committed to **50% electricity capacity from non-fossil sources by 2030**.
- **An energy transition in the industry** (most GHG emissions come from steel, cement, fertilizers, and petrochemicals) is needed at the same time.
- Green H2 can serve as an **energy source** (heavy industry, mobility, and power storage) and an **energy carrier** (as green ammonia/blended with natural gas). It holds the promise of **fuelling industrial growth while simultaneously reducing industrial emissions**.
- With abundant sunshine and wind energy resources, **India is geographically blessed** to become one of the lowest-cost producers of green H2.

Right against self-incrimination

Article 20(3): “No person accused of any offence shall be compelled to be a witness against himself.”

Since the onus of **proving the case against the accused (in criminal cases) beyond a reasonable doubt** is on the **state**, a person cannot be compelled to testify against himself or share information that **might go against him in a trial**

Punchhi Commission Report

The Punchhi Commission was constituted in **2007** under the chairmanship of former Chief **Justice of India Madan Mohan Punchhi**. In 2010, the Commission submitted its report to the Centre in **seven volumes**.

Deliberation on the report was carried out by **Inter-State Council (ISC's) Standing Committee** in 2017 and 2018. However, **the report is yet to be implemented** and the government has said that it will seek the state's view on the report again.

Major recommendations of the Commission on Governor:

- **Governor to be from outside the State** and not involved in regional politics
- Governor to be **nominated after consulting with Chief Minister**
- **Establishment of a committee** for selecting governors
- **Repeal of the Constitution's Doctrine of Pleasure**
- **Guaranteed tenure of Governor** with a fair chance to object to removal
- **Impeachment of Governor** by state legislature

International

High Seas Treaty

- After more than a decade of negotiations, the UN members have agreed (in New York, US) on the first-ever treaty – **the UN High Seas Treaty, to protect the world's oceans outside national boundaries**.
- It places **30%** of the world's international waters into **protected areas (MPAs) by 2030**, and puts more money into marine conservation and new rules for mining at sea.
- It also provides for **–Arrangements for sharing marine genetic resources**, such as biological material from plants and animals in the ocean. Requirements for **environmental assessments** for deep sea activities like mining.
- Richer nations have pledged money for the delivery of the treaty. **For example**, the EU announced nearly 820m euros (£722.3m).
- The treaty can have **benefits for society (pharmaceuticals and food)** and will help **reverse biodiversity losses and ensure sustainable development**.

Russian bots to boost Instagram reach

- High-profile Instagram accounts, **with up to 40 million followers, were allegedly using Russian bots to boost reach.**
- Data about the bot service allegedly linked to Russia was discovered when **it started leaking clients' private data and messages.**

What are bots?

- A bot is a **computer programme designed to work automatically.** It is mainly used to gather information on the **Internet or perform repetitive jobs.**
- Bot accounts are especially **notorious for spamming, spreading crypto scams and fraudulent boosting on social media accounts.**
- Bots accounts have also been linked to **disinformation campaigns, targeting political opponents and baiting audiences across a number of countries.**

Importance of Myanmar teak

- Teak from Myanmar's **deciduous and evergreen forests** is considered the **most tensile and durable hardwood, resistant to water and termites.**
- It is in demand for **high-end furniture, veneer and ship decking** – much sought-after by the **luxury yacht industry.**

Illegal harvesting of timber and teak from Myanmar:

- There have been increased instances of illegal trade of Myanmar timber; **Global Forest Watch** says the country, over the last two decades, **has lost forest cover roughly the size of Switzerland.**
- **International NGO Environmental Investigation Agency (EIA) released data,** which showed that over 70% of the logs exported from Myanmar between 2000-2013, **were illegally harvested.**

Global regulations to tackle illegal trade:

- **The European Union introduced the EU Timber Regulation (EUTR),** which put the onus on timber merchants to do **sufficient due diligence to disallow illegal timber from entering their markets.**
- Myanmar **itself banned the export of whole logs.**

The Windsor framework

- **UK and EU recently announced the Windsor Framework** (a proposed post-Brexit legal agreement).
- It will address the **problem of the movement of goods** between the **European Single Market** and the United Kingdom in the current **Northern Ireland Protocol.**

- **Northern Ireland Protocol** allows EU customs rules to apply across Northern Ireland.
- The framework will allow free trade between **Great Britain and Northern Ireland** through the use of **green and red lanes** for goods flowing into Northern Ireland (Green: for goods that will stay in Northern Ireland and Red: for those that will go to the EU)

Implications of its people having top leadership positions in global organizations for India

- Increased Global Influence
- Reduce asymmetric information and thus improve global engagement with India.
- Improved Reputation
- Economic Benefits
- Access to Information
- Capacity Building
- National Pride

Glacier Retreat

- **Glacial retreat** is when **glacial melt occurs** faster than new seasonal snow and ice have time to accumulate.
- Out of the total water on Earth, **2.1%** is in glaciers while **97.2%** is in the oceans and inland seas.
- **91% of the Glaciers are in Antarctica** and 8% are in Greenland. They occupy about 10% of the world's total land area.
- **Firnification**: The process of formation of Glaciers by snow compacting into glacial firn (dense, grainy ice)

Science-Tech & Environment

International Big Cat Alliance (IBCA)

India has proposed to launch a mega global alliance under its leadership to protect big cats and assured support over five years with **guaranteed funding of \$100 million**

Aim: Protection and conservation of the **seven major big cats — tiger, lion, leopard, snow leopard, puma, jaguar and cheetah**. To **provide a platform for** “dissemination of information on benchmarked practices, capacity building, resources repository, research and development, awareness creation”, etc., on the protection and conservation of big cats.

Governance structure:

- **General Assembly** (consisting of all member countries)
- **A council** (seven to 15 member countries elected by the General Assembly for a term of 5 years)

- **A Secretariat** (headed by IBCA Secretary General for a specific term)

Funding: 1st five years will be supported by India's "total grant assistance" of \$100 million.

Membership: It will be open to 97 "range" countries, which contain the natural habitat of these big cats, as well as other interested nations, international organisations, etc.

India is the **only country in the world** to have tigers, lions, leopards, snow leopards and cheetahs in the wild. India has all the big cats, except **the pumas and jaguars**, today.

Forest and tree cover in India

- The **Forest Survey of India (FSI)** publishes **biennial** State of Forest reports
- Since 19.53% in the early 1980s, India's **forest cover has increased to 21.71% in 2021**.
- The country's **total green cover** now stands at **24.62%**, which was arrived after adding 2.91% tree cover estimated in 2021.
- The forest maps are based on the images purchased from the **National Remote Sensing Agency (NRSA)**, another arm of the government (Dept of Space).

Compensatory Afforestation

- **The compensatory afforestation programme** ensures that forest lands getting 'diverted' for non-forest purposes is **mandatorily accompanied by afforestation** on an equal area of land.
- It was made a legal requirement through the **Compensatory Afforestation Fund (CAF) Act 2016**.
- Though the law came in 2016, the concept has existed since the 1980s, as an offshoot of the Forest Conservation Act 1980

Programmes with compensatory afforestation component:

- Green India Mission
- **National afforestation programme**
- Tree plantation exercises along the highways and railways
- National rural employment guarantee scheme (MGNREGS)
- Namami Gange, etc

Issues faced by the compensatory afforestation:

- **Legitimised clearing of forests** and see it as an example of 'greenwashing'.
- Money collected before 2016 had **remained largely unutilised**. For example, much of the Rs 55,000 crore in the state funds remains locked.
- Allegations of **misutilisation** or diversion of these funds.
- **Lack of availability of suitable land**/unavailability of land in a **contiguous stretch** remains the biggest problem.

- Land made available for afforestation cannot be used for any other purpose and is **unsuitable for growing plantations**.
- Often the plantations are **monocultures**, which is against the core concept of biodiversity.
- **Biotic pressures** – plantations face nearby human habitations and cattle.

IEA's 'CO2 Emissions in 2022' report

- According to the IEA's 'CO2 Emissions in 2022' report, global energy-related carbon dioxide (CO2) emissions rose by **under 1% in 2022**.
- It covers CO2 emissions from **all energy combustion and industrial processes**.
- It also includes information on **methane and nitrous oxide emissions**, providing a complete picture of energy-related greenhouse gas emissions in 2022.

Important takeaways from the report:

- Global energy-related CO2 emissions grew by **0.9%/321 million tonnes** in 2022, reaching a new high of more than **36.8 billion tonnes**.
- The rise in emissions last year was **far smaller** than the exceptional jump of **over 6% in 2021**.
- However, the report called for **stronger actions to accelerate the clean energy transition** to move the world towards **meeting its energy and climate goals**.

RTIS project

The Indian Railways is harnessing the **power of data analytics for integrated transportation**. It has commenced a project, which will **now enable real-time tracking of train movements with the assistance of satellite imagery under the Real Time Train Information System (RTIS) project**.

How will it work?

Railways will take technology help from ISRO. ISRO has developed its **own regional navigation satellite system called Navigation with Indian Constellation (NavIC) and Bhuvan**, a web-based utility **which allows users to explore a set of map-based content being deployed for tracking**.

Benefits:

- Real-time tracking of trains is **useful during accidents, floods and landslides** when there is a need to pin down the train's exact location for rendering help.
- On-time services

Climate Justice

A group of 16 countries, led by **Vanuatu**, is seeking an **advisory opinion** from the **International Court of Justice (ICJ)** on "What are the **legal consequences for states that have caused significant harm to the climate system and vulnerable states**".

Also, **The Commission of Small Island States on Climate Change and International Law** has also sought the **advisory opinion** of the **International Tribunal for the Law of the Sea (ITLOS)** on the specific obligations of countries about preventing, controlling, and reducing pollution of the marine environment.

Climate justice is a concept that addresses the just division, fair sharing, and equitable distribution of the burdens of climate change and its mitigation and responsibilities to deal with climate change

3-year approval to nano-DAP

- Ministry of Agriculture has allowed **IFFCO and Coromandel International (a private company)** to start production of **nano-DAP (Di-Ammonia Phosphate)** for three years.
- Also, DAP has been notified in the **Fertilizer Control Order**, thus paving the way for its early commercial release for farmers.
- In 2021, **IFFCO launched Nano-Urea**
- The government will also **launch nano-potash, nano-zinc and nano-copper** fertilizers in future

Concerns regarding the use of Nano DAP: May lead to **nanoparticles contamination in soil** and crops from continued nanoparticles use. This may lead to **health Hazards** from nano-size particles at higher concentrations.

'Abhra' Weapon System

- **MRSAM weapon system** which is also called the **'Abhra' Weapon System** is a state-of-the-art medium-range air defence weapon system and is a joint venture of **DRDO and Israeli Aerospace Industries (IAI)** and produced at Bharat Dynamics Limited (BDL).
- It is designed to **destroy hostile aircraft, helicopters cruise missiles and drones** at a 70km range

Economics

SMART-PDS

SMART-PDS aims to **leverage technology to reduce human intervention and promote automation in the PDS supply chain**, thereby ensuring timely and targeted delivery of food grains to beneficiaries. The system involves **real-time tracking of food grains** from the procurement stage to the distribution stage, enabling authorities to monitor and address any issues or bottlenecks in the supply chain.

Components:

- Smart Ration Card
- Fingerprint Template (beneficiaries' fingerprint template is recorded in these smart ration cards, which records all transactions)

Other Features:

- **Full Form Of SMART-PDS:** Scheme for Modernization and Reforms through Technology in Public Distribution System.
- **Nodal Ministry:** Ministry of Consumer Affairs, Food and Public Distribution
- **Successful Implementation:** Andhra Pradesh
- **Objective:** Introduce a transparent and accountable system and reduce human intervention and promote automation in the existing processes.

Electricity Transition

It refers to the **shift from fossil-based power production and consumption to renewable energy sources** (RES) like wind and solar.

Four Parameters considered for ranking are:

- **Decarbonisation:** Evaluate states' preparedness to shift from fossil-based power to Renewables
- **Performance of Power System**g., Discom's performance rating, outstanding loans
- **Readiness of Power Ecosystem**g., Smart metering, feeder segregation
- **Policies and Political Commitments**g., circular economy, battery policy etc

Coal vs renewable energy debate in India:

- India has recently **relaxed environmental consultations** on coal mine expansions, **boosted its coal production** and cited **coal as critical for energy security** in global climate dialogues.
- But the country still aims to reduce coal from the current 50% of its energy mix to about 30% by 2030, while **building 500 GW of new renewable capacity by 2030**.
- With renewable energy storage capacity currently weak and expensive, India will **phase out coal only when it is sure the transition won't cause power disruptions**.

Challenges for India:

- At least five Indian states depend heavily on the **country's coal economy**.
- To ensure **clean and affordable energy** for all while moving away from fossil fuel.
- To meet its renewable energy targets, India will have to invest an average of **\$27.9 billion annually up to 2029**, but its budget allocations aren't sufficient.

Structural Transformation

Structural transformation in economics is the **shift in labour force from agriculture to high-productivity sectors** like manufacturing and modern services. It is a compositional shift caused by the transfer of surplus labour from the farms to better-paying sectors. It is expected to result in increased productivity and higher incomes.

The recently released annual Periodic Labour Force Survey (PLFS) report for 2021-22 shows that the farm sector still employs a significant proportion of the labour force in India, at 45.5%. Although this figure has decreased slightly from 46.5% in 2020-21, it is still higher than the 2018-19 low of 42.5%. This indicates that the economic disruptions caused by the pandemic, which led to a migration back to the farms, have not yet been fully resolved. Notably, the structural transformation has been slowing down since 2011-12.

HUID Number

Hallmark Unique Identification (HUID) number is a unique 6-digit alphanumeric code consisting of numbers and letters. It is stamped manually on a piece of jewellery at the Assaying & Hallmarking centres. It ensures the purity and fitness of gold via third-party assurance to the customers. BIS Hallmark has **3 components**- the BIS logo, a symbol indicating the article's purity and fineness and the HUID.

The Union Ministry of Consumer Affairs, Food and Public Distribution recently announced that the sale of gold jewellery and gold artefacts without the HUID number is prohibited in India from April 1.

Ethics & Society

World Bank index on the life cycle of working women

- India scores **74.4** in the World Bank index on the life cycle of working women
- **The report measures** laws that affect women's economic opportunity
- **Indicators considered by the report for ranking:** Mobility, Workplace, Pay, Marriage, Parenthood, Entrepreneurship etc.

Issues faced by working women (as per the Report):

Global:

- Women enjoy only **77% of** the legal rights that men do
- At the current pace, it would take at least 50 years to approach legal gender equality everywhere

India:

- Laws affecting pay, pension, inheritance and property rights
- Laws affecting women's work after having children
- Constraints on women starting and running a business

Ragging

Ragging, also known as hazing refers to the **practice of subjecting new students to humiliating or abusive behaviour as a way of initiating them into a group or community**. Ragging can take many forms, including **physical and emotional abuse, harassment, bullying, and even sexual assault**.

Laws against ragging in India:

- Indian Penal Code
- UGC Regulations on Curbing the Menace of Ragging in Higher Educational Institutions, 2009

Ethical issues associated with ragging:

- Violation of **human dignity**
- Infringement of **individual rights**
- Promotion of **unhealthy behavior**
- **Compromise of academic standards**
- **The legal and moral responsibility** of educational institutions

Current Affairs Update (Mar 10-16)

National

Blood donation

- The Centre recently told the Supreme Court, that the **exclusion of transgenders, gay people, and female sex workers as blood donors by including them in the “at risk”** category for HIV, Hepatitis B, or C infections is based on **due consideration of scientific evidence**.
- The Central government’s response came after **Thangjam Singh**, a member of the transgender community, moved the Supreme Court seeking to strike **down the prohibition on gay and transgender people from donating blood under clauses 12 and 51 of the ‘Guidelines for Blood Donor Selection & Blood Donor Referral, 2017’** issued by the National Blood Transfusion Council (NBTC) and the National Aids Control Organisation on October 11, 2017.
- The plea adds that **since the blood is tested for infectious diseases like AIDS/ HIV, Hepatitis C, and B; permanently excluding persons based on their sexual preference violates their right to equality**.

Data Empowerment and Protection Architecture (DEPA)

It was launched by the **NITI Aayog in 2020** on the premise that individuals themselves are the best judges of the **‘right’** uses of their personal data. It is designed as an evolvable/agile **framework for good data governance** that empowers people to seamlessly and securely **access their data and share it with third-party institutions**.

Advantages of DEPA:

- Potential to improve **data protection and privacy** for citizens
- Allowing individuals to **easily manage and control** their data consent
- **Build trust** in digital technologies and data governance.

Risks associated with DEPA:

- Personal data could be **misused or misappropriated** if the consent management tool is not properly implemented.
- An implementation may be **inconsistent across different sectors and jurisdictions** → undermine effectiveness, **and create confusion** among citizens.

3rd Session of the National Platform for Disaster Risk Reduction

- The 3rd Session of the **National Platform for Disaster Risk Reduction (NPDRR)** has concluded in New Delhi.
- The session deliberated on 10-point agenda on Disaster Risk Reduction given by Prime Minister Shri Narendra Modi and the Sendai Framework apart from other issues.
- **Organized by:** Ministry of Home Affairs (MHA)+ National Disaster Management Authority (NDMA)+ National Disaster Response Force (NDRF)+ National Institute of Disaster Management (NIDM)

PM's 10-Point Agenda:

- **Importance of Local Resilience in Disaster Risk Reduction**
- Need for **Development Sectors to Imbibe Principles of Disaster Risk Management**
- Importance of **Risk Coverage for All**
- **Women's Leadership** and Greater Involvement in Disaster Risk Management
- Investment in **Global Risk Mapping**
- **Leveraging Technology** for Disaster Risk Reduction
- **Developing a Network of Universities** to Work on Disaster-Related Issues
- Utilizing **Social Media and Mobile Technologies** for Disaster Risk Reduction
- Learning from Disasters through **Post-Disaster Studies**
- **Need for Greater Cohesion in International Response** to Disasters E.g. in wake of the recent Earthquake in Syria and Turkey, **United Nations Satellite Centre (UNOSAT)** activated its emergency GIS mapping service

Global initiatives for Disaster Risk Reduction (DRR)

- Sendai Framework (2015): Successor instrument to the Hyogo Framework for Action (HFA)
- Global Platform for Disaster Risk Reduction, 2022
- Climate Risk and Early Warning Systems (CREWS) (Under the World Meteorological Organization): It provides access to early warnings in the Least Developed Countries (LDCs) and Small Island Developing States (SIDS).

Operation Trishul

- Under its '**Operation Trishul**,' the Central Bureau of Investigation (CBI) has extradited 33 fugitives involved in various criminal activities in the past year. CBI raises requests through Interpol channels and seeks their deportation or extradition through a formal route.
- CBI uses **Interpol's Star Global Focal Point Network** and analysis of financial crime files to not only trace suspects but also the proceeds of financial crimes.
- Also, recently, India has called upon G20 countries to adopt **multilateral action** for faster extradition of '**fugitive economic offenders**'.

- FEO is defined as an individual against whom a warrant of arrest in relation to a scheduled offence has been issued by any court in India and the value of the offence is **at least Rs. 100 crore**.
- **Fugitive economic offenders act, 2018** aims to seize the property of economic offenders who have fled the nation to avoid being prosecuted or who refuse to come back to face charges.

Suspension of Operations (SoO) agreement

The state government of Manipur decided to withdraw from the **Suspension of Operations (SoO)** agreement with two hill-based tribal militant groups. Two hill-based tribal militant groups – **Kuki National Army (KNA) and Zomi Revolutionary Army (ZRA)** were allegedly influencing agitation among forest encroachers.

There are nearly 30 Kuki insurgent groups in Manipur, of which 25 are under **tripartite** Suspension of Operations (SoO) with the Government of India and the state. The SoO pact was signed on **August 22, 2008**, with the primary objective of **initiating political dialogue**.

What are the terms of the SoO pact?

- The important terms under the pact are that security forces, including state and central forces, are **not to launch any operations**, nor can the underground groups.
- The signatories (like UPF, and KNO) shall **abide by the Constitution of India**, the laws of the land and the **territorial integrity of Manipur**.
- They are prohibited from committing all kinds of atrocities, extortion, etc.

Alluri Sitharama Raju and Komaram Bheem

Inspired by the lives of Indian freedom fighters **Alluri Sitharama Raju, and Komaram Bheem** telugu movie 'RRR' is garnering attention on the global stage **after winning Best Original Song for 'Naatu Naatu' at the 2023 Oscars**.

About Alluri Sitharama Raju:

- Raju **channelled the discontent of the hill people in Ganjam, Visakhapatnam, and Godavari** into an effective guerrilla resistance against the British.
- Colonial rule threatened the tribals' traditional **podu (shifting) cultivation**, as the government sought to secure forest lands.
- The **Forest Act of 1882 banned the collection of minor forest produce such as roots and leaves, and tribal people were forced into labour by the colonial government**.
- Strong anti-government sentiment, exploded into armed resistance in August 1922.
- **The Rampa or Manyam Rebellion** continued in the form of a **guerrilla war until May 1924, when Raju, the charismatic 'Manyam Veerudu' or Hero of Jungle, was finally captured and executed**.

About Komaram Bheem:

- **Komram Bheem** was born in the **Gond tribal community at Sankepally village** in Komarambheem District, **renamed after him in 2016**.
- The Nizam government used to collect tax in the name of **'Bambram' and 'Dupapetti'** from people grazing cattle and collecting firewood for cooking.
- In opposition, Bheem spread the message of **"Jal, Jangal, Zameen" (water, forest land) among tribal people**. This has become a clarion call for indigenous people's rights to natural resources, used in many parts of India to date.

International

'Least Developed Country' status

Bhutan will become the **seventh nation to graduate from the United Nations (UN) list of Least Developed Countries (LDC)**.

According to the UN, an LDC is defined as "a country that exhibits the lowest indicators of socioeconomic development, with low levels of income, human capital and economic diversification, high levels of economic vulnerability, and a population that is disproportionately reliant on agriculture, natural resources, and primary commodities."

The UN identifies **three criteria for a country to be classified as an LDC**:

- It must have a **gross national income (GNI) per capita below the threshold of USD 1,230 over a three-year average**.
- It must **perform poorly on a composite human assets index** based on indicators including **nutrition, health and education**.
- The country must **demonstrate economic vulnerability** such as being prone to natural disasters and possessing structural economic constraints.

How does a country get off the LDC list?

- A nation must have a **GNI per capita of at least USD 1,242 for two consecutive triennial reviews** in order to meet the income requirement.
- By using measures like education, health, and nutrition, a nation must show that it has improved its **human capital in order to achieve the human assets requirement**.

- A nation also must show that it has **improved its ability to withstand external economic shocks like natural catastrophes or shifts in commodity prices in order to pass the economic vulnerability test.**

New President of Nepal

Ram Chandra Poudel, a veteran Nepali Congress leader and former Deputy Prime Minister, was elected as the new President of Nepal. This is the third presidential election in Nepal since the country became a republic in 2008.

Kill Web

The **South Korean military** has introduced a concept known as the “Kill Web” in response to the escalating nuclear threat from North Korea. This concept is a key part of Military Innovations 4.0, which seeks to utilize the latest AI technologies to ensure the country’s army can win a war with minimal casualties in the shortest possible time.

It is a multi-layered system that uses advanced warfare techniques such as cyber operations and electronic warfare. It will collect information using sensors, process them and aid the military to speed up or slow down the war. The sensors will help to learn about the weapons used by the enemies and also about their space manipulation.

Science-Tech & Environment

H3N2 VIRUS

- Influenza sub-type H3N2, commonly called **Hong Kong Flu**, is causing a surge in hospitalizations due to respiratory illness across India.
- H3N2 virus is a **type of influenza virus called the influenza A virus**. It is a respiratory viral infection that causes illnesses every year. **This subtype of influenza A virus was discovered in 1968 in humans.**
- The **virus derives from types of protein strains of the influenza A virus – hemagglutinin (HA) and neuraminidase (NA).**
- HA has over **18 different subtypes, each numbered H1 to H18 while NA has 11 different subtypes, each numbered N1 to N11. The H3N2 is a combination of the two protein strains of the influenza A virus.**
- **Symptoms:** The symptoms of the H3N2 virus include **cough, runny nose or congested nose, sore throat, headaches, body aches, fever, chills, fatigue, diarrhoea, vomiting and breathlessness.**
- **Treatment:** Regular **over-the-counter medications for fever, cough or headaches can be consumed to relieve the symptoms.**

SIPRI Report 2023

- **Acronym:** Stockholm International Peace Research Institute
- **Period assessed:** 2018-22
- The **five biggest arms exporters** are, in order, the US, Russia, France, China and Germany.
- India's share of the global arms imports was the highest in the past five years at 11%, followed by Saudi Arabia (9.6%), Qatar (6.4%), Australia (4.7%) and China (4.7%)

Mudumalai Tiger Reserve

Mudumalai Tiger Reserve is located in the **Nilgiris District of Tamil Nadu** state at the tri-junction of three states, viz, Karnataka, Kerala and Tamil Nadu. It is a **part of the Nilgiri Biosphere Reserve** (1st Biosphere Reserve in India). The Reserve has tall grasses, commonly referred to as '**Elephant Grass**'

Multi-Angle Imager for Aerosols (MAIA)

- The space agencies of the **United States** (National Aeronautics and Space Administration) and **Italy** – Agenzia Spaziale Italiana (**ASI**) will launch the **Multi-Angle Imager for Aerosols (MAIA) missions** to investigate the health impacts of air pollution in the world's most populated cities
- MAIA is a **state-of-the-art satellite instrument** producing data that **will be used in health studies to examine the health effects of various types of air pollution.**
- The MAIA mission will **collect and analyse data from the observatory, sensors on the ground and atmospheric models**
- Its measurements of sunlight **reflecting off airborne particles will help researchers determine the abundance, size and optical properties of certain pollutants in the atmosphere.**

Net-zero waste

- According to the Union Ministry of Housing and Urban Affairs, all upcoming housing societies and commercial complexes in the country will soon mandatorily have to ensure **net zero waste.**
- The directive is part of the **Manhole to Machine-hole scheme** for the complete removal of manual scavenging and has been formulated as a convergence of programmes like **Swachh Bharat, NAMASTE** and **AMRUT.**
- India currently generates **72,368 million** litres per day of urban wastewater of which only 28% is treated.
- **The UN SDG 6.3** aims at halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally by 2030.

What does achieving net zero waste mean?

- Reducing, reusing, and recovering waste streams (sludge) to convert them to valuable resources so that **zero solid waste is sent to landfills.**

- Net zero waste along with the treatment of liquid discharge will be part of the government's push for **reforming and modernising the sewage disposal system**.

Reddmatter

- It is the new Superconductor material discovered recently.
- **Operating range:** Can operate at room temperature (21 degrees C) and much lower pressure (10,000 atmospheric pressure) than previously discovered superconducting materials.
- **Naming:** They named the resulting material "**reddmatter**," after observing how the material's hue changed from blue to pink to red as it got compressed.
- **Material:** It is formed by **combining lutetium (a rare earth metal) with hydrogen and nitrogen**
- **Applications:** The new superconductor could help create lossless electrical grids, and better and cheaper magnets for use in future nuclear fusion reactors, among other things.

Hypersonic missile

- A hypersonic missile, such as Kinzhal, is **capable of flying at least at the speed of Mach 5, i.e. five times the speed of sound, and is maneuverable**.
- The **maneuverability of the hypersonic missile is what differentiates it from a ballistic missile**, as the latter follows a set course or a ballistic trajectory.
- This makes **them extremely lethal because, by the time they are detected by ground-based radars, they are already quite near to their target**.
- There are **two types of hypersonic weapons systems**: Hypersonic Glide Vehicles (HGV) and Hypersonic Cruise Missiles. The HGVs are fired from a rocket before gliding to the intended target while the hypersonic cruise missile is powered by air-breathing high-speed engines or 'scramjets' after acquiring their target.

Artificial General Intelligence (AGI) vs Artificial Narrow Intelligence (ANI)

Artificial General Intelligence	Artificial Narrow Intelligence
Flexible and adaptable	Designed to perform a single or a narrow set of related tasks.
Designed to perform a wide variety of intellectual tasks without human intervention	Not necessarily capable of reasoning or learning in the way that humans do.
Unsupervised learning means that the AI system can learn from data without being explicitly programmed to do so	Typically trained using machine learning algorithms such as supervised learning, unsupervised learning, or reinforcement learning.
Lack of control continues to learn and make decisions (based on incomplete or uncertain information) that even its creators cannot possibly predict.	Widespread use in a variety of industries and applications
In the realm of theoretical research and development.	For example, ChatGPT – is a chatbot which allows users to engage in a conversation about a variety of topics.

SOFIA

For the first time, **Oxygen-18** was detected in Earth's mesosphere and lower thermosphere using the data collected by the GREAT instrument on NASA's **Stratospheric Observatory for Infrared Astronomy** (SOFIA). This is the first time that heavy oxygen has been detected outside a laboratory. Heavy oxygen has 10 neutrons compared to the 8 neutrons present in the more common isotope that we breathe.

e-Fuels

- E-fuels are a type of fuel that is produced by capturing carbon emissions and combining them with hydrogen made from renewable or CO₂-free electricity. Their examples include **e-kerosene, e-methane, and e-methanol**.
- When e-fuels are burned in an engine, they release carbon dioxide into the atmosphere, but the emissions are balanced by the amount of carbon dioxide removed from the air to make the fuel, making it carbon-neutral.
- **Electro fuels** are **fourth-generation biofuels**. The third-generation and fourth-generation biofuels use non-arable land. The non-arable lands are those lands that are not suitable for growing agricultural crops.

Economics

What went wrong at Silicon Valley Bank (SVB)?

- The financial institution best known for its relationships with high-flying world technology startups and venture capital **experienced a bank run**.
- **A bank run**, which is **typically the result of panic** (customers withdraw their deposits simultaneously) rather than true insolvency, **pushes a bank into actual insolvency**.
- Bank runs have occurred throughout history including during the **Great Depression and the 2008-09 financial crisis**.
- **The SVB's large deposits** (startups and wealthy tech workers) are unsafe. The Federal government insures deposits to **\$250,000** and anything above it is considered uninsured and likely to be released in an orderly process.
- But many businesses want to access funds **to meet payroll and office expenses** → could lead to furloughs/layoffs.
- **There's no buyer of SVB**.

Impact on the Indian economy:

- Many Indian start-ups [especially in the SaaS (software as a service) sector] **not only have accounts**, but the bank had also been an important **lender**. **For example**, an investment of a total of \$1.7 million in One97 Communications, the parent company of Paytm.
- As the funding for start-ups is dwindling, this could prove to be a major roadblock, especially for **young businesses**.

IREDA

RBI has granted an 'Infrastructure Finance Company (IFC)' status to Indian Renewable Energy Development Agency (IREDA). It was earlier classified as an '**Investment and Credit Company (ICC)**'

Benefits of the IFC status:

- Now IREDA will be able to **take higher exposure to RE (Renewable Energy) financing**
- It will be able to **access a wider investor base** for fund mobilisation, resulting in competitive rates for fundraising.
- It will **increase the investors' confidence**, enhance the brand value, and generate a positive outlook in the market.

Challenges in achieving financial inclusion

- Lack of access to basic infrastructure
- Low financial literacy
- Limited trust in formal financial institutions
- Insufficient regulatory framework
- High transaction costs
- Lack of diversity in financial services

Govt brings crypto under money laundering law

Ministry of Finance has brought crypto trading, safekeeping and related financial services under the ambit of the Prevention of Money Laundering Act.

Objective: It will give authorities greater power to monitor the transfer of virtual digital assets beyond the country's borders

Reporting Entity: Entities dealing in VDAs will now be considered 'reporting entities' under PMLA and subsequently have to maintain KYC details of their clients and beneficial owners

Transactions included under PMLA:

- Exchange between virtual digital assets and fiat currencies
- Exchange between one or more forms of virtual digital assets
- Transfer of virtual digital assets, safekeeping or administration of virtual digital assets

Ethics & Society

Governments arguments against same-sex marriage

- The government argued that the **Court had only decriminalised sexual intercourse between same-sex persons in its 2018 judgment in Navtej Singh Johar, and not legitimised this “conduct”**.
- The court, while decriminalising homosexuality, **had never accepted same-sex marriage as part of the fundamental right to life and dignity under Article 21 of the Constitution.**
- Registration of marriage of same-sex persons **would also result in violation of existing personal as well as codified law provisions.**
- It is submitted that **there cannot be an untrammelled right under Article 21 and cannot override other constitutional principles**, adding that Parliament has designed and framed marriage laws, which are governed by personal laws/codified laws relatable to customs of various religious communities, to recognise only the union of a man and a woman to be capable of legal sanction, and thereby claim legal and statutory rights and consequences.

Ethical aspects of Same-sex marriage

Equality: Denying same-sex couples the right to marry is seen as discrimination and a violation of basic human rights.

Consent: Same-sex couples should be able to marry if they are both consenting adults who are making a free and informed decision to enter into a lifelong commitment.

Harm: Opponents of same-sex marriage argue that it is harmful to society or to children who may be raised by same-sex couples.

Tradition: Some people argue that same-sex marriage goes against traditional values and beliefs.

Compassionate appointments

- The concept can be traced to the Indian Constitution’s **Article 39 (DPSP)**, which talks about the **right to livelihood**.
- **It aims to provide employment on compassionate grounds** to the dependent family members of a government servant who dies/retires on medical grounds.
- According to the DoPT, these appointments can only be made for **Group ‘C’** posts against the direct recruitment quota.
- The measure can also extend to the family members of an **Armed Forces employee**.

Who is empowered to make these appointments? Either the Secretary/Joint Secretary of a Ministry or Department concerned or the Head of the Department in the case of attached and subordinate offices.

What has the court said now?

- **Existence of a policy issued by the State Government** is a sine qua non for making appointments on a compassionate basis.
- Even if the policy existed, it would be of no use to consider the applications **several years after they were filed.**
- There **shouldn't be any delay in such appointments** and the same should be provided immediately to redeem the family in distress.

Women's Reservation Bill (WRB)

- The Bill will reserve **one-third of the total number of seats** in state Assemblies and Parliament for women.
- It was first introduced in **1996** and was referred to a **Joint Parliamentary Committee** (chaired by Geeta Mukherjee), which recommended –
 - Reservation for a period of 15 years;
 - Including reservation in cases where the state has less than three seats in LS;
 - Including reservation for the Delhi assembly; and
 - Changing “not less than one-third” to “as nearly as may be, one-third”, etc.
- Two recommendations, which became **major sticking points** –
 - Regarding reservation for OBC women (quota within a quota)
 - Reservation for women in the Rajya Sabha and legislative council
- The Constitution (**108th Amendment**) Bill, 2008, was introduced in Parliament.
- The last attempt was made in **2010** when the WBR Bill was **passed in the RS but the LS never voted on it.**

Parental leave

- **Spain** became the first country in the world to give **mothers and fathers the same parental leave**: 16 weeks, non-transferable and fully paid, in January 2021.
- New research suggests that most men are taking their paternity leave, which could **boost shared responsibility for childcare.**

- Some companies are introducing measures to **encourage male employees to take care of their children**, such as offering **workshops on co-responsibility** and changing business and family dynamics.

Issues related to migrant workers in India

- Lack of social security and health benefits
- Lack of portability of state-provided benefits
- Lack of access to affordable housing
- **Lack of data** makes it difficult to track labourers during times of crisis
- **Inadequate coordination** among states on a formal exchange of information
- **The nativist agenda** of political parties in the states. For example, many state governments have reserved a certain percentage of employment for locals.

Awards

Oscars '23

Indian films made history at the 95th Academy Awards securing two wins for the country. SS Rajamouli's magnum opus *RRR* won the 'Best Original Song' Oscar (M.M. Keeravaani and Chandrabose) for 'Naatu Naatu and Kartiki Gonsalves' & Guneet Monga documentary short *The Elephant Whisperers* won in its category as well.

Everything Everywhere All at Once won Best Picture and the Best Actress and Actor awards went to Michelle Yeoh and Brendan Fraser respectively.

Current Affairs Update (Mar 17-23)

National

National Security Act, 1980

- NSA “empowers the state to detain a person without a formal charge and without trial”.
- Under the Act, a person is taken into custody to **prevent them** from acting in any manner prejudicial to “**the security of the state**” or for “**maintenance of the public order**”.
- It is an **administrative order passed either by the Divisional Commissioner or the District Magistrate (DM)**.
- Even if a person is in **police custody**, the **District Magistrate can slap NSA against them**. Or, if a person has been **granted bail by a trial court**, they can be **immediately detained under the NS** If the person has been **acquitted by the court**, the same person can be **detained under the NSA**.
- The law **takes away an individual’s constitutional right to be produced before the magistrate within 24 hours**, as is the case when the accused is in police custody. **The detained person also does not have the right to move a bail application before a criminal court.**

What are the grounds for detention?

- NSA can be invoked to **prevent a person from acting in any manner prejudicial to the defence of India**, relations of India with foreign powers or the security of India. Among others, it can also be applied to **prevent a person from acting in any manner prejudicial to the maintenance of supplies and services essential to the community**.
- An individual can be detained **without a charge for a maximum period of 12 months**.

PM Pranam

The scheme—**PM programme for restoration, awareness, nourishment and melioration of mother earth (PM Pranam)**. The scheme is designed to **check excessive and indiscriminate use of chemical fertilizers as part of the government’s efforts to make farming more sustainable**. Robust agriculture growth, price stability of farm produce, and sustainability are **priorities for NITI Aayog in the farm sector**.

Features of the Scheme:

- The scheme will have no separate budget and will be financed through the “**savings of existing fertiliser subsidy**” **under schemes run by the Department of Fertilizers**.
- **50% of subsidy savings will be passed on as a grant to the state that saves the money**.

- **70% of the grant provided under the scheme can be used for asset creation related to the technological adoption of alternate fertilisers and alternate fertiliser production units at the village, block and district levels.**
- **The remaining 30% of grant money can be used for rewarding and encouraging farmers, panchayats, farmer producer organisations and self-help groups that are involved in the reduction of fertiliser use and awareness generation.**
- **For this purpose, data available on a Fertilizer Ministry dashboard, IFMS (Integrated Fertilizers Management System) will be used.**

Global Millets (Shree Anna) Conference

At the inaugural edition of the **global conference on millets**, the PM of India spoke about how millets, considered to be “**high-fibre foods**”, are effective for health. Based on India’s proposal, the year **2023** was declared the **International Year of Millets (IYM)** by the UNGA.

Consistent efforts of the Indian government to turn Shree Anna into a global movement:

- **Millets were declared nutri-cereals in 2018** → making the farmers aware of its benefits, and generating interest in the market.
- Millets have been selected in 19 districts of the country under the ‘**One District, One Product**’ scheme.
- The National Food Security Mission (NFSM) as **NFSM-Coarse Cereals** and implemented in 14 States.
- In 2021, the **PM POSHAN** (earlier known as the mid-day meal scheme) was approved to include millet to enhance the nutritional outcome.
- India is planning to launch a global initiative – Millet International Initiative for Research and Awareness (**MIIRA**), to encourage the consumption and production of millets.

Coastal Erosion

Coastal erosion is the **temporary or permanent loss of land owing to the action of waves, currents, tides, wind-driven water, waterborne ice, or other effects of storms**. It can also be the **long-term removal of soil and rocks along the shoreline**.

Reasons for Coastal Erosion:

Natural reasons

- **Wave energy**
- **Natural hazards**
- **El Niño and effects of climate change (e.g., sea level rise).**

Anthropogenic reasons

- **Mining activities** such as **sand and Coral mining**.
- **Fishing harbours and dams** were constructed in the catchment area of rivers and ports.

Vaikom Satyagraha

- Kerala Government will organise the **centenary** celebrations of the Vaikom Satyagraha
- **Vaikom Satyagraha** (1924-25) was a movement in Travancore (modern-day Kerala) for temple entry of the depressed classes. It took place near the Shiva Temple at Vaikom, Kottayam district, Kerala.
- **Issue:** The protest was against the caste-based discrimination prevalent in Kerala and the rest of India, where lower-caste Hindus were not allowed to enter temples, and roads leading to temples were banned from them.
- **Leaders:** K. Kelappan, T K Madhavan, Velayudha Menon, K Neelakantan Namboothiri, and T R Krishnaswami Iyer

Medical Tourism Index

India has been ranked **10th** in the **Medical Tourism Index (MTI) for 2020-2021 out of 46** destinations in the world by the Medical Tourism Association.

Medical vs wellness tourism:

- **Medical tourism** (valued at \$60-80 billion globally) primarily addresses the “**poor health**” end of the market, with patients travelling to another place for specific medical treatments.
- **Wellness tourism** (~\$639 billion), on the other hand, attracts those seeking destinations that extend their **wellness lifestyle** and help them proactively maintain and improve their health and well-being.
- As far as medical tourism is concerned, India currently has a **\$5-6 billion market** (2019 figure) that may rise to **\$13 billion by 2026**.

Perumal Murugan’s novel ‘Pookkuzhi’

- **Tamil writer Perumal Murugan’s novel ‘Pookkuzhi,’ or ‘Pyre’ in English translation**, has been nominated for the International Booker Prize 2023 longlist, making it the **first Tamil novel** to be nominated for the award.
- The book tells the story of a young inter-caste couple who elope, exploring caste-based violence in rural Tamil Nadu during the 1980s.

President’s Colour Award TO INS DRONACHARYA

- The President of India presented the President’s Colour to INS Dronacharya in Kochi
- **INS Dronacharya** is the gunnery school of the Indian Navy. It is located in Kochi, Kerala. It is responsible for training 820 officers and 2100 ratings per year in small-arms, naval missiles, artillery, radar and defensive countermeasures

- The President's Colour is a **prestigious honour**, awarded by the **President to armed forces or a police unit** that has **rendered exceptional service to the nation**.
- The award serves as a **recognition of the sacrifices made by police personnel** in the line of duty, and as a tribute to their unwavering commitment to serving and protecting its people.

International

Vienna Convention on Diplomatic Relations (1961)

- Entered into force on April 24 1964, the Convention is **nearly universally ratified**, with Palau and South Sudan being the exceptions.
- It provides a **complete framework for the establishment/maintenance/termination** of diplomatic relations on a basis of consent between independent sovereign States.
- It **codifies the longstanding custom of diplomatic immunity**, in which diplomatic missions are granted privileges, enabling diplomats to function without fear of coercion or harassment by the host country.
- It affirms the concept of "**inviolability**" of a diplomatic mission, which has been one of the enduring cornerstones of international diplomacy.

Why in news? Soon after the pro-Khalistan protestors took down the Indian flag at the High Commission in London, the Indian External Affairs Ministry reminded the UK Government about the Vienna Convention.

The Great Rift

Scientists, in 2020, predicted a **new ocean would be created as Africa gradually splits into two separate parts**. The division of the continent is connected to **the East African Rift**, which appeared in the **desert of Ethiopia in 2005, triggering the formation of a new sea**.

About rifting:

- Rifting refers to the geological process in which a **single tectonic plate is split into two or more plates separated by divergent plate boundaries**.
- This process leads to the **emergence of a lowland region known as a rift valley, which can occur either on land or at the bottom of the ocean**. These rift valleys occur due to the movement of Earth's tectonic plates.

What is happening in Africa?

- The three plates — **the Nubian African Plate, Somalian African Plate and Arabian Plate** — are **separating at different speeds**.

- The **Arabian Plate is moving away from Africa** at a rate of about an inch per year, while the two African plates are separating even slower.
- As the **Somali and Nubian tectonic plates continue to pull apart from each other, a smaller continent will be created from the rift**, which will include present-day Somalia and parts of Kenya, Ethiopia, and Tanzania.
- This **new ocean will result in East Africa becoming a separate small continent with its own unique geographic and ecological characteristics.**

World Happiness Report 2023

- For the **sixth year running, Finland was named the world's happiest country in an annual U.N.-sponsored index** that saw acts of kindness grow in Ukraine despite the Russian invasion.
- India was ranked **126 of the 137 countries on the list.**
- **Northern Europe once again dominated the top spots** — with Denmark in second place followed by Iceland.
- War-scarred Afghanistan, which has occupied the bottom spot on the table since 2020, saw **its humanitarian crisis deepen since the Taliban government took power in 2021 following the US-led military pull-out.**

The impact of methodological issues: Conceptual ambiguity, flawed benchmarks and shoddy methodology → flawed estimation → overestimating the level of deprivation.

Global Terrorism Index

- The tenth Global Terrorism Index (GTI) report was published by **Institute for Economics and Peace (IEP)** showing global trends and patterns in terrorism.
- **Afghanistan remains the country most impacted by terrorism** for the fourth consecutive year though violence has declined
- **Deadliest terrorist groups in the world in 2022:** Islamic State (IS); Al-Shabaab; Balochistan Liberation Army (BLA), and Jamaat Nusrat Al-Islam wal Muslimeen (JNIM)
- India remained at **13th** while Pakistan ranked **6th** (more terror-prone)

Iran-Saudi deal

The Saudi-Iran detente/truce is China's major geopolitical manoeuvre in West Asia and sets the stage for political influence in the region that was formerly dominated by the US.

About the Saudi-Iran deal brokered by China: The “**joint trilateral statement**”, signed in Beijing, includes –

- **Resumption of diplomatic relations** and reopening of embassies and missions;
- To respect for the sovereignty of states and the non-interference in the internal affairs of states;
- **To implement the Security Cooperation Agreement (2001)** and

- To implement the General Agreement for Cooperation in **Economy, Trade, Investment, Technology, Science, Culture, Sports, and Youth** (1998).

Significance of the deal:

- No one believes this deal will end all differences between the Sunni (Saudi) monarchy and Shia (Iran) republic.
- The deal may lead **to lasting peace in Yemen** and also end proxy Saudi-Iran hostilities in **Lebanon, Syria**, etc.
- May develop into a **four-way alignment (Saudi-Iran-China-Russia)**.
- **China is taking a new avatar** – peacemaker, power broker – giving the world a new alternative to the US (blamed for instability in the region – failed miserably in Iraq, and Afghanistan).

ICC: Arrest warrant for Vladimir Putin

- The **International Criminal Court** issued an **arrest warrant for war crimes for President Vladimir Putin and a second Russian official**.
- The court says **Putin bears individual criminal responsibility for the abduction and deportation of Ukrainian children** since Russia's full-scale invasion.
- The court also **issued a warrant for Maria Lvova-Belova**, Russia's commissioner for children's rights, who has **been the public face of a Kremlin-sponsored program in which Ukrainian children and teenagers have been taken to Russia**.
- The International Criminal Court was created as a standing body to **investigate war crimes, genocide and crimes against humanity under a 1998 treaty known as the Rome Statute**.

Zealandia

Scientists have confirmed the existence of a continent called Zealandia, which is approximately **1.89 million square miles** in size and was once part of the ancient supercontinent called Gondwana.

About Zealandia:

- It is a long, **narrow microcontinent** that is mostly submerged in the South Pacific Ocean.
- Zealandia started to separate from **Gondwana about 105 million years ago** and gradually sank beneath the waves, with over **94% of the landmass remaining underwater**.
- It is recognized as the **world's eighth continent**
- The part of Zealandia which is above water forms the **foundation of New Zealand's north and south islands** as well as the island of **New Caledonia**.
- The existence of Zealandia was first recorded in **1642 by Dutch businessman and sailor Abel Tasman**, who was on a mission to find the "great Southern Continent," or Terra Australis.

Science-Tech & Environment

Laccase Enzyme

An **enzyme called laccase generated** by a group of **fungi** has been found capable of degrading a variety of **hazardous organic dye molecules** that are regularly drained into waterbodies after dyeing clothes in the textile industry.

Horseshoe crabs

- They are **marine and brackish water** arthropods of the family Limulidae
- Despite their name, they are **not true crabs or crustaceans**
- They are considered **living fossils** meaning they have existed nearly unchanged for at least 445 million years (before even dinosaurs existed)
- **Odisha** is their largest habitat in India
- **Threats:** Overharvesting for use as food, bait and biomedical testing
- **Use:** Blood of Horseshoe crab is very important for the preparation of rapid diagnostic reagents (used in chemical reactions)
- **Schedule IV** of the Wildlife Protection Act 1972
- **IUCN Status:** American horseshoe crab: **Vulnerable** and Tri-spine horseshoe crab: **Endangered**.

India misses Renewable Energy: Parliamentary panel

India set an ambitious target (in 2014) of installing 175 GW of RE capacity by the year 2022, which included **100 GW (solar), 60 GW (wind), 10 GW (bio-power), and 5 GW (small hydropower)**. A parliamentary panel has attributed the low installation of solar roof-top and wind energy projects as key reasons for the shortfall in achieving India's renewable energy (RE) capacity target of 175 GW by 2022.

Findings of the Parliamentary Standing Committee on Energy:

- A RE capacity of **90 GW** (69% of the overall target) **has been installed** in the country as of December 31, 2022.
- This is a commendable achievement, as the RE installed capacity has **increased by more than 236% since 2014**.
- Whatever shortfall has occurred in achieving the target is because of **the low installation of solar roof-tops and wind energy projects**. Against 40 GW, **only 7.40 GW** of rooftop solar projects could be installed in the country. Against 60 GW, the cumulative installed capacity of wind power is 41.93 GW.

Hasdeo forest

The Hasdeo forest (spanning over 170 sq km) and is often called the “lungs of Chhattisgarh”, is said to be the largest contiguous stretch of dense forestland in central India. Tribal villagers near Hasdeo forest in the state of Chhattisgarh, India, have been protesting against the proposed **opening of a new coal mine** by the Adani Group.

The state government notified the reserve (Conservation Reserve) in October 2020 under **Section 36A of the Wild Life (Protection) Act, 1972 (WLPA)**.

Barda Wildlife Sanctuary

- The Gujarat government has planned to **translocate 40 adult and sub-adult lions to the Barda Wildlife Sanctuary** in the state.
- Barda sanctuary, about **100 kilometres away from Gir National Park**, has been identified as a **potential site to accommodate the Asiatic Lions**.
- A second home would protect the lion population **from extinction in case of diseases, Natural disasters etc**

Protection of Loktak Lake and Keibul Lamjao National Park

- Centre advises the state government to take steps for the protection of **Loktak Lake and Keibul Lamjao National Park**.
- **Loktak lake** is located in the state of **Manipur**, it's the **largest freshwater lake in Northeast India**.
- Known for its **floating circular swamps, which are called phumdis in the local tongue**.
- The lake houses the only **floating national park in the world, the Keibul Lamjao National Park**, which is the last refuge of the **endangered brow-antlered deer or sangai, Manipur's state animal**.
- Loktak Lake was initially **designated as a wetland of international importance under the Ramsar Convention in 1990**.
- Later it was also listed under **the Montreux Record in 1993**.

Asia's largest 4-metre International Liquid Mirror Telescope (LMT)

- Ministry of science and technology inaugurated Asia's largest 4-metre International Liquid Mirror Telescope at Devasthal in Uttarakhand
- **By:** Aryabhata Research Institute of Observational Sciences (ARIES).
- LMTs are stationary telescopes that image a strip of sky. It can capture all possible celestial objects — from stars, galaxies, supernovae explosions, and asteroids to space debris
- **Working of the telescope:** ILMT employs a 4-metre-diameter rotating mirror made up of a **thin layer of liquid mercury** to collect and focus light.

CBAM or Carbon Tax

European Union is willing to collaborate with India in easing the administrative burden for businesses while enforcing its Carbon Border Adjustment Mechanism (CBAM).

What is CBAM or Carbon Tax?

It is a tax that imposes importers and non-EU manufacturers to pay for the carbon emission linked to the goods they sell within EU limits. Under the political agreement, the CBAM will **enter into force in its transitional phase as of 1 October 2023**

Importance:

- It seeks to **impose tariffs on imports** with a high carbon footprint entering the 27-member bloc.
- Encourage cleaner industrial production in non-EU countries

Implication for India:

- Indian exports (India exports about **\$2 billion worth** of products annually to the EU) could attract a **20-35% duty** on key Indian shipments, potentially clouding free trade talks between the two sides

Economics

Human Development Report 2021-22

- According to the Human Development Report of 2021-22, **India ranks 132 out of 191 countries, behind Bangladesh (129) and Sri Lanka (73).**
- The HDI scores range from **0 to 1**, with **higher values indicating higher levels of human development.**
- The subnational HDI in India shows that **while some states have made considerable progress, others continue to struggle.** Delhi occupies the top spot and Bihar occupies the bottom spot.
- The **five states with the highest HDI scores are Delhi, Goa, Kerala, Sikkim, and Chandigarh.** Nineteen states are classified as high human development states, while the **bottom five states are Bihar, Uttar Pradesh, Madhya Pradesh, Jharkhand, and Assam, with medium levels of human development.**

Sugar export

- India has become world No. 2 in sugar export, behind only Brazil.
- India's sugar export (in 2016-17) was **0.46 lakh tonnes (lt)**, which has now increased to **110 lt by 2021-22.**
- India is the **world's largest producer and consumer of sugar**

- **Importers of Indian Raw Sugar:** Indonesia, Bangladesh, and Saudi Arabia

Advantages of Indian raw sugar in the International Market:

- **Season advantage:** India's crushing is from October to April, whereas Brazilian mills operate from April to November. Hence, importers are utilising Indian raw sugar during Brazil's off-season.
- **Freight cost savings:** India is much closer to its major sugar importers (compared to Brazil) and therefore less freight cost.
- **Indian sugar is free of dextran:** Dextran is a bacterial compound formed when sugarcane stays in the sun for too long after harvesting.
- **Indian raw sugar has no dextran,** as it is produced from fresh cane crushed within 12-24 hours of harvesting (compared to 48 hours or more in Brazil)
- India's sugar has a **higher % of sucrose present**

Friction over formula

With the population given a higher weightage over performance, **the revenue-sharing formula has created friction** between States and the Centre.

Revenue sharing between centre-states:

- **The Indian Constitution** grants the Union government **more revenue-raising powers** while the States undertake most of the development-related responsibilities.
- Therefore, the Constitution provides **for sharing** of the Union government's revenue with the States.
- The Centre's tax collections are pooled-in from States and a part of it is distributed among them, based on the **Finance Commission's (FC) formula**.

The XVFC formula:

- The XVFC had arrived at the States' share in the divisible pool of taxes based on each State's –
 - **Needs** (population, area and forest and ecology) – 40% weightage,
 - **Equity** (per capita income difference) – 45% and
 - **Performance** (own tax revenue and lower fertility rate) – 15%.
- **The fertility rate** in the formula to reward States which had reduced the fertility levels.

Ethics & Society

Ethical Guidelines for AI in Healthcare

The Indian Council of Medical Research (ICMR) has released **Ethical Guidelines for AI in Healthcare and Biomedical Research** to guide the effective, safe development/deployment/adoption of AI-based technologies.

Highlights of the guidelines:

- It outlined **10 key patient-centric ethical principles** for AI application in the health sector for all stakeholders involved.
- These are **accountability and liability, autonomy, data privacy, collaboration**, risk minimisation and safety, accessibility and equity, optimisation of data quality, non-discrimination and fairness, validity and trustworthiness.
- The ethical review process came under the domain of the **ethics committee** which assesses a host of factors including data source, quality, safety, anonymization, etc.

How has the SC recently viewed LGBTQIA+ rights?

- **In Navtej Singh Johar (2018) case** [decriminalised homosexuality by reading down Section 377 (IPC)], the SC held that the community is entitled to the benefit of equal citizenship and to the equal protection of the law. **Article 21** of the Indian constitution (right to life and liberty) guarantees the choice of whom to partner with, the ability to find fulfilment in sexual intimacies, etc.
- **In K.S. Puttaswamy's (2017) case**, SC ruled that the fundamental right to privacy (including bodily autonomy, and sexual orientation) is intrinsic to life and liberty and thus integral to Article 21.
- After these judgements, there was hope that same-sex marriages would be legalised, but that has not been the case, prompting many couples to move to court.

What is the Centre's stand?

- **Opposed** same-sex marriage and said **judicial interference will cause complete havoc with the delicate balance of personal laws.**
- This definition of marriage is **socially, culturally and legally** ingrained into the very idea of the heterogeneous institution (a union between two persons of the **opposite sex**) of marriage.
- The decriminalisation of Section 377 IPC does not give rise to a claim to seek recognition for same-sex marriage.
- Even if same-sex marriage is claimed under Article 21, **the right can be curtailed by the competent legislature** on permissible constitutional grounds including legitimate state interest.

Awards

Kalanidhi award for 2023

Renowned Carnatic vocalist and Padma Shri awardee Bombay Jayashri has been selected for the Sangita Kalanidhi award for 2023 by the Music Academy.

Kalanidhi award is the title awarded yearly to a Carnatic musician by the Madras Music Academy

Current Affairs Update (Mar 24-31)

National

Online Right to Information (RTI) portals

The Supreme Court has directed **States and Union Territories** to set up and operationalize **online Right to Information (RTI) portals** within three months to **ensure transparency in governance**.

The Right to Information Act 2005 (RTI) gives **Indian citizens the right to access information held by public authorities** (all levels of government, judiciary, as well as any non-governmental organizations that receive public funding).

Section 6(1) of RTI, 2005 stipulated that an information seeker had a **statutory right to move an application through electronic means**.

Issues with the online portal:

- Even after 17 years of the act being passed, **several High Courts and most district courts** entertain **only physical RTI applications**.
- Issues of the '**digital divide**', **lack of digital infrastructure**, and **lack of digital literacy** hamper RTI progress.

Issues with the use of AFSPA

- The Centre has decided to **decrease** the jurisdiction of "disturbed areas" declared under the **Armed Forces (Special Powers) Act, 1958 (AFSPA)** in Nagaland, Assam and Manipur from April 1st.
- **Violation of human rights**-Justice Verma committee (on offences against women in conflict areas) said "AFSPA legitimizes impunity for sexual violence"; Justice Santosh Hegde Committee described it as a "symbol of oppression".
- **Cases of fake encounters**
- **Opposition by the state government**-States like Nagaland, Tripura, and Manipur have constantly opposed its imposition.
- **Poor checks and balance**-The Act gives powers to security forces to open fire but only after a prior warning is given to the suspect. There is a lack of accountability.
- **Fuels the cycle of violence**-People's disillusionment with the democratic setup is exploited by secessionists and terror sympathizers, leading to more violence and counter-violence

National Rabies Control Programme (NRCP)

The Central Government has launched the **National Rabies Control Programme (NRCP)** for the **prevention and control of Rabies**.

The **Strategies of the National Rabies Control Program** are as follows:

- 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**

Western Disturbances

- Western disturbances are **extra-tropical storms that originate in the Caspian or Mediterranean Sea, which is an area of low pressure & bring sudden showers(non-monsoonal), snow and fog to northwest India.**
- These **travel eastwards on high-altitude westerly jet streams**— massive ribbons of fast winds traversing the earth from west to east.
- The rainfall and the storms **were caused by multiple western disturbances (WD), other WD-associated weather systems and many troughs, which are extended low-pressure areas, formed due to the interaction of the WDs** and associated systems with winds blowing in from the east, mainly the Bay of Bengal.

Provisions available for 'Freedom of Press'

- **Constitutional Provisions: Article 19(1)(a) of the Constitution** guarantees the right to freedom of speech and expression. However, this **right is not absolute and is subject to reasonable restrictions** under **Article 19(2)**.
- **Supreme Court in Romesh Thappar v. State of Madras (1950)** observed that freedom of the press lay at the foundation of all democratic organisations.
- **World Press Freedom Day (3rd May)** by the UN
- **Windhoek Declaration (adopted by UNESCO)** aimed towards the 'development of a free, independent and pluralistic press'
- India ranked **150th among the 180 countries** in World Press Freedom Index 2022 published by Reporters Without Borders (RSF).

Issues faced by the CBI

- **A caged parrot:** For instance, to prosecute any MLA/state minister, the CBI needs sanction from the Speaker of the state Assembly (for MLAs)/ the Governor (for state ministers).

- **Structural constraints:** Both the legal structure and the changes made in the Rules governing CBI have hindered the functioning of the CBI.
- **Political tug-of-war:** Increasingly hostile relations between the Centre and the state governments (usually ruled by opposition parties).
- **Inadequate manpower:** 1,709 posts are vacant against its sanctioned strength of 7,295 → increasing pendency of cases, hampering the quality of investigation → impacting the **effectiveness and efficiency of the agency**.
- **Opacity:** The details of the cases and the annual report CBI is also not accessible to the general public.

Lily Thomas SC verdict

- A Surat court sentenced Congress leader (Rahul Gandhi) to two years in jail in a 2019 defamation case and also granted him bail and suspended his sentence for 30 days to allow him to appeal.
- As per **Section 8(3) of the Representation of the People Act 1951**, conviction of a lawmaker for an offence with a two-year sentence or more leads to disqualification from the House.
- As per **Section 8(4)** of the RPA the disqualification takes effect only after three months have elapsed from the date of conviction. Within that period, the convicted lawmaker could have filed an appeal against the sentence before a higher court.
- However, this provision was struck down as “**unconstitutional**” in the SC’s landmark **2013** ruling in ‘**Lily Thomas v Union of India**’.

World’s Highest Rail Bridge

The Indian Railways is constructing the world’s highest railway bridge in the challenging terrain of the Himalayas, which is expected to be completed in the coming months. The Chenab Bridge, an engineering marvel, is a part of the strategically important **Udhampur-Srinagar-Baramullah (USBRL)** railway link that will connect Jammu & Kashmir to the rest of India.

The Chenab Bridge is 35 meters taller than the Eiffel Tower in Paris, making it the world’s highest rail bridge. The **1.3 km long bridge** has a design speed of 100 kmph for trains and a lifespan of 120 years. The ambitious project is being executed by **Konkan Railway Corporation Ltd.** at an estimated cost of Rs. 1486 crore.

International

Japan’s Indo-Pacific strategy

- Landlocked **Northeast India may soon get a trade gateway through Matarbari deep sea port in Bangladesh** being constructed by Japan, under its Free and Open Indo-Pacific strategy
- **Bay of Bengal Industrial Growth Belt (BIG-B) initiative:** Through this initiative, Japan is helping Bangladesh develop infrastructure and Industrial Belt along Dhaka-Chittagong-Cox's Bazar belt area and beyond.
- **India-Japan Act East Forum (AEF):** Through this, Japan has been supporting the development of India's North East through connectivity to Bangladesh and Southeast Asia.

About Japan's Indo-Pacific strategy: Japan will promote the Bay of Bengal-Northeast India industrial value chain concept to foster the growth of the entire region. The strategy consists of three pillars:

- **Promotion and establishment of rule of law**, freedom of navigation and free trade
- **Pursuit of economic prosperity**
- **Commitment to peace and stability** (capacity building on maritime law enforcement, HA/DR cooperation, etc.)

Abel Prize

Luis Caffarelli, a 74-year-old mathematician from Argentina, has been awarded the **2023 Abel Prize for his contributions to** regularity theory for nonlinear partial differential equations, including free-boundary problems and the Monge-Ampère equation.

Operation Interflex

Operation Interflex involves the **United Kingdom (U.K.)** and several other countries **training nearly 2,000 Ukraine military recruits**. This initiative is part of the U.K.'s £2.3 billion commitment towards military aid and support to Ukraine, and is a collaborative effort between Canada, New Zealand, Australia, Norway, Denmark, Finland, Sweden, Lithuania, and the Netherlands.

Science-Tech & Environment

GSLV-Mk3/LVM3 Mission successful

- **Launch site:** Satish Dhawan Space Centre SDSC-SHAR, Sriharikota
- **Launch vehicle:** GSLV-Mk3/LVM3
- **No of satellites launched:** 36
- **Orbit:** Low Earth Orbit
- **Highlights:** ISRO's heaviest payload rocket, GSLV-Mk3/LVM3 carried 36 OneWeb satellites under the **OneWeb India-1 mission**.

- **OneWeb India-1 mission** is a **Network Access Associates Limited, UK** (Bharti-backed OneWeb Group Company) and the **NewSpace India Limited (NSIL)** joint mission to launch 72 satellites to Low-Earth Orbits (LEO).

Biotransformation technology

- It is a **novel technology** that would digest plastic waste naturally with the help of microbes and biodegrade the waste without leaving behind any microplastics.
- **Food packaging and healthcare industries** are the two prime sectors that could use this technology to reduce waste.
- This will ensure that plastics escaping refuse streams are **processed efficiently and broken down**.

Depleted uranium

- Depleted uranium is a **by-product of the process of creating enriched uranium**, which is used in **nuclear reactors and nuclear weapons**. In comparison to enriched uranium, depleted uranium is **much less radioactive and is incapable of generating a nuclear reaction**.
- However, due to its high density — **it's denser than lead** — **depleted uranium is widely used in weapons as it can easily penetrate armour plating**.

Which countries have depleted uranium munitions?

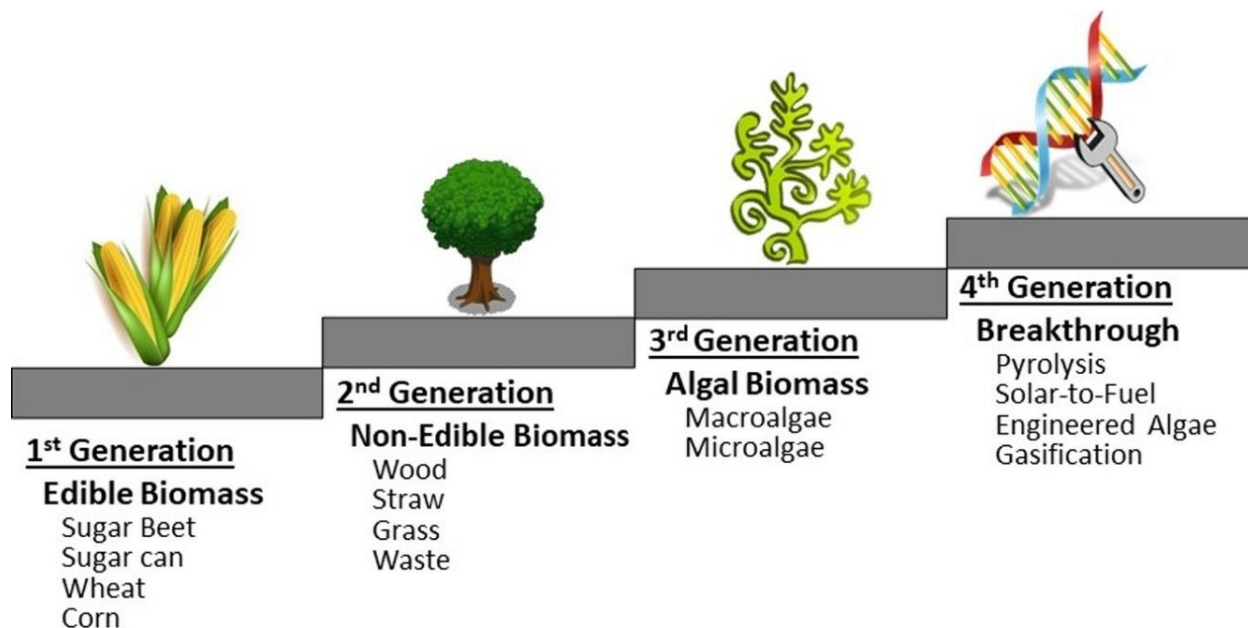
Apart from the **US, Britain, Russia, China, France and Pakistan** produce uranium weapons, which are **not classified as nuclear weapons, as per the International Coalition to Ban Uranium Weapons**.

Where have depleted uranium munitions been used?

- 1991 Gulf War to destroy T-72 tanks in Iraq.
- 1999 NATO bombing of Yugoslavia
- During the 2003 invasion of Iraq

Biofuels

- Any hydrocarbon fuel that is **produced from an organic matter (living or once living material) in a short period of time (days, weeks, or even months)** is considered a biofuel.
- Biofuels may **be solid, liquid or gaseous in nature**.
- These can be **used to replace or can be used in addition to diesel, petrol or other fossil fuels** for transport, stationary, portable and other applications.
- Some of the **main reasons for shifting to biofuels are the rising prices of oil, the emission of greenhouse gases from fossil fuels** and the interest in obtaining fuel from agricultural crops for the benefit of farmers.



Limitations of the green hydrogen – dubbed as the ‘fuel of the future’

- **Energy inefficient** → 30% of renewable energy is lost while producing hydrogen.
- **Indirectly contributes to global warming** → when it reacts with hydroxyl radicals (responsible for breaking down and eliminating methane – a potent GHG) → could lead to delayed climate action.
- Large-scale production requires **vast amounts of land, water and renewable energy**, which could lead to **human rights violations and energy poverty**.

India’s first Bauxite Certified Reference Material (CRM)

National Aluminium Company Limited (NALCO) and Bhabha Atomic Research Centre (BARC) have jointly developed India’s first Bauxite Certified Reference Material (CRM) named **BARC B1201**. This is **the fifth CRM** of its kind in the world.

A Bauxite Certified Reference Material (CRM) is a standardized sample of bauxite that has been certified to have a known and consistent composition.

What are its uses?

- CRMs are used as **calibration standards for analytical methods**, instrument performance evaluation, and data quality control in routine analysis of bauxite.
- The use of CRMs ensures the **accuracy and reliability of analytical results and facilitates inter-laboratory**

Marine protected areas (MPA)

India will continue to support setting up two **Marine Protected Areas (MPA) in Antarctica** to protect marine life and its ecosystem services.

The Southern Ocean that encircles Antarctica covers around 10% of the global ocean and is home to nearly 10,000 unique polar species. **Climate change and commercial fishing are altering habitats** such as sea ice and the sheltered seafloor under ice shelves that are home to a variety of species.

International efforts to protect marine ecosystem:

- Commission for the Conservation of Antarctic Marine Living Resources (**CCAMLR**) is an intergovernmental body set up in **1982** to conserve Antarctic marine life.
- **The UN 30×30 Framework** (reached at the COP15 to the CBD in 2022) aims to protect 30% of the world's land and sea.
- **The Southern Ocean has 2 MPAs** – one in the southern shelf of the South Orkney Islands and the other in the Ross Sea – **protecting only 5% of the ocean.**

Conservation Plan for Great Indian Bustards

- Minister of State for Environment, Forest and Climate Change has taken various measures for the Conservation and protection of Great Indian Bustards
- **Centrally Sponsored Scheme for Species Recovery** under the Integrated Development of Wildlife Habitats
- **Conservation Breeding:** E.g., Desert National Park at Jaisalmer
- **Establishment of a Satellite conservation** breeding Facility at Sam, Jaisalmer, Rajasthan.
- **In-situ Conservation** Proposal by Rajasthan government
- **Consideration of funding support** from State plan and/or State CAMPA funds.
- **Project Great Indian Bustard**

Why is compensatory afforestation contested?

- According to the Synthesis Report of the IPCC, the **preservation of natural ecosystems** rather than restoring the destroyed ones is being recognised as an important means to mitigate climate change.
- According to the **CAG report (2013)**, most of the money (~Rs 47,000 crore in 2019) in the CAMPA fund had been **unspent.**
- CAMPA has also come under fire for **facilitating the destruction of natural ecosystems** → adversely impacting livelihood, biodiversity, hydrology and the climate.
- **Planting non-native species** or artificial plantations wouldn't compensate for the ecosystem loss as well be hazardous to the existing ecosystem.

Patent evergreening

- India rejects Johnson & Johnson's attempt to extend monopoly on lifesaving TB drug – Bedaquiline.
- **Bedaquiline** is a crucial drug in the treatment of **multi-drug resistant TB patients** for whom the first-line drug treatment (Isoniazid, Rifampicin, Pyrazinamide and Ethambutol) has stopped working.
- When J&J filed for evergreening of its patent on fumarate salt (a formulation of Bedaquiline), its patent evergreening practice was challenged by two TB survivors in 2019.

Why is Patent Monopoly/Evergreening?

- It is a practice of **modifying drugs** (without improving efficacy) in order to extend their patent life and profitability.
- Evergreening → establishes monopoly → undermines competition.
- **The Indian Patents Act, 1970** prohibits the mischievous practice of evergreening of patents → making the drugs **affordable** and promoting domestic **generic drug markers**.

Babesiosis

- Babesiosis is a deadly disease that occurs due to the **parasitic infection by protozoa Babesia of red blood cells**.
- It is primarily transmitted to humans through the bite of **infected ticks**, particularly the black-legged or deer tick.
- While many infected individuals may not experience any symptoms, some can become severely ill. Common symptoms include fever, chills, sweats, headache, body aches, loss of appetite, nausea, and fatigue.
- In severe cases, it can be life-threatening, especially in people with weakened immune systems or other serious health conditions.
- Azithromycin is the mainstay of the treatment

The Sarus crane

- It is a large **non-migratory** crane found in parts of the Indian subcontinent, Southeast Asia, and Australia.
- Standing at 152-156 centimetres, it is the **world's tallest flying bird** classified as '**Vulnerable**' on the IUCN Red List and is a **CITES Appendix II**
- In India, it is usually found in **wetlands** and is the **state bird of UP**.
- A man from UP was booked under the Wildlife Protection Act 1972, for "illegally" keeping and nursing an injured Sarus crane (Grus Antigone) he found in his village.

Economics

IMF bailouts

The International Monetary Fund (IMF) confirmed a \$3 billion bailout plan for Sri Lanka's struggling economy and is also in negotiations with Pakistan for a \$1.1 billion bailout plan. The IMF usually imposes **conditions on countries** before it lends any money to them.

Why do nations seek an IMF bailout?

- **Central banks mismanagement** → forced by governments (populist spending) → create fresh money → rapid rise in the money supply → prices rise → exchange value of the currency drops → destroy confidence in the currency.
- **A country's domestic economic policies** (that imperil productivity) can also have an adverse impact on its currency's exchange rate and foreign exchange reserves.
- **Bad luck can also contribute to a crisis.** For example, a **decrease in foreign tourists visiting Sri Lanka** led to a steep fall in the flow of U.S. dollars into the nation.
- In such a scenario, many countries (facing a major macroeconomic risk/currency crisis) are forced to seek help from the IMF **to meet their external debt and other obligations**, to purchase essential imports, etc.

Cons:

- Too tough on the public
- Influenced by international politics

Pros:

- Essential for the success of IMF lending
- Throwing money without reforming policies that caused the crisis/corruption does not make sense
- Ensures independence of its central bank

Green Product

Green Product A product that has a **minimal negative impact** on the environment throughout its entire life cycle, from production to disposal.

Examples Renewable energy sources (**solar panels, wind turbines**), energy-efficient appliances, organic food, non-toxic cleaning products, and electric vehicles.

Trend in The global market for **green energy and hydrogen technologies** is projected to reach **\$2.2**

Trade **trillion by 2023.** Electric and hybrid vehicles, non-plastic packaging, and wind turbines show significant growth.

Advantages Reduces negative environmental impact, promotes sustainability, encourages innovation in eco-friendly technology, helps preserve natural resources, and can provide a marketing advantage for businesses.

Challenges Can be more **expensive** to produce, may **not always be as accessible or convenient as traditional products**, may require changes in **consumer behaviour** and attitudes towards sustainability, and there can be **difficulties in verifying** and regulating green claims.

Deen Dayal Upadhyaya Grameen Kaushalya Yojana (DDU-GKY)

The Ministry of Rural Development has launched a new initiative called “**Captive Employment**” under the Deen Dayal Upadhyaya Grameen Kaushalya Yojana (DDU-GKY) program.

Objectives:

- For greater **industry participation** in skilling rural poor youth
- To bridge the gap between job seekers and job providers and contribute to sustainable development goals.

Who are captive employers?

Any Employer or Industry that provides employment to candidates in their own organization or one of its subsidiaries and has suitable in-house training facilities.

Features:

- It aims to train and **place more than 31,000 rural youth** in their own establishment or subsidiary companies.
- The trained candidates are **assured post-training placement of a minimum of six months** with a minimum CTC of Rs 10,000/-. The program is expected

Ethics & Society

Recent achievements in the health sector

- **NFHS-5: Total fertility rate (TFR):** India achieved a TFR of 2.1 (replacement level) in 2020.
- **Maternal and infant mortality:** Even in the BIMARU states, hospital deliveries have soared to 89%.

- **Increase in insurance coverage:** 74% of Indians are either covered or eligible for health insurance coverage.
- **Ayushman Bharat insurance scheme (2018)** provides insurance against hospitalisation for up to Rs 5 lakh per year per family

Haryana GK

Aravalli Green Wall Project

The government recently launched the **Aravalli Green Wall Project**, a major **initiative to green the 5 km buffer area around the Aravalli Hill Range** in **four states** at a function organised to celebrate the International Day of Forests in Haryana.

The Aravalli Green Wall Project is **part of the Union Environment Ministry's vision** to create green **corridors across the country to combat land degradation and** desertification. **The project covers the states of Haryana, Rajasthan, Gujarat and Delhi** – where the Aravalli hills landscape span over 6 million hectares of land.

The project will **involve planting native species of trees and shrubs on scrubland, wasteland and degraded forest land, along with rejuvenating and restoring surface water bodies such as ponds, lakes and streams.**

Objectives:

- Improve the **ecological health of the Aravalli range**
- **Prevent the eastward expansion of the Thar Desert** and reduce **land degradation**
- Help in **carbon sequestration and mitigate climate change**