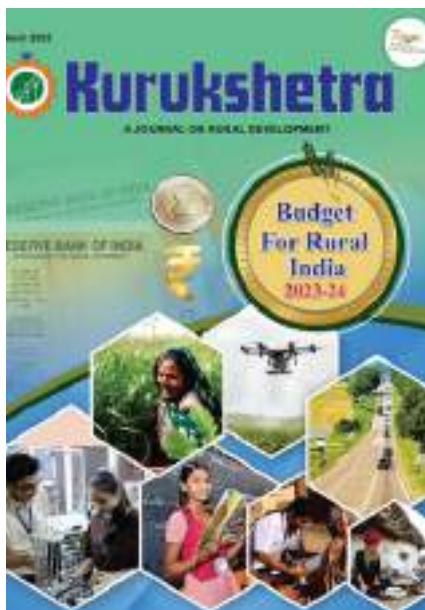


OFFICERS' Pulse

March 2023 - AT A GLANCE



DownToEarth Business Standard



Current Affairs Monthly

The **PULSE** of UPSC at your fingertips.

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Schemes

1) Stand-Up India

About

- Stand up India Scheme was launched in 2016 to **promote entrepreneurship at grassroots level** focusing on economic empowerment and job creation.
- This scheme has been extended up to the year **2025**.

Objectives

- The purpose of Stand-Up India is to:
 - promote entrepreneurship amongst **women, SC & ST category**.
 - **provide loans for setting up greenfield enterprises** in manufacturing, services or the trading sector & activities allied to agriculture by both ready and trainee borrowers
 - **facilitate bank loans between Rs.10 lakh to Rs.1 crore** to at least one Scheduled Caste/ Scheduled Tribe borrower and at least one woman borrower per bank branch of Scheduled Commercial Banks;

Significance

- The Stand-Up India scheme is based on **recognition of the challenges faced by SC, ST and women entrepreneurs** in setting up enterprises, obtaining loans and other support needed from time to time for succeeding in business.
- The scheme therefore endeavors to create an ecosystem which facilitates and continues to **provide a supportive environment for doing business**.
- The scheme seeks to give access to loans from bank branches to borrowers to help them set up their own enterprise.

Who all are eligible for a loan?

- SC/ST and/or women entrepreneurs, **above 18 years** of age.
- Loans under the scheme are available for **only green field projects**. Green field signifies, in this context, the first time venture of the beneficiary in the manufacturing, services or the trading sector & activities allied to agriculture.
- In case of non-individual enterprises, **51% of the shareholding and controlling stake** should be held by either SC/ST and/or Women Entrepreneur.
- Borrowers should **not be in default** to any bank/financial institution.

Why in News?

- Stand Up India has completed 7 years of implementation.

2) Deen Dayal Upadhyay Grameen Kaushal Yojana

About DDUGKY

- The **Ministry of Rural Development (MoRD)** launched the Deen Dayal Upadhyaya Grameen Kaushalya Yojana (DDU-GKY) Antyodaya Diwas in 2014.
- DDU-GKY is tasked with the **dual objectives of adding diversity to the incomes of rural poor families and cater to the career aspirations of rural youth**.
- As a **part of the Skill India campaign**, it plays an instrumental role in supporting the social and economic programs of the government like the Make In India, Digital India, Smart Cities and Start-Up India.

Beneficiaries

- DDU-GKY is uniquely focused on **rural youth between the ages of 15 and 35 years from poor families.**
- Over 180 million or 69% of the country's youth population between the ages of 18 and 34 live in its rural areas. Of these, the bottom of the pyramid youth from poor families with no or marginal employment number about 55 million.
- There are several challenges preventing India's rural poor from competing in the modern market, such as the **lack of formal education and marketable skills.**
- DDU-GKY **bridges this gap** by funding training projects benchmarked to global standards, with an emphasis on placement, retention, career progression and foreign placement.

Implementation Model

- DDU-GKY follows a **3-tier implementation model.**
- The **DDU-GKY National Unit** at MoRD functions as the policy-making, technical support and facilitation agency. The **DDU-GKY State Missions** provide implementation support; and the **Project Implementing Agencies (PIAs)** implement the programme through skilling and placement projects.

Why in News?

- The Ministry of Rural Development has signed a Memorandum of Understanding (MoU) with several employers to provide gainful employment to rural poor youths under DDU-GKY.

3) O-SMART scheme

About the Scheme

- The "Ocean Services, Modelling, Application, Resources and Technology (O-SMART)" scheme is an umbrella scheme of the **Ministry of Earth Sciences.** It was launched in 2018.
- The O-SMART scheme **encompassing oceanographic research activities** is being implemented with the objectives for **providing forecast and services** based on the continuous observation of our oceans, **development of technologies and exploratory surveys** for sustainable harnessing of our oceanic resources (both living and non-living) and **promotion of front-ranking research** in ocean sciences.
- The scheme encompasses **seven sub-schemes** namely Ocean Technology, Ocean Modelling and Advisory Services (OMAS), Ocean Observation Network (OON), Ocean Non-Living Resources, Marine Living Resources and Ecology (MLRE), Coastal Research and Operation and Maintenance of Research Vessels.
- These sub-schemes are being implemented by **autonomous/attached institutes of the Ministry**, viz. National Institute of Ocean Technology (NIOT), Chennai; Indian National Center for Ocean Information Services (INCOIS), Hyderabad; National Centre for Polar and Ocean Research (NCPOR), Goa, Center for Marine Living Resources and Ecology (CMLRE), Kochi; and National Centre for Coastal Research (NCCR), Chennai as well as involving other national institutes.

Why in News?

- An amount of Rs. 2177 crore is allocated for implementation of O-SMART scheme during a period of 5 years i.e 2021-22 to 2025-26.

4) Members of Parliament Local Area Development Scheme

About the Scheme

- The Members of Parliament Local Area Development Scheme (MPLADS) is meant to enable **Members of Parliament to recommend works of developmental nature** with emphasis on **creation of durable community assets based on locally felt needs** to be taken up in their constituencies in the area of national priorities namely drinking water, education, public health, sanitation, roads etc.
- The **Ministry of Statistics and Programme Implementation** has been responsible for the policy formulation, release of funds and prescribing monitoring mechanism for implementation of the Scheme.

Features

- The MPLADS is **fully funded by the Government of India**. The annual MPLADS fund entitlement per MP constituency is **Rs. 5 crore**.
- Funds under the MPLADS are **non-lapsable**.
- **Lok Sabha Members** can recommend works within their Constituencies and **Elected Members of Rajya Sabha** can recommend works within the State of Election (with select exceptions). **Nominated Members** of both the Rajya Sabha and Lok Sabha can recommend works anywhere in the country.
- All works to meet **locally felt infrastructure and development needs**, with an **emphasis on creation of durable assets** in the

constituency are permissible under MPLADS as prescribed in the scheme guidelines.

- The MPLADS funds can be merged with other schemes such as MGNREGA and Khelo India.

Allocation for SC & ST

- The guidelines recommend MPs to suggest works costing **at least 15 per cent** of their MPLADS entitlement for the year for areas inhabited by **Scheduled Caste population** and **7.5 per cent** for areas inhabited by **Scheduled Tribe population**.
- In case there is insufficient tribal population in the area of Lok Sabha Member, they may recommend this amount for the creation of community assets in **tribal areas outside of their constituency but within their State of election**.

Implementation

- Under MPLADS, the role of the MPs is limited only upto recommendation of works. Thereafter, it is the responsibility of the **District Authority** to sanction, execute and complete the works recommended by Members of Parliament within the stipulated time.
- The District Authority shall identify the Implementing Agency capable of executing the eligible work qualitatively, timely and satisfactorily. It shall be responsible for timely and effective implementation of such works.
- Information on MPLADS (the number and cost of works sanctioned, implementing agencies, projects completed, etc) should be made available to citizens under the **Right to Information Act**.
- **At least 10% of the projects** under implementation in the district are to be **inspected** every year by the district authority.

Why in News?

- The Ministry of Statistics and Programme Implementation (MoSPI) has released the **revised guidelines** on MPLADS.
- The revised set of guidelines aims to broaden the scope of the Scheme so as to enable the MPs to recommend the developmental works as per the changing needs of the community.
- The Ministry has also launched a **web portal**, under which the entire process of fund flow will operate. It aims to facilitate real-time monitoring, greater transparency and accountability in the system, and improved efficiency and effectiveness of the MPLAD Scheme.

5) Pradhan Mantri Shram Yogi Maan-dhan

About the Scheme

- It is a **Central Sector pension scheme** to ensure **old age protection for Unorganised Workers**. It was launched in 2019.
- It is administered by the **Ministry of Labour and Employment** and implemented through **Life Insurance Corporation of India (LIC)** and **Common Service Centres (CSCs)**.
- LIC is the Pension Fund Manager and responsible for Pension pay out.

Eligibility

- The **Unorganised workers** whose **monthly income is Rs 15,000/ per month or less** and belong to

the entry **age group of 18-40 years** are eligible for the scheme.

- The worker **should not be covered under any statutory social security schemes** such as National Pension Scheme (NPS), Employees' State Insurance Corporation scheme, Employees' Provident Fund Organization Scheme and is **not an income tax payee**.

Salient Feature of PM-SYM

- **Matching contribution by the Central Government:** PM-SYM is a **voluntary and contributory pension scheme** on a **50:50 basis** where prescribed age-specific contribution shall be made by the beneficiary and the matching contribution by the Central Government.
- **Minimum Assured Pension:** Each subscriber under the PM-SYM, shall receive a minimum assured pension of **Rs 3000/- per month after attaining the age of 60 years**.
- **Family Pension:** During the receipt of pension, if the subscriber dies, the spouse of the beneficiary shall be entitled to receive 50% of the pension received by the beneficiary as family pension. Family pension is applicable only to the spouse.

Why in News?

- The Government of India has allocated Rs. 350 crore for the implementation of PM-SYM during FY 2022-23.

Initiatives

1) PM MITRA Parks

What's in the news?

- The Government has approved setting up of 7 PM Mega Integrated Textile Region and Apparel (PM MITRA) Parks to boost the textiles sector.
- The Parks will come up in Tamil Nadu, Telangana, Gujarat, Karnataka, Madhya Pradesh, Uttar Pradesh and Maharashtra.

Significance

- PM MITRA would provide an opportunity to develop an **integrated textiles value chain at one place**, starting with spinning, weaving, processing/dyeing, printing, and garment manufacture.
- The core infrastructure of PM MITRA parks will include an incubation centre and plug-and-play facility, developed factory sites, roads, power, water, and waste-water systems, a typical processing house, a common effluent treatment plant (CETP), and other related facilities such as a design centre and testing centres.
- It would also lead to the **creation of 20 lakh jobs**.
- The Central government's budget outlay for the scheme, which is ₹4,445 crore, is to be spent till **2027-28**.

Implementation

- **Special purpose vehicles**, with a **51% equity shareholding of the State government and 49% of the Centre**, will be formed for each park.
- The **State governments** will provide the land, be part of the SPV, and give the required clearances.
- The **Central government** will disburse **Development Capital Fund of ₹500 crore** in two

tranches for each of the seven facilities. This is for the creation of core and support infrastructure.

- It will also give a **Competitive Incentive Support of ₹300 crore per park** to be provided to the manufacturing units.

2) India rejects J&J's attempt to extend patent on TB drug

Context

- Recently, the **Indian Patent Office** rejected an application by pharmaceutical giant Johnson & Johnson (J&J) to extend its patent on the drug **bedaquiline** beyond July 2023.
- Bedaquiline is a drug in tablet form used to **treat drug-resistant tuberculosis (TB)**.
- This opens the door for drug manufacturers to produce generic versions of bedaquiline, which are expected to be more affordable and to contribute to India's goal of **eliminating TB by 2025**.
 - *The Indian Patent Office is responsible for administering the Indian law of patents, and its roles include patent administration, patent duration, and patent renewal, among other things.*
 - *There are four patent offices in India, located in different cities, i.e., Chennai, Delhi, Kolkata, and Mumbai.*

What is drug-resistant TB?

- As of 2017, **India** accounted for around **one-fourth of the world's burden of multi-drug-resistant (MDR) TB and of extensively-drug-resistant (XDR) TB**.

- **MDR TB resists treatment by at least two frontline drugs in TB treatment, isoniazid and rifampicin.**
- **XDR TB resists these two drugs as well as fluoroquinolones and any second-line injectable drug. XDR TB is rarer than MDR TB.**

How is drug-resistant TB treated?

- TB is an infection of the **bacterium Mycobacterium tuberculosis** in the **lungs**, but often in **other organs** as well.
- It can be treated by **strictly adhering to the doses and frequencies of drugs** prescribed by a physician.
- **Deviations** from this schedule can lead the bacteria to become **drug-resistant**. Yet they happen because the drugs often have **side effects** that diminish the quality of life and/or because **patients haven't been afforded access to the requisite drugs on time**.
- Drug-resistant TB is **harder to treat**. One important option for those diagnosed with pulmonary MDR TB is **bedaquiline**.

How effective is bedaquiline?

- Typically, bedaquiline needs to be **taken for six months**. This period is shorter than other treatment routines for pulmonary MDR TB, which can last 9-24 months.
- Unlike second-line treatment options that are injected and can have severe side effects, like hearing loss, bedaquiline is available as tablets and is **less harmful**, although it has **potential side effects** of its own.
- Studies until 2018 found that it could be toxic to the heart and the liver. This is part of why it is

recommended only as a treatment of last resort.

Why was the patent application rejected?

- J&J's patent application was for a fumarate salt of a compound to produce bedaquiline tablets. This would have extended the monopoly of the company on the drug for over four years till 2027.
- This is what is known as **ever-greening of patents** – when **companies make slight changes to the formulation to extend the patent period**, guaranteeing their monopoly over the drug.
- With **India being one of the biggest manufacturers of generics**, the Indian Patent Act 1970 disallows ever-greening of patents.
- **Section 3(d)** of the Act does not allow 'evergreening' of patents to **prevent innovator pharma companies from extending the patent beyond the stipulated period of 20 years**, to ensure that the monopoly does not extend forever.
- The provision says that a **drug cannot be termed as an invention if a new form of the same substance is developed without any significant improvement in efficacy**.

Why is the rejection notable?

- **India has the largest population of people living with drug-resistant TB**. The rejection is expected to **lower the cost of bedaquiline by up to 80%**.
- As of now it is still a patented product and there are no generic versions. However, after the expiry of the Bedaquiline patent in July 2023, the drug makers can make the **generic versions per the law**.

3) Prices of essential medicines set to see a hike

About NPPA

- The National Pharmaceutical Pricing Authority was established in 1997 as an **independent body of experts to regulate the pricing of drugs**.
- It has been constituted as an **attached office of the Department of Pharmaceuticals (DoP), Ministry of Chemicals & Fertilizers**.
- The Authority has been entrusted with the task of
 - **Fixation/revision of prices** of pharmaceutical products (bulk drugs and formulations);
 - **Enforcement** of provisions of the **Drugs (Prices Control) Order (DPCO)**;
 - **Monitoring of the prices** of controlled and decontrolled drugs in the country.
- The NPPA currently fixes prices of drugs placed in the **National List of Essential Medicines (NLEM)** under **Schedule-I of the DPCO**.
- Non-scheduled drugs are allowed an increase of up to **10 per cent in prices every year**, which is monitored by the NPPA.
- NPPA can **also fix the price for non-scheduled drugs** by invoking extraordinary powers in public interest, under the Drugs (Prices Control) Order, 2013.

Why in News?

- Essential and life-saving medicines are set to get expensive from April 1 in line with rising inflation.
- The central government has approved a **12.12% hike in the prices of 384 essential drugs** due to a sharp rise in the **Wholesale Price Index (WPI)**.

- **Annual hikes in the prices of drugs listed in the National List of Essential Medicines (NLEM) are based on the WPI.**
- The 384 drugs, part of NLEM, are also known as **scheduled drugs**, with their **prices regulated by the NPPA**.
- The rest - **non-scheduled drugs** which are **outside price control** - are **allowed an annual increase of 10% every year**.

4) National Disaster Response Fund

About NDRF

- Under the **Disaster Management Act 2005**, a financial mechanism has been set up by way of **National Disaster Response Fund (NDRF)** at national level and **State Disaster Response Fund (SDRF)** at state level to meet the rescue and relief expenditure during any notified disaster.
- The primary purpose of NDRF is to **supplement the SDRF**, in case there is a calamity of “**severe nature**” which **requires assistance over and above the funds available under SDRF**.
- NDRF is classified in the **Public Accounts of the Government of India** under “Reserve Funds not bearing interest”.
- The NDRF is funded through the **National Calamity Contingency Duty (NCCD)** imposed on specified goods and additional budgetary support is provided as and when necessary.
- The **National Disaster Management Authority** takes decisions on the expenses from the National Disaster Response Fund.

About SDRF

- The State Disaster Response Fund, constituted under the **Disaster Management Act**,

2005, is the **primary fund available with State Governments for responses to notified disasters.**

- The **Central Government contributes 75%** of SDRF allocation for **general category States/UTs** and **90% for special category States/UTs** (NE States, Sikkim, Uttarakhand, Himachal Pradesh, Jammu and Kashmir).
- SDRF shall be **used only for meeting the expenditure for providing immediate relief to the victims.**
- **Disasters covered under SDRF:** Cyclone, drought, earthquake, fire, flood, tsunami, hailstorm, landslide, avalanche, cloudburst, pest attack, frost and cold waves.
- **Local Disaster:** A State Government may use **up to 10 percent of the funds** available under the SDRF for providing immediate relief to the victims of natural disasters that they **consider to be 'disasters' within the local context in the State** and which are not included in the

notified list of disasters of the Ministry of Home Affairs.

Why in News?

- The Centre has approved the additional Central assistance of over 1,816 crore rupees under the National Disaster Response Fund (NDRF) to 5 States which were affected by the floods, landslides, and cloudbursts.

Related Information

About NDMA

- The National Disaster Management Authority (NDMA) is a **statutory body** constituted under the Disaster Management Act 2005, with the **Prime Minister of India** as its **Chairman**, a Vice Chairman with the status of Cabinet Minister, and eight members with the status of Ministers of State.
- The NDMA is the **apex statutory body for disaster management in India**. It is under the **control of the Ministry of Home Affairs (MHA)**.

Environment

1) Antarctic Sea ice cover at record low

About C3S

- The Copernicus Climate Change Service (abbreviated as C3S) is one of the six thematic services provided by the European Union's Copernicus Programme.
 - Copernicus is the **European Union's Earth Observation Programme**.
 - It consists of a complex set of systems that collect data from multiple sources: earth observation satellites and in situ sensors, such as ground stations, airborne and sea borne sensors.
 - Copernicus processes these data and provides users with information through a set of services that address six thematic areas: land, marine, atmosphere, climate change, emergency management and security.
- The Copernicus Climate Change Service provides **authoritative information about the world's past, present and future climate**.
- The freely accessible high-quality data, tools and information help businesses, scientists and policymakers to mitigate and adapt to the effects of climate change.

Why in News?

- According to the European Union's Copernicus climate monitor (C3S), the **Antarctic Ocean area covered by ice was the lowest on record** for January, exposing Earth to even more planet-warming heat.

- The Antarctic ice is known for **deflecting some amount of sun rays and keeping the temperatures liveable**. With this ice buffer zone melting with human activity, the **protective layer further depletes** and **raises the temperature to the point of heat waves**.

Impacts

- Melting sea ice has **no discernible impact on sea levels** because the ice is already in ocean water. But it is **problematic because it helps accelerate global warming**.
- About **90% of the Sun's energy that hits white sea ice is reflected back into space**. But when sunlight hits **dark, unfrozen ocean water**, nearly **the same amount of that energy is absorbed instead, contributing directly to a warming planet**.
- Globally, **2022 was recorded among the warmest years on record** despite the cooling influence of the natural La Nina weather pattern.
- Europe clocked some of the deadliest heat waves that fuelled droughts and wildfires on the continent. Other regions, such as the eastern United States, Canada, and Mexico, also experienced extreme heat.

2) Global food system emissions imperil Paris climate goals

Paris Climate Deal

- The Paris Agreement is a **legally binding** global climate change agreement, adopted at the Paris climate conference (COP21) to the United Nations Framework Convention on Climate Change

(UNFCCC) in 2015. The Agreement entered into force in **2016**.

- *The United Nations Framework Convention on Climate Change, signed in 1992 at the **United Nations Conference on Environment and Development** (also known as the **Rio Earth Summit**), constitutes the foundational climate agreement that has provided the platform for most subsequent international climate agreements.*
- The Paris Agreement's central aim is to strengthen the global response to the threat of climate change by keeping a global temperature rise this century **well below 2 degrees Celsius above pre-industrial levels** and to **pursue efforts to limit the temperature increase even further to 1.5 degrees Celsius**.
- A key feature of the Paris Agreement has been the way the agreement reflects the principle of '**common but differentiated responsibilities**' (CBDR). This principle acknowledges the different capabilities and differing responsibilities of individual countries in addressing climate change.
- Under the Paris Agreement, developed countries are under obligation to mobilise **at least \$100 billion every year** from the year 2020 in climate finance meant for the developing world. This amount has to be revised upwards after five years.
- The Paris Agreement requires all Parties to put forward their best efforts through **nationally determined contributions (NDCs)** and to strengthen these

efforts in the years ahead. This includes requirements that all Parties report regularly on their emissions and on their implementation efforts.

Why in News?

- A recent study published in the *Nature Climate Change* journal revealed that the **global food system's greenhouse gas emissions will add nearly one degree Celsius to Earth's surface temperatures by 2100** on current trends, obliterating Paris Agreement climate goals.

Highlights of the Study

- **Earth's surface has warmed 1.2°C since the late 1800s**, leaving only a narrow margin for staying under the 2015 treaty's core goal of capping warming at "well below" 2°C.
- **Even further out of reach is the aspirational limit of 1.5°C**, which science subsequently showed to be a much safer threshold to avoid devastating and possibly irreversible climate impacts, including coastal flooding, heatwaves and drought.
- The report noted that the **global food system accounts for about 15% of current warming levels**, but **only a third of national emissions reductions plans** under the Paris pact include any **measure to cut carbon pollution from agriculture or livestock**.
- **Methane from belching livestock, rice paddies and rotting food accounts for about 60% of food-related emissions**, with **CO2 from machinery and transport, along with nitrous oxide from excess use of chemical fertilisers**, responsible for 20% each.

- Without a sharp change in production and diet, the study concluded, **global food consumption will boost Earth's average surface temperature 0.7°C and 0.9°C by century's end.** This additional warming alone is enough to surpass the 1.5°C global warming target and approach the 2°C threshold.

Measures Required

- **Methane** is clearly the **key to curbing food-related carbon pollution.** The majority of future warming from the food sector comes from the emissions of methane. Because it is a **short-lived pollutant, immediate reductions in its emissions can result in climate benefits in the near future.**
- **Improving production methods** for meat, dairy and rice alone could **reduce the additional warming forecast** from the food sector **by a quarter.**
- **Adopting a diet optimal for human health** across the globe, **using renewables** rather than fossil fuels for power, and **slashing food waste would cut another 25%.**

3) Earth Hour

What is Earth Hour?

- Earth Hour is an international initiative that requires people, government offices, workplaces, and other urban centres to **switch off the non-essential lights in a symbolic call for environmental protection.**
- It is a **global annual initiative of the World Wide Fund for Nature**, an international non-governmental organization.
- The day aims to increase awareness and spark global conversations on protecting

nature, tackling the climate crisis, and working together to shape a brighter future for us all.

- The event, which was first observed in **Sydney (Australia) in 2007**, has grown into a popular annual event with citizens of 187 countries across the globe observing an hour of refraining from the use of non-essential lighting to save energy on a specific day towards the end of March.

Why in News?

- Millions of people around the world observed the annual Earth Hour on 25th March to raise awareness about climate change.

4) Landslide Atlas of India

About Landslides

- Landslides are natural disasters occurring mainly in **mountainous terrains** where there are conducive conditions of soil, rock, geology and slope.
- A **sudden movement of rock, boulders, earth or debris down a slope** is termed as a landslide.
- **Natural causes** that trigger it include **heavy rainfall, earthquakes, snow-melting and undercutting of slopes due to flooding.**
- Landslides can also be caused by **anthropogenic activities** such as **excavation, cutting of hills and trees, excessive infrastructure development, and overgrazing by cattle.**

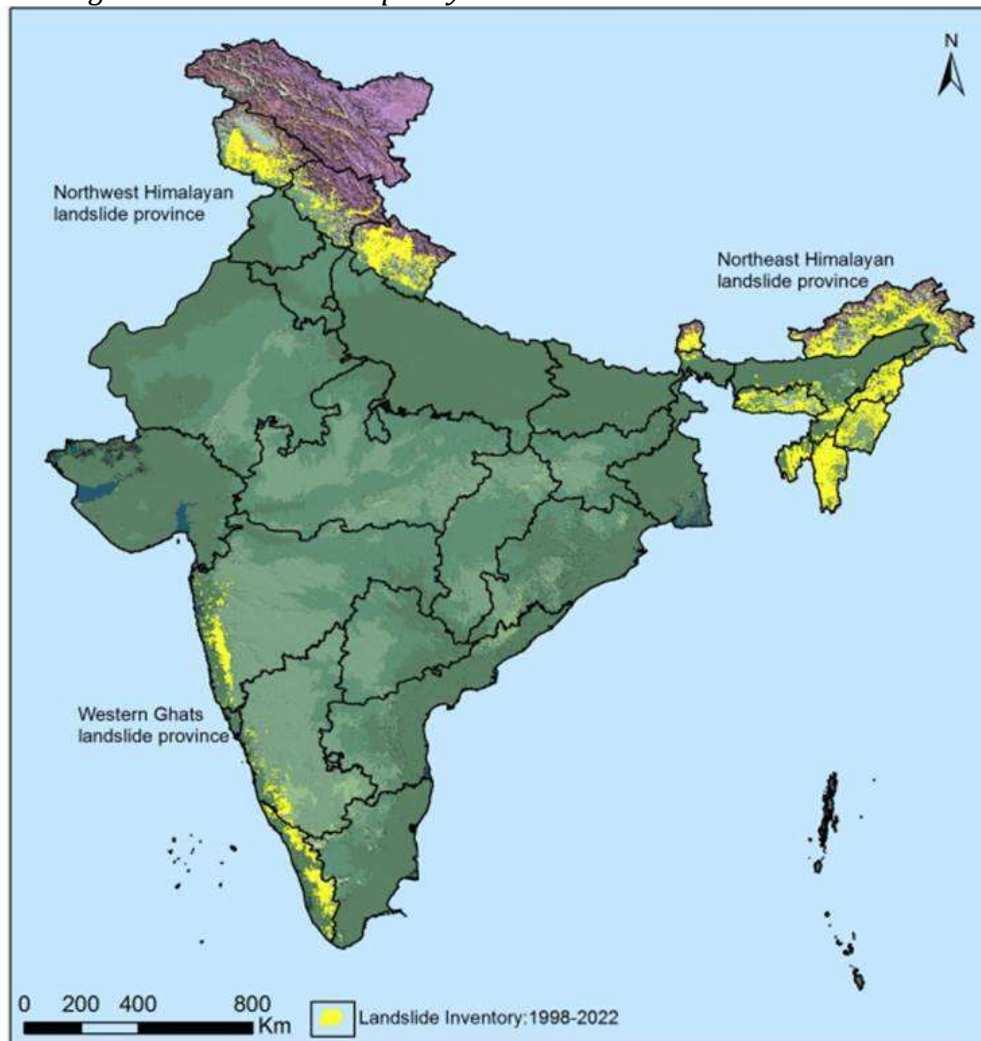
Why in News?

- **ISRO's National Remote Sensing Centre (NRSC)** has released the **Landslide Atlas of India**, a detailed guide identifying landslide hotspots in the country.
 - *NRSC is one of the primary centres of ISRO. It has the mandate for establishment*

of ground stations for receiving satellite data, generation of data products, dissemination to the users, development of techniques for remote sensing applications including disaster management support, geospatial services for good governance and capacity

building for professionals, faculty and students.

- The atlas is a database of landslide-prone regions of India based on events during 1998 – 2022.
- In addition to aerial images, high resolution satellite images were used to study the landslides over the past 25 years.



How prone is India to landslides?

- **India** is considered among the **top five landslide-prone countries globally**, where at least one death per 100 sq km is reported in a year due to a landslide event.
- **Rainfall variability pattern** is the **single biggest cause** for landslides in the country, with the

Himalayas and the Western Ghats remaining highly vulnerable.

- Excluding snow covered areas, **approximately 12.6 per cent of the country's geographical land area (0.42 million sq km) is prone to landslides.** As many as 66.5 per cent of the landslides are reported from the **North-western**

Himalayas, about 18.8 per cent from the **North-eastern Himalayas**, and about 14.7 per cent from the **Western Ghats**.

- **Nearly half of the country's landslide-prone area** (0.18 sq km) is located in the states of **Assam, Arunachal Pradesh, Sikkim, Meghalaya, Mizoram, Manipur, Tripura and Nagaland**.
- **Uttarakhand, Himachal Pradesh, Jammu and Kashmir** cover 0.14 million sq km of the total landslide-prone areas, whereas **Maharashtra, Goa, Karnataka, Kerala, and Tamil Nadu** account for 0.09 million sq km.
- A relatively small area (0.01 million sq km) of the **Araku region in Andhra Pradesh** along the **Eastern Ghats**, too, reports landslide events.

What does the landslide atlas suggest?

- **Uttarakhand, Kerala, Jammu and Kashmir, Mizoram, Tripura, Nagaland and Arunachal Pradesh** reported the highest number of landslides during 1998 – 2022.
- **Mizoram topped the list**, recording 12,385 landslide events in the past 25 years, of which 8,926 were recorded in 2017 alone.
- While **Uttarakhand's** fragility was recently exposed during the land subsidence events reported from Joshimath since January, this Himalayan state has experienced the **second highest number** (11,219) of landslides since 1998.
- From the events and images obtained, the NRSC ranked **Rudraprayag in Uttarakhand** at the top of 147 vulnerable districts. It has the **highest landslide density** in the country, along with

having the **highest exposure to total population and number of houses**.

5) Aravalli Green Wall Project

What's in the news?

- The **Ministry of Environment, Forest and Climate Change** has launched an extensive afforestation and plantation project called the "**Aravalli Green Wall Project**" in 75 villages.
- The project aims to **revive the Aravallis** that are under threat from rampant mining, dumping of waste and encroachments.
- The project will include **planting native plant species** on scrubland, wasteland and in degraded forests. It will also focus on **restoring water bodies** such as ponds, lakes and streams. Another focus will be **agroforestry and pasture development**, to enhance the livelihoods of local communities.



- In the first phase of the project, state forest departments will restore **75 water bodies**, starting with **five each in every district**

of the **Aravallis**. The project covers states of **Haryana, Rajasthan, Gujarat and Delhi** - where the Aravalli hills landscape span over 6 million hectares of land.

- The project is conceptualised on the lines of the **African Green Wall programme**.

Objectives

- The Aravalli Green Wall Project has the following objectives:
 - **Improving the ecological health** of the Aravalli range;
 - To **prevent eastward expansion of Thar Desert** and to reduce land degradation by creating green barriers that will prevent soil erosion, desertification and dust storms;
 - **Contribute to India's commitments** under various international conventions such as UNCCD (United Nations Convention to Combat Desertification), CBD (Convention on Biological Diversity) and UNFCCC (United Nations Framework Convention on Climate Change).

Related Information

About Aravallis

- Spread over an area of 692 km, the Aravallis cover the states of **Gujarat, Rajasthan, Delhi and Haryana**.
- The Aravalli Range is **one of the oldest fold mountains of the world**. It includes a series of peaks and ridges, with **breadths varying from 10 to 100 km**, and are generally **between 300 and 900 metres in elevation**.

- It gives **rise to several rivers**, including the **Banas, Luni, Sahibi, Sakhi, and Sabarmati**. Though heavily forested in the south, it is generally bare and thinly populated.
- It is also the **most "degraded" forest range** in India, according to a study by the Wildlife Institute of India (WII).

Impacts on Climate

- The Aravallis have a significant impact upon the climate of northwest India and beyond. During **monsoons**, the mountain range **gently guides the attenuated monsoon clouds eastwards** towards Shimla and Nainital, thus helping nurture the sub-Himalayan rivers and feeding the north Indian plains.
- In the **winter months**, it **protects the fertile alluvial river valleys from the assault of cold westerly winds** from Central Asia.

African Great Green Wall Project

- The "Great Green Wall" is an initiative to **increase the amount of arable land** in the **Sahel**, the region bordering Africa's Sahara Desert.



- This ambitious project is being implemented across 22 African countries and will revitalize thousands of communities across the continent.
- The GGW initiative's ambition is to **restore 100 million hectares**

of currently degraded land; sequester 250 million tons of carbon and create 10 million green jobs by 2030.

6) PARIVESH Portal

About the Portal

- In order to bring more **transparency and accountability** in the forests, environment and wildlife clearance process, the **Ministry of Environment, Forests and Climate Change** has rolled out a portal named as Pro-Active Responsive facilitation by Interactive and Virtuous Environmental Single Window Hub (PARIVESH).
- It is a web portal which has been developed for **online submission and monitoring of the**

proposals submitted by the proponents seeking for **Environmental (EC), Forest (FC), Wildlife (WL) and Coastal Regulation Zone (CRZ) clearances.**

- Main aim and objective of the PARIVESH portal is to provide a **“single window” solution** by process automation of aforementioned four major clearances through process & data synchronization, leveraging emerging technologies such as GIS, Advance Data Analytics etc for an **expeditious, transparent and effective decision making without compromising on the environmental safeguards.**
- It was launched in 2018 at Central level and in 2019 at State level.



Why in News?

- More than 12000 clearances have been granted under the PARIVESH Portal in 2022.

Agriculture

1) National Workshop on Bamboo Sector Development

About Bamboo

- Bamboo is a versatile crop. It can be used in 1,500 different ways including as food, a substitute for wood, building and construction material, for handicrafts and paper. **Around 80 per cent of bamboo forests lie in Asia.**
- **India is the world's second largest cultivator of bamboo** after China. However, despite all this, the **country's share in the global bamboo trade and commerce is only 4 per cent.**

About National Bamboo Mission

- In 2006, the Government of India launched the National Bamboo Mission (NBM).
- The NBM's key objective was to address issues relating to the development of the bamboo industry in the country, provide a new impetus and direction and enable the realisation of India's considerable potential in bamboo production.

Main Objectives of NBM

- To **increase the area under bamboo plantation in non forest Government and private lands** to supplement farm income and contribute towards resilience to climate change as well as availability of quality raw material for industries.
- To **improve post-harvest management** through establishment of innovative primary processing units near the source of production, primary treatment and seasoning plants, preservation technologies and market infrastructure.
- To **promote product development** keeping in view

market demand, by assisting R&D, entrepreneurship & business models at micro, small and medium levels and feed bigger industries.

- To **rejuvenate the underdeveloped bamboo industry** in India.
- To **promote skill development, capacity building, awareness generation** for development of bamboo sector from production to market demand.
- To realign efforts so as to **reduce dependency on import** of bamboo and bamboo products by way of improved productivity and suitability of domestic raw material for industry, so as to enhance income of the primary producers.

Restructured National Bamboo Mission

- In 2018, a restructured National Bamboo Mission was launched for **holistic development of the bamboo sector through a cluster-based approach.**
- The restructured NBM aims to support the **development of the entire value chain of the bamboo sector** starting from planting material, plantation, creation of facilities for collection, aggregation, processing marketing, micro, small & medium enterprises, skill development and brand building initiative in a **cluster approach mode.**

Potential of Bamboo Sector

- **Land degradation** is a major problem confronting India. According to the **State of India's Environment 2017 Report, nearly 30 per cent of India's land is degraded.** With its unique ability to stitch and repair damaged soils, bamboo is **ideal for rehabilitating degraded soil.**

- To arrest the pace of land degradation in the country, a national programme of intensive bamboo plantation involving all stake-holders needs to be undertaken.
- **Edible bamboo** has a huge demand in East Asian cuisines and medicine. Bamboo grown in the **Northeast** (which is 66 per cent of the growing bamboo stock in India) can be exported to East Asian countries like Japan and Taiwan for competitive prices with the Government's support.
- To facilitate the benefit flow to the farmers, **bamboo outside forest areas has been excluded from the definition of tree** by amending Section 2 (7) of the **Indian Forest Act, 1927** by the Government of India in 2017. Prior to this, the Act defined bamboo as a "tree" and bamboo grown outside forests was subject to regulatory rules of felling and transportation.

Why in News?

- The Ministry of Agriculture & Farmers Welfare conducted a National Workshop on Bamboo Sector Development in New Delhi.

2) Paramparagat Krishi Vikas Yojana

About PKVY

- The Government of India has been **promoting organic farming** in the country through a dedicated scheme namely Paramparagat Krishi Vikas Yojana (PKVY) since 2015-16.
- The scheme stresses on **end to end support to organic farmers** i.e from production to certification and marketing.
- Under PKVY, farmers are provided **financial assistance of Rs 50,000 per hectare/3 years**.

- The scheme promotes the **Participatory Guarantee System (PGS) for India (PGS-India) form of organic certification** that is built on mutual trust, locally relevant and mandates the involvement of producers and consumers in the process of certification. PGS-India **operates outside the framework of Third Party Certification**.

- *Refer Pulse May 2022 at a glance edition for more details about PGS-India.*

Objectives:

- The Scheme envisages
 - **Promotion of commercial organic production** through certified organic farming.
 - The produce will be **pesticide residue free** and will contribute to **improve the health of consumers**.
 - It will **raise farmer's income** and create a **potential market for traders**.
 - It will motivate the farmers for **natural resource mobilization for input production**.

Funding Pattern:

- Funding pattern under the scheme is in the ratio of **60:40** by the **Central and State Governments** respectively.
- In case of **North Eastern and Himalayan States, Central Assistance** is provided in the ratio of **90:10** (Centre: State) and for **Union Territories**, the assistance is **100%**.

Why in News?

- The Government of India provided state-wise beneficiaries details about PKVY in the Parliament.

Flora & Fauna

1) Olive Ridley Turtles

About olive ridley turtles

- The olive ridley turtle is considered the **smallest and most abundant of all sea turtles found in the world.**
- Olive ridleys are found **only in warmer waters**, including the **southern Atlantic, Pacific and Indian Oceans.**
- They are listed as **vulnerable** in the IUCN Red list.

Mass nesting

- These turtles spend their entire lives in the ocean, and migrate thousands of kilometers between feeding and mating grounds in the course of a year.
- The Olive Ridley Turtles come to the beaches of **Odisha** coast annually between November and December and stay on until April and May for mass nesting. Such mass nesting events are called **arribadas.**
- While states like **Maharashtra, Goa, and the offshore Andaman islands** witness sporadic nesting of olive ridley turtles, **Odisha** is the only state in India that sees mass nesting of olive ridley turtles.
- **Gahirmatha beach in Odisha** is acclaimed as the **world's largest-known nesting site** for the marine species. Apart from Gahirmatha, turtles turn up at the **mouths of Rushikulya and Devi river** (both in Odisha) for mass nesting.



Threats

- The Olive Ridley's face serious threats across their migratory route, habitat and nesting beaches, due to **human activities such as turtle unfriendly fishing practices, development and exploitation of nesting beaches for ports, and tourist centers.**
- Though international trade in these turtles and their products is banned, they are still extensively poached for their meat, shell and leather.
- **All the five species of sea turtles occurring in India**, including the Olive Ridley turtles, are legally protected under **Schedule I** of the Wildlife Protection Act, 1972 and **Appendix I** of the CITES Convention which prohibits trade in turtle products.
- As the nesting period stretches over six months, the Indian Coast Guard undertakes the Olive Ridley Turtle protection program under the code name '**Operation Olivia**' every year.

Why in News?

- About 6.37 lakh Olive Ridley sea turtles have arrived for mass nesting at Rushikulya coast this year, setting a new record for the beach in Odisha.

Economy

1) Understanding IMF bailouts

Context

- The International Monetary Fund (IMF) has confirmed a \$3 billion bailout plan for Sri Lanka's struggling economy. IMF officials are also in negotiations with Pakistan for a \$1.1 billion bailout plan as the country faces a severe economic crisis marked by a falling currency and price rise.

Mandate of IMF

- The IMF was set up in **1945** out of the **Bretton Woods conference**. The **primary goal** of the IMF back then was to bring about **international economic coordination** to prevent competing currency devaluation by countries trying to promote their own exports.
- Eventually, the IMF evolved to be a **lender of last resort to governments of countries that had to deal with severe currency crises**.

Why do nations seek an IMF bailout?

- Countries seek help from the IMF usually when their **economies face a major macroeconomic risk**, mostly in the form of a **currency crisis**.
- For instance in the case of Sri Lanka and Pakistan, both countries have witnessed domestic prices rise rapidly and the exchange value of their currencies drop steeply against the U.S. dollar.
- A rapid, unpredictable fall in the value of a currency can destroy confidence in said currency and affect economic activity as people may turn hesitant to accept the currency in exchange for goods and services. Foreigners may also be unwilling to invest in an

economy where the value of its currency gyrates in an unpredictable manner.

- In such a scenario, many countries are forced to seek help from the IMF to meet their external debt and other obligations, to purchase essential imports, and also to prop up the exchange value of their currencies.

How does the IMF help countries?

- The IMF basically lends money, often in the form of **special drawing rights (SDRs)**, to troubled economies that seek the lender's assistance.
 - SDR is a reserve created by the IMF. The member countries have to contribute to this account in proportion to their IMF quota.
 - SDRs simply represent a **basket of five currencies**, namely **the U.S. dollar, the euro, the Chinese yuan, the Japanese yen, and the British pound**.
 - Also called "**paper gold**", an SDR is **neither paper nor gold but an accounting entry**. It is a **potential claim on the freely usable currencies of IMF members**.
 - Holders of SDRs can obtain these currencies in exchange for their SDRs in two ways: first, through the arrangement of voluntary exchanges between members; and second, by the IMF designating members with strong external positions to purchase SDRs from

members with weak external positions.

- The IMF carries out its lending to troubled economies through a **number of lending programs** such as the **extended credit facility, the flexible credit line, the stand-by agreement, etc.**
- Countries receiving the bailout can **use the SDRs for various purposes** depending on their individual circumstances. Currently, both Sri Lanka and Pakistan are in urgent need for U.S. dollars to import essential items and also to pay their foreign debt. So any money that they receive from the IMF is likely to go towards addressing these urgent issues.

Are there any strings attached to an IMF bailout?

- It should be noted that the **IMF does not lend for specific projects**. Instead, the IMF provides financial support to countries hit by crises to create breathing room as they implement policies that restore economic stability and growth. It also provides **precautionary financing** to help prevent crises.
- The IMF usually **imposes conditions** on countries before it lends any money to them. For example, a country may have to agree to implement **certain structural reforms** as a condition to receive IMF loans.
- The IMF's conditional lending has been **controversial** as many believe that these reforms are **too tough on the public**. Some have also accused the IMF's lending decisions, which are taken by officials appointed by the governments of various countries, to be **influenced by international politics**.

- Supporters of the IMF's lending policies, however, have argued that conditions are essential for the success of IMF lending.

2) Money laundering laws will now cover cryptocurrency trade

What is Money laundering?

- Money laundering refers to a financial transaction scheme that aims to **conceal the identity, source, and destination of illicitly-obtained money**.
- According to the **United Nations Office on Drugs and Crime**, money laundering is a process which typically follows **three stages** to finally release laundered funds into the legal financial system.
- The 3 Stages of Money Laundering are:
 - **Placement** (i.e. moving the funds from direct association with the crime)
 - **Layering** (i.e. disguising the trail to foil pursuit)
 - **Integration** (i.e. making the money available to the criminal from what seem to be legitimate sources).

Prevention of Money-Laundering Act, 2002

- The Prevention of Money Laundering Act, 2002 was enacted to **fight against the criminal offence of legalizing the income/profits from an illegal source**.
- The Act **enables the Government or the public authority to confiscate the property earned from the illegally gained proceeds**.
- The PMLA seeks to combat money laundering in India and has three main objectives:
 - To prevent and control money laundering

- To confiscate and seize the property obtained from the laundered money; and
- To deal with any other issue connected with money laundering in India
- The **Prevention of Money Laundering (Amendment) Act 2012** enlarges the definition of offence of money laundering. The new definition includes activities like concealment, acquisition, possession and use of the proceeds of crime as criminal activities, also it has **removed the existing limit of Rs 5 lakhs fine under the Act.**

Why in News?

- The government has **imposed money laundering provisions on cryptocurrencies or virtual assets** as it looks to tighten oversight of digital assets.
 - Virtual digital assets are defined as any code or number or token generated through cryptographic means with the promise or representation of having inherent value.
- This means that **exchanges, custodians, wallet providers, among others in crypto-related trade will fall under the Prevention of Money Laundering Act, 2002.**
- After this, Indian crypto exchanges will have to report suspicious activity to the **Financial Intelligence Unit India (FIU-IND).**
- Extending India's money laundering rules to cryptocurrencies will give **authorities greater authority** in monitoring the transfer of these assets beyond the country's borders.

- The move is in line with the global trend of requiring digital-asset platforms to follow anti-money laundering standards similar to those followed by other regulated entities like banks or stock brokers.

About FIU-IND

- Financial Intelligence Unit – India was set by the Government of India in 2004 as the **central national agency responsible for receiving, processing, analyzing and disseminating information relating to suspect financial transactions.**
- FIU-IND is also responsible for coordinating and strengthening efforts of national and international intelligence, investigation and enforcement agencies in pursuing the global efforts against money laundering and financing of terrorism.
- FIU-IND is an independent body **reporting directly to the Economic Intelligence Council (EIC) headed by the Finance Minister.**

3) Financial Services Institutions Bureau

What is the Financial Services Institutions Bureau (FSIB)?

- The Financial Services Institutions Bureau has been constituted effective from **July 01, 2022**, as an **autonomous body of Government of India.**
- It replaced the Banks Board Bureau (BBB).
- FSIB's mandate is **recommending persons for appointment as whole-time directors and non-executive chairpersons on the Board of Public Sector Banks (PSBs), Public Sector Financial Institutions (FIs) and Public**

Sector Insurance Companies (PSIs) and recommend measures to improve Corporate Governance in these Institutions.

- FSIB is headed by a **chairman**, a **central government nominee**.
- Other functions of the Bureau are:-
 - To advise the Government on matters relating to **appointments, transfer or extension of term of office and termination of services** of the said directors;
 - To advise the Government on the **desired management structure** at the Board level for PSBs, FIs and PSIs;
 - To **build a databank** containing data related to the performance of PSBs, FIs and PSIs;
 - To advise the Government on **formulation and**

enforcement of a code of conduct and ethics for whole-time directors in PSBs, FIs and PSIs;

- To advise the Government on evolving **suitable training and development programmes** for management personnel in PSBs, FIs and PSIs;

Why in News?

- The Financial Services Institutions Bureau (FSIB) recommended names for the posts of managing directors of Bank of Baroda and Bank of India.
- The final decision on the FSIB recommendation would be taken by the **Appointments Committee of the Cabinet** headed by the **Prime Minister**.

Organisations

1) IREDA

About IREDA

- Indian Renewable Energy Development Agency Limited (IREDA) is a **Mini Ratna (Category - I)** Government of India Enterprise under the administrative control of **Ministry of New and Renewable Energy (MNRE)**.
 - *The CPSEs which have made profit in the last three years continuously, pre-tax profit is Rs.30 crores or more in at least one of the three years and have a positive net worth are eligible to be considered for grant of Miniratna Category-I status.*
- IREDA is a Public Limited Government Company established as a **Non-Banking Financial Institution** in **1987** engaged in promoting, developing and extending financial assistance for setting up projects relating to new and renewable sources of energy and energy efficiency/conservation with the motto: '**ENERGY FOR EVER**'.
- Its objective is to give **financial support** to specific projects and schemes for generating electricity and/or energy through new and renewable sources and conserving energy through energy efficiency.

Why in News?

- IREDA has completed 36 years of existence.

2) Animal Welfare Board of India

About AWBI

- The Animal Welfare Board of India (AWBI) is a **statutory advisory body** on Animal Welfare Laws and promotes animal welfare in the country.
- Established in **1962** under the **Prevention of Cruelty to Animals Act, 1960**, AWBI was started under the stewardship of **Rukmini Devi Arundale**, well known humanitarian.
- AWBI functions under the aegis of the **Ministry of Fisheries, Animal Husbandry and Dairying (MoFAH&D)**.
- The Board **advises** the Central Government, States and UTs' on the issues related to animal welfare. and best practices to prevent the unnecessary pain or suffering to animals.
- The AWBI recognizes animal welfare organizations (AWOs)/societies and provides **grants-in-aid** under various Central schemes.
- AWBI's mandate is to **prevent the infliction of unnecessary pain or suffering on animals**, in terms of the provision of the Prevention of Cruelty to Animals Act, 1960.
- The Board consists of **28 Members**. The term of office of Members is for a **period of 3 years**.

Why in News?

- The Punjab and Haryana high court has asked the Animal Welfare Board of India to furnish details of the fund received by it and utilization of the same in monitoring the infrastructure in their respective state for the welfare of animals.

Science and Technology

1) Generative AI

Context

- Generative AI is a **type of artificial intelligence that involves creating new, original content or data using machine learning algorithms**. It can be used to generate text, images, music, or other types of media. **ChatGPT, DALL-E 2, and Bing AI** are some of the popular examples of Generative AI tools.
- Generative AI works by training a model on a large dataset and then using that model to generate new, previously unseen content that is similar to the training data.
- This can be done through techniques such as **neural machine translation, image generation, and music generation**.
- Generative AI has the potential to **revolutionize many industries** by automating the creation of content and enabling the generation of new ideas and concepts.
- However, it also raises **ethical concerns** about the potential for biased or inaccurate content to be generated and disseminated.

Different ways Generative AI is used

- Generative AI can **craft sales, marketing, and brand messaging**. Agencies can generate personalised social media posts, blogs, and marketing text and video copies by providing a text prompt to a Generative AI service, like **ChatGPT**.
- **DALL-E**, a **generative image generation service**, can also generate original imagery to align with the branding. Many startups are exploring such services to create their **brand logo** and to

align the same with Generative AI text messaging.

- **GitHub, Copilot6 and ChatGPT1** can **generate code** and help with developer productivity.
- Furthermore, generative artificial intelligence can sift through numerous legal research materials and produce a **pertinent, specific, and actionable summary**. As a result, it can reduce the countless hours of human research and enable them to focus on more complex and exciting problems.
- In addition, ChatGPT can assist in **providing answers to complex queries and augment search algorithms** to generate responses to complex search queries. Generative AI can **accelerate the discovery of new research, drafting and synthesising documents and reports**.
- It can also **help health professionals with their medical diagnosis**. AI can generate potential and alternative treatments personalised to patients' symptoms and medical history.

Concerns around AI use

- Overall, generative AI has the potential to **enable efficiency and productivity** across multiple industries and applications at scale.
- However, if not designed and developed responsibly with appropriate safeguards, Generative AI can create harm and adversely impact society through **misuse, perpetuating biases, exclusion, and discrimination**.
- Therefore, we must add **rigour and responsibility** to developing

AI technology, **enforce ethical guidelines, conduct regular audits for fairness, identify and address biases, and protect privacy and security.**

- Several concerns surround the use of generative AI, including **bias and exclusion.** Generative AI systems can **perpetuate and amplify existing biases.** If the models are trained on biased, non-inclusive data, they will generate biased outputs, such as offensive or discriminatory language, demeaning and degrading imagery, and prejudicial content.
- For example, initially, generative imagery would show only images of white men for the prompt "CEO." Big tech has taken corrective actions to mitigate such bias issues and develop AI responsibly in the last few years.
- Generative AI systems can create content for **malicious purposes, such as deepfakes, disinformation, and propaganda.** It can also generate **offensive or inappropriate content.**
- Nefarious actors may use AI-generated media to **manipulate people and influence public opinion.** These systems can potentially **access sensitive information, raising concerns about data privacy and security.**
- It may also produce **low-quality and less accurate information,** specifically in the context of **complex engineering and medical diagnosis.**
- It can be **challenging to determine who is responsible for the content generated** by a generative AI system — the acquisition and consent model

around the training data and intellectual property issues make it difficult to hold anyone accountable for any harm resulting from its use.

Way Forward

- Overall, it is essential to carefully consider the potential harms, threats, and concerns of Generative AI systems and ensure that they are used responsibly and ethically.
- Therefore, we must add adequate policy, regulation, awareness, and education guardrails to develop and use Generative AI services ethically and responsibly.

2) DigiLocker

About DigiLocker

- DigiLocker is a flagship initiative of the **Ministry of Electronics & IT (MeitY)** under the **Digital India programme.**
- DigiLocker is a **secure cloud based platform for storage, sharing and verification of documents & certificates.**
- Linked to both **Aadhaar card and cellphone numbers,** DigiLocker **eliminates the use of physical documents** as part of the government's Digital India drive, since all data is stored in the cloud.
- One can **upload scanned copies** of their documents (PDF, JPEG or PNG format) and **access it anywhere** they want. One can also **e-sign** these uploaded documents, which works like **self-attestation of physical documents.**
- On the other hand, organisations like the CBSE, the Registrar Office or the Income Tax Department can also push electronic copies of documents and certificates directly into Citizens' e-lockers.
- The issued documents in DigiLocker system are **deemed to**

be at par with original physical documents as per the Information Technology (Preservation and Retention of Information by Intermediaries providing Digital Locker facilities) Rules, 2016.

- DigiLocker is available both on **websites and mobile apps**.

Benefits of DigiLocker

- Benefits to Citizens
 - Important Documents Anytime, Anywhere.
 - Authentic Documents, Legally at Par with Originals.
 - Digital Document Exchange with the consent of the citizen.
 - Faster service Delivery of Government Benefits, Employment, Financial Inclusion, Education, Health.
- Benefits to Agencies
 - **Reduced Administrative Overhead:** Aimed at the concept of paperless governance. It reduces the administrative overhead by minimizing the use of paper and curtailing the verification process.
 - **Digital Transformation:** Provides trusted issued documents. Issued Documents available via DigiLocker are fetched in real-time directly from the issuing agency.
 - **Secure Document Gateway:** Acts as a secure document exchange platform like payment gateway between trusted issuer and trusted Requester/Verifier with the consent of the citizen.
 - **Real Time Verification:** Provides a verification module enabling government agencies to

verify data directly from issuers after obtaining user consent.

Why in News?

- The Sports Authority of India has integrated Khelo India Games Certificates with DigiLocker, thus allowing Athletes, Support Staff, Technical Officers, etc. to access their Khelo India Certificates through the digital platform.
 - ***Khelo India***, which translates to 'Let's play India', was proposed by the Government of India in 2017 to **revive India's sporting culture by engaging with children at the grassroots level**. The initiative also focused on building better sporting infrastructure and academies across the country for various sports.
 - Under this movement, the Khelo India Youth Games (KIYG), the Khelo India University Games (KIUG) and the Khelo India Winter Games were set up as annual national sports competitions where youngsters, representing their states and universities, respectively, showcased their skills and competed for medals.

3) Why do so many waste-to-energy plants fail?

Context

- The Kerala government recently announced the State's first waste-to-energy project in Kozhikode. The planned facility is expected to be built in two years and generate about 6 MW of power.
- There are around 100 waste-to-energy projects around the

country but only a handful of them are operational due to various **production and operation challenges**.

- Waste-processing infrastructure is a good way to deal with the mountains of waste that Indian cities produce – but to succeed, such projects need the unwavering support of the municipality, its residents, and the State.

What do waste-to-energy projects do?

- Waste-to-energy projects use **non-recyclable dry waste to generate electricity**. The process **increases the State's power generation capacity** and **eases the solid waste management (SWM) burden**.
- Generally, **solid waste in India is 55-60% biodegradable organic waste, which can be converted into organic compost or biogas; 25-30% non-biodegradable dry waste; and around 15% silt, stones, and drain waste**.
- Of the **non-biodegradable dry waste, only 2-3% – including hard plastics, metals, and e-waste – is recyclable**. The remainder consists of low-grade plastic, rags, and cloth that can't be recycled.
- This **fraction of the non-recyclable dry waste is the most challenging portion of the present SWM system**; the presence of these materials also **reduces the efficiency of recycling other dry and wet waste**.
- Waste-to-energy plants **use this portion to generate power**. The waste is **combusted to generate heat, which is converted into electricity**.
- Waste-to-energy plants in major cities could also consume a

portion of the non-recyclable dry waste generated in urban local bodies (ULBs) nearby.

Why do waste-to-energy plants often fail?

- While waste-to-energy plants seem like a simple solution, they have **several challenges** en route to becoming feasible.
- First is the **low calorific value of solid waste in India due to improper segregation**. The **calorific value of mixed Indian waste is about 1,500 kcal/kg, which is not suitable for power generation**.
 - *For comparison, coal's calorific value is around 8,000 kcal/kg.*
- **Biodegradable waste has high moisture content and can't be used for power generation; it should be composted instead**.
- The **calorific value of segregated and dried non-recyclable dry waste is much higher, at 2,800-3,000 kcal/kg, sufficient to generate power**. However, **segregation** (ideally at the source, if not at the processing plant) **should be streamlined** to ensure the waste coming to the facility has this calorific value.
- Second is the **high costs of energy production**. The cost of generating power from waste is around **Rs 7-8/unit**, while the cost at which the States' electricity boards buy power from coal, hydroelectric, and solar power plants is around **Rs 3-4/unit**.
- Third, many waste-to-energy projects have failed because of **improper assessments, high expectations, improper characterisation studies, and other on-ground conditions**.

- **Pollution** coming from waste-to-energy plants is another issue and the poor quality of waste put into the plants is making them unviable.

How can plants overcome these challenges?

- Operating waste-to-energy projects depends on parameters like the **municipal collection efficiency, waste segregation, moisture content, and the operational efficiency** of existing biodegradable-waste-processing plants.
- Setting up waste-to-energy projects is complex and needs the **full support of the municipality, the State and the people**. To overcome its various challenges, the municipality must ensure that only non-biodegradable dry waste is sent to the plant and separately manage the other kinds of waste.
- It is also crucial to conduct **field studies** and learn from the experience of other projects.

4) Leprosy Eradication in India

About Leprosy

- Leprosy, also called **Hansen's disease**, is a **chronic infectious disease** caused by a type of **bacteria, Mycobacterium leprae**.
- The disease predominantly affects the **skin and peripheral nerves**. Left untreated, the disease may cause **progressive and permanent disabilities**.

Transmission

- The bacteria are transmitted via **droplets from the nose and mouth** during close and frequent contact with untreated cases.

Prevention

- Leprosy is **curable with multidrug therapy (MDT)** and treatment in the early stages can prevent disability.
- Apart from the **physical deformity**, persons affected by leprosy also face **stigmatization and discrimination**.

Why in News?

- The Union Health Ministry has devised a **strategic road map for achieving zero cases of leprosy by 2030**.
- Despite India being declared **"Leprosy Eliminated"** in **2005**, the **country still accounts for over half (52%) of the world's new leprosy patients**.
 - According to WHO, 'elimination' implies a prevalence rate of less than one case per 10,000 population; whereas 'eradication' means to reach zero level — a condition where no infection remains, and there is no possibility of further transmission.
- Health officials have noted that earlier gains made in the leprosy programme were reversed during **COVID-19** as a sudden decline in case detection numbers was noted.
- Early detection of the infection in the affected person can save them from physical disability.
- The Strategy focuses on **achieving zero indigenous cases** by accelerating case detection activities in high endemic districts and sustaining a strong surveillance system in low endemic districts.

Reports and Indices

1) India's rank slips further on Sustainable Development Goal target

About SDGs

- The **Sustainable Development Goals (SDGs)** are a universal call to action to end poverty, protect the planet and improve the lives and

prospects of everyone, everywhere.

- The **17 Goals** were **adopted by all UN Member States in 2015**, as part of the **2030 Agenda for Sustainable Development** which set out a 15-year plan to achieve the Goals.



- Through the pledge to **Leave No One Behind**, countries have committed to fast-track progress for those furthest behind first. That is why the SDGs are designed to bring the world to several life-changing 'zeros', including zero poverty, hunger, AIDS and discrimination against women and girls.
- Today, progress is being made in many places, but, overall, action to meet the Goals is not yet advancing at the speed or scale required.

Why in News?

- The **Centre for Science and Environment (CSE)** has released

its '**State of India's Environment 2023**' Report which looks at performance of countries on the 17 SDGs.

- Centre for Science and Environment is a not-for-profit public interest research and advocacy organisation based in New Delhi, India.*
- Published **annually**, the report examines several metrics such as the state of development, effects of climate change, health, decarbonisation, agriculture, biodiversity, and the energy sector.

Where is India standing on its SDGs?

- In the **past five years, India's overall global rank in meeting the SDGs has slipped by nine places.** In 2022, it stood at the **121st position**, behind Bhutan, Sri Lanka, Nepal and Bangladesh; Pakistan was lagging close behind at 125.
- The rollback has been attributed to **declining performance on 11 goals**, such as zero hunger (SDG 2), good health and well-being (SDG 3), gender equality (SDG 5) and sustainable communities (SDG 11).
- There has also been **stagnation in goals** pertaining to life below water (SDG 14), life on land (SDG 15), peace, justice and strong institutions (SDG 16).
- Goals on responsible consumption and production (SDG 12) and climate action (SDG 13) **are on track.**

How are the states faring?

- Individual states in India have also performed **below average.** States that usually fare well in these indices have also slipped in their performance.
- **Kerala**, which **ranked first**, has fallen behind on four goals; **Tamil Nadu and Himachal Pradesh**, which **share the second rank**, have slipped on four and six goals respectively.
- Meanwhile, the performance of most states has declined on goals regarding life on land and decent work and economic growth, industry, innovation and infrastructure, and good-quality education. **Life on land has seen the most decline.**

What are the other findings?

- The report also highlighted two main trends in 2022-2023: a **turn back to fossil fuels** and reversing

the gains made towards transitioning to clean energy due to the conflict between Ukraine and Russia, and the **impact of climate change with extreme weather events worldwide.**

2) Synthesis Report of IPCC

What's in the news?

- Highlighting the need for urgent climate action, the **Intergovernmental Panel on Climate Change (IPCC)** has released its **Synthesis Report for the Sixth Assessment Cycle.**
 - *IPCC is the United Nations body for assessing the science related to climate change.*
 - *It was created in 1988 by the **World Meteorological Organization (WMO)** and the **United Nations Environment Programme (UNEP).***
 - ***Aim:** To provide governments at all levels with scientific information that they can use to develop climate policies. It provides regular assessments of the scientific basis of Climate change, its impacts and future risks and options for adaptation and mitigation.*
- The IPCC is now in its sixth assessment cycle. The Fifth Assessment Report was completed in 2014.
- The Synthesis Report is the last of the Sixth Assessment reports and it is essentially a summary of the previous reports, which were released between 2018 and 2022.

What does the report say?

- The report highlights that the world is on track to **breach the 1.5°C global warming limit by the 2030s**, which would cause **irrevocable damage** to the

planet's ecosystem and severely impact humans and other living beings

- Despite the IPCC's warnings in 2018, the increase in greenhouse gas emissions continued so much so that the **global surface temperature has already warmed by 1.1°C over pre-industrial levels**, leading to **extreme and/or unpredictable weather events** that are risking human health, fortunes, and ecosystems.
- Such events have **made people much more susceptible to food insecurity, water shortages with vulnerable populations disproportionately facing the brunt of climate change.**

What is the way ahead?

- The report suggests **climate resilient development** that will not only mitigate the effects of climate change but also provide wider benefits.
- **Access to clean energy, improving air quality, boosting healthcare through technology, and delivering equity** are among the report's recommended goals to help adapt to climate change.
- The report also foregrounded the **role of financial investments** to achieve climate goals and encouraged **public funding** through central banks, government and financial regulators to reduce emissions, scale up climate resilience, and protect low-income and marginalised communities.

What are the implications for India?

- With a large vulnerable population, India needs to prioritise grants and policies that focusses on adapting to the effects of climate change.

- India's priority should be to **minimise loss and damage in terms of lives, livelihood and biodiversity, and accelerate equitable action mitigation and adaptation.**

3) Women, Business and the Law 2023 Report

What's in the news?

- The **World Bank** has released its **"Women, Business and the Law 2023" Report.**

About the Report

- The Report is the ninth in a series of annual studies **measuring the laws and regulations that affect women's economic opportunity in 190 economies.**
- The project presents **eight indicators structured around women's interactions with the law** as they move through their lives and careers: **Mobility, Workplace, Pay, Marriage, Parenthood, Entrepreneurship, Assets, and Pension.**
- By examining the economic decisions women make as they go through different stages of their working lives, as well as legal reforms in the areas measured, Women, Business and the Law makes a contribution to policy discussions about the state of women's economic opportunities.

Highlights of the Report

- The **global average score** on the Women, Business and the Law index rose just half a point to **77.1** from 2021 to 2022. It signifies that **globally, on average, women enjoy only 77 percent of the legal rights that men do.**
- Of the 190 economies covered in the Index, **only 14 scored a perfect 100:** Belgium, Canada, Denmark, France, Germany, Greece, Iceland, Ireland, Latvia,

Luxemburg, The Netherlands, Portugal, Spain and Sweden.

- A score of 100 on the Index means that women are on an equal standing with men on all the eight indicators being measured.
- In 2022, the **global pace of reforms toward equal treatment of women under the**

law has slumped to a 20-year low.

- This **“reform fatigue”** is a potential impediment to economic growth and resilience at a critical time for the global economy.
- At the current pace of reform, it would take **at least 50 years to approach legal gender equality everywhere.**

MAP 1 | THE GLOBAL AVERAGE WOMEN, BUSINESS AND THE LAW SCORE IS 77.1



India's Performance

- The laws affecting the Indian working woman's pay and pension do not provide for equality with Indian men, dragging India's score to **74.4 out of a possible 100.**
- India scored **higher than the 63.7 average for the South Asian region**, though lower than **Nepal** which had the region's highest score of 80.6.
- For India, the Index used data on laws applicable in **Mumbai**, viewed as the country's main business city.
- When it comes to **constraints on freedom of movement, laws affecting women's decisions to work, and constraints related to marriage**, India gets a **perfect score.**
- However, India **lags behind** when it comes to **laws affecting women's pay, pension and work after having children, constraints on women starting and running a business, gender differences in property and inheritance.**

Polity

1) New Committee to appoint of CEC & ECs

About ECI

- The Election Commission of India is an **autonomous constitutional authority** responsible for administering Union and State election processes in India. The body administers elections to the **Lok Sabha, Rajya Sabha, State Legislative Assemblies in India, and the offices of the President and Vice President** in the country.
- The **President** appoints Chief Election Commissioner and Election Commissioners. They have tenure of **six years**, or up to the age of **65 years**, whichever is earlier.
- They enjoy the same status and receive salary and perks as available to Judges of the **Supreme Court of India**.
- All Election Commissioners have **equal say in the decision making of the Commission**. If the Chief Election Commissioner and other Election Commissioners differ in opinion on any matter, such matter shall be decided according to the **opinion of the majority**.

Powers and responsibilities

- The Commission's functions and powers with respect to elections are divided into **three categories (Administrative, Advisory, and Quasi-judicial)**. In detail, these powers include
 - **Determining** the Electoral Constituencies' territorial areas throughout the country;
 - Preparing and periodically revising **electoral rolls** and **registering all eligible voters**;
 - **Notifying** the schedules and dates of elections and

scrutinising nomination papers;

- Granting recognition to the various political parties and allocating them election symbols;
- The Commission also has **advisory jurisdiction** in the matter of post-election disqualification of sitting members of Parliament and State Legislatures;
- It issues the **Model Code of Conduct** in elections for political parties and candidates so that no one indulges in unfair practice or there is no arbitrary abuse of powers by those in power.

Removal

- **Article 324** mentions the provisions to safeguard and ensure the independent and impartial functioning of the Election Commission. The **chief election commissioner** is provided with **security of tenure**.
- He cannot be removed from his office except in the same manner and on the **same grounds as a judge of the Supreme Court**.
- However, the **same constitutional provision is silent** about the procedure for removal of the two Election Commissioners. It only provides that they cannot be removed from office **except on the recommendation of the CEC**.

Why in News?

- In a landmark judgment, a Constitution Bench of the Supreme Court has directed that **Chief Election Commissioner and Election Commissioners will be appointed by the President on the advice**

tendered by a committee of Prime Minister, Leader of Opposition (LoP) in the Lok Sabha or the leader of the single largest party in opposition and the Chief Justice of India (CJI).

- The court said the high-powered committee would continue to advise the President on the appointment **until the Parliament enacts a law** on the appointment process of Election Commissioners.
- **Article 324** of the Constitution asks the parliament to make laws for the appointment of CEC. However, **till the date it has not been constituted.**
- Chief Election Commissioners and Election Commissioners have **so far been appointed by the President on the advise of the Prime Minister.**
- The judgment has now brought the appointment process of Chief Election Commissioners and Election Commissioners **on par with that of the CBI Director.**
- The verdict came on petitions seeking a Collegium-like 'independent' mechanism to appoint the CEC and ECs.

2) Fugitive Economic Offenders

Fugitive Economic Offenders Act, 2018

- According to the Act, a **fugitive economic offender** is an individual who has **committed specified economic offences** involving an amount of **Rs 100 crore or more** and has **absconded from India or refused to come back to India to avoid criminal prosecution.**
 - Economic offences relate to fraud, counterfeiting, money-laundering, and tax evasion, among others.

- The Act is basically aimed at acting as a deterrent for those who commit economic offences and flee, thereby, defying the Rule of Law in India and evading jurisdiction of the Indian justice system.
- Under the Act, upon declaration as FEO, the **properties and assets may be confiscated and vested by the Centre.** This includes not just the properties directly owned by the FEO and affiliated organisations but also any and all **benami properties owned by the offender.**
- Courts and tribunals across the country have the power to **disentitle anyone declared as a FEO from filing or defending any civil case** – even if that case has nothing to do with their alleged economic offence.

Why in News?

- India has called upon G20 countries to **adopt multilateral action for faster extradition of fugitive economic offenders and recovery of assets** both on domestic front as well as from abroad.
- Economic offences have been a problem faced by many, especially when the offenders flee from the jurisdiction of the country.
- India has put in place specialised legislation in this regard, in the form of Fugitive Economic Offenders Act, 2018.

3) CAMPA

Background

- Many development and industrial projects such as erection of dams, mining, and construction of industries or roads require **diversion of forest land.**
- In such cases, the **Forest (Conservation) Act of 1980** requires that non-forest land,

equal to the size of the forest being diverted, is **afforested**.

- Any project proponent, government or private, must apply for **forest clearance from the Ministry of Environment, Forest and Climate Change (MoEFCC)** before the conversion of land takes place. If clearance is given, then **compensation for the lost forest land** is to be decided by the ministry and the regulators.
- In 2001, the **Supreme Court** had observed that collected funds for afforestation were under-utilised by the states and ordered for establishment of **Compensatory Afforestation Fund and Compensatory Afforestation Fund Management and Planning Authority (CAMPA)**.

Compensatory Afforestation Fund Act, 2016

- The Compensatory Afforestation Fund Act, 2016 establishes the **National Compensatory Afforestation Fund** under the **Public Account of India**, and a **State Compensatory Afforestation Fund** under the **Public Account of each state**.
- These Funds will receive payments for:
 - compensatory afforestation,
 - net present value of forest (NPV), and
 - other project specific payments.
- The **National Fund receives 10% of these funds**, and the **State Funds receive the remaining 90%**.
- These funds are primarily spent on **afforestation to compensate for**

loss of forest cover, regeneration of forest ecosystem, wildlife protection and infrastructure development.

- The Act also established the **National and State Compensatory Afforestation Fund Management and Planning Authorities** to manage the National and State Funds.

What is Net Present Value of Forest?

- Since afforested land does not become a forest overnight, there is still a loss of the goods and services that the diverted forest would have provided in the interim period. These goods and services include timber, bamboo, fuelwood, carbon sequestration, soil conservation, water recharge, and seed dispersal. Afforested land is expected to take no less than 50 years to start delivering comparable goods and services.
- Thus, **"Net Present Value (NPV)"** means the **quantification of the environmental services provided for the forest area diverted for non-forestry uses**, as may be determined by an expert committee appointed by the Central Government from time to time in this regard.

Why in News?

- The Ministry of Environment, Forest and Climate Change has released details of transfer of share of State CAMPA fund to various States and Union Territories (UTs) during the last three years.

International Relations

1) India and Australia reach Critical Minerals Investment Partnership

What's in the news?

- India and Australia have reached a major milestone in working towards **investment in critical minerals projects to develop supply chains between the two countries**. The Partnership has **identified five target projects (two lithium and three cobalt)**.
- Under the agreement, India's **Khanij Bidesh India Ltd (KABIL)** will make a significant investment in Australia's critical minerals to build new supply chains that will help India's plans to lower emissions from its electricity network and become a global manufacturing hub.
- **Australia produces almost half of the world's lithium, is the second-largest producer of cobalt and the fourth-largest producer of rare earths.**
- With the expected increase in global demand for low-emissions technologies over the next three decades, this partnership will go a long way towards securing mutually beneficial critical mineral supply chains.

About KABIL

- Khanij Bidesh India Ltd. is a **joint venture company of three Central Public Sector Enterprises** under **Ministry of Mines** namely, National Aluminium Company Ltd. (NALCO), Hindustan Copper Ltd. (HCL) and Mineral Exploration and Consultancy Ltd.
- The company was set up in **2019** with an objective to **identify and acquire overseas mineral assets of critical and strategic nature**.

- The strategic and other minerals are intended to be supplied primarily to India to meet the domestic requirement due to its none or meager availability in the country and giving a big push to Make in India.
- The Company is **focusing on two prime critical and strategic mineral i.e. Lithium and Cobalt** in the present context of the Indian economy and linking it with creation of supply chain ecosystem in the country.

2) High Seas Treaty

Context

- The UN member states have agreed on a historic treaty for **protecting the high seas that cover nearly two-thirds of the global ocean**.
- The agreement on High Seas was reached at UN headquarters in New York. It has been under discussion since 2004.
- The treaty is **yet to be formally adopted as members are yet to ratify it**.

What are the high seas?

- **Parts of the sea that are not included in the territorial waters or the internal waters of a country are known as the high seas**, according to the **1958 Geneva Convention on the High Seas**.
- It is the area **beyond a country's Exclusive Economic Zone which extends up to 200 nautical miles from the coastline and till where a nation has jurisdiction over living and non-living resources**.
- **No country is responsible for the management and**

protection of resources on the high seas.

How important are the high seas?

- The high seas account for **more than 60% of the world's ocean area** and cover about **half of the Earth's surface**, which makes them a **hub of marine life**.
- They are home to around 2.7 lakh known species, many of which are yet to be discovered. The high seas are **fundamental to human survival and well-being**.
- The high seas **regulate the climate** by playing a fundamental role in planetary stability by mitigating the effects of climate change through its **absorption of carbon and by storing solar radiation and distributing heat around the globe**.
- In addition, the ocean provides a **wealth of resources and services**, including seafood and raw materials, genetic and medicinal resources, air purification, climate regulation, and aesthetic, scientific and cultural services.
- However, these oceans **absorb heat** from the atmosphere, are affected by phenomena like the **El Nino**, and are also undergoing **acidification** — all of which endanger marine flora and fauna.
- Several thousand marine species are at a **risk of extinction by 2100** if current warming and acidification trends continue.
- **Anthropogenic pressures** on the high seas include seabed mining, noise pollution, chemical spills and fires, disposal of untreated waste (including antibiotics), overfishing, introduction of invasive species, and coastal pollution.
- Despite the alarming situation, the **high seas remain as one of**

the least-protected areas, with only about 1% of it under protection.

UNCLOS

- The last international agreement on ocean protection was signed 40 years ago in 1982 - the **UN Convention on the Law of the Sea (UNCLOS)**.
- But, under UNCLOS, there was **no comprehensive legal framework that covered the high seas**.

What is the treaty?

- The treaty aims to safeguard marine life by **designating 30% of the world's oceanic expanse as protected areas**. The treaty will provide a **legal framework** for establishing vast **Marine Protected Areas (MPAs)** to protect against the loss of wildlife and share out the genetic resources of the high seas.
- It will establish a **Conference of Parties (CoP)** that will meet periodically and enable member states to be held to account on issues such as governance and biodiversity.
- The historic treaty is crucial for enforcing the **30x30 pledge** made by countries at the **UN biodiversity conference** in December (*Refer Pulse December 2022 at a glance edition*), to protect a third of the sea (and land) by 2030.
- Without a treaty, this target would certainly fail, as until now no legal mechanism existed to set up MPAs on the high seas.

Key Features of the Treaty

Access and Benefit-sharing:

- The treaty has agreed to setup an **access- and benefit-sharing committee** to frame guidelines on access to benefits reaped from the

commercialisation of resources (especially genetic resources).

Usage of Marine genetic resources:

- Activities concerning marine genetic resources of areas on high seas should be in the **interests of all States and for the benefit of humanity**.
- They have to be carried out **exclusively for peaceful purposes**.

Environmental Impact Assessments:

- Signatories will have to conduct **environmental impact assessments before the exploitation of marine resources**.

Funding:

- A **special fund** will be established which will be fixed by the conference of parties, which will be formed as part of the pact.
- The **conference of parties will also oversee the functioning of the treaty**.

When will the treaty take effect?

- Though this agreement is still in the **draft stage**, when it is **ratified by countries** (requiring them to also pass it in their own Parliaments), it will become **legally binding**.
- It will only enter into force once **60 countries** have signed up and legally passed the legislation in their own countries.

3) US Senate resolution on McMahon Line

What's in the news?

- Two United States Senators have introduced a resolution in the upper chamber of Congress reiterating that **the US recognises the McMahon Line as the international boundary between China and India in Arunachal Pradesh**.

- The resolution reaffirms India's well-known and established position that Arunachal Pradesh, which China calls '**South Tibet**', is an **integral part of India**.
- The resolution indicates a clear hardening of America's stand against China and also possibly America's willingness to insert itself into border disputes between India and China and increase India-US military cooperation.



What is the McMahon Line?

- The McMahon Line serves as the **de facto boundary between China and India in the Eastern Sector**.
- It was established by **Sir Henry McMahon**, then Foreign Secretary in the Government of British India, and is known as the McMahon Line after him. It is **890 kilometres long**.
- It specifically represents the **boundary between Arunachal Pradesh and Tibet, from Bhutan in the west to Myanmar in the east**.
- The McMahon line was the result of the **1914 Shimla Treaty between India and Tibet**. But, **China does not accept this agreement or line**.
- **China has historically disputed the boundary and claims the state of Arunachal Pradesh as part of the Tibetan Autonomous Region (TAR)**.

What is the Shimla Treaty?

- The **1914 Simla Convention** (attended by the representatives of British India, Tibet and Republic of China) **recognized the McMahon Line as the boundary between Tibet** (an independent region at the time) and **British India**.
- However, the Chinese representative repudiated the conference due to differences over the text and to this day, **China considers it illegal**.
- The British believed Tawang in Arunachal Pradesh and the southern part of Tibet to be part of India, which the Tibetans consented to. As a result, Arunachal Pradesh's Tawang region became a part of India.

Why Doesn't China Accept the McMahon Line?

- According to China, Tibet has always been a part of its territory, hence the representatives of Tibet are not entitled to approve any deal without Chinese authorization. **China entirely captured Tibet in 1950**. The McMahon Line is **no longer approved or accepted by China**.
- However, India says that because Tibet was an autonomous country when the McMahon Line was created in 1914, it has every right to negotiate a border deal with any country.

Current Stance

- The McMahon Line is recognised by India and is considered the '**Actual Line of Control (LAC)**' between India and China, however **China does not accept the McMahon Line**.
- China believes the disputed territory is 2,000 kilometres long, while India asserts it is 4,000 kilometres long.

- The Chinese however claim that Chinese territory extends southerly to the foothills of the Himalayas. This border dispute with independent India sparked the **Sino-Indian war of October-November 1962**.

4) Raisina Dialogue About the Dialogue

- The Raisina Dialogue is **India's flagship conference on geopolitics and geoeconomics**, held annually since **2016**.
- The conference is hosted by the **Observer Research Foundation (ORF)** in collaboration with the **Ministry of External Affairs**.
 - *ORF is an independent global think tank based in Delhi.*
- It is a multilateral conference committed to addressing the most challenging issues facing the global community. Every year, global leaders in policy, business, media and civil society are hosted in **New Delhi** to discuss cooperation on a wide range of pertinent international policy matters.
- The Dialogue is structured as a **multi-stakeholder, cross-sectoral discussion**, involving heads of state, cabinet ministers and local government officials, as well as major private sector executives, members of the media and academics.
- The Raisina Dialogue has grown in stature and profile to emerge as a **leading global conference on international affairs**. It attracts leading minds from the global strategic and policy-making community to discuss broader foreign policy and strategic issues facing the world.

Why in News?

- The 8th Edition of the Raisina Dialogue was recently held in New Delhi.
- The theme of the 2023 Edition of Dialogue is **“Provocation,**

**Uncertainty, Turbulence:
Lighthouse in the Tempest?”.**

Art & Culture

1) Ayya Vaikunda Swamikal

About

- Vaikunda Swami (1809–1851), one of the earliest crusaders for social justice in south India was born at **Sasthan Koil Vilai**, the present **Samithoppu**, a village near **Kanyakumari**. In his boyhood, he was known as **Muthukutty**.
- He preached the **ideas of equality and advocated the rights of depressed class people** in the face of stiff opposition from upper castes as well as the **princely state of Travancore**.
- Vaikunda Swamikal **criticised the rule of the British and the rule of Rajah of Travancore** as the **rule of White devils and Black devils** respectively.

- Vaikunda Swamikal founded **Samathuva Samajam** to unite all the people of various castes. He organized **inter-dining** to accomplish it.
- His followers called him respectfully as **Ayya** (father). His cult was also known as **Ayya Vazhi** (The Path of Ayya).
- His message emancipated the people from the unjust social customs and superstitious beliefs. His ideas are collected into a text called **Akila Thirattu**.

Why in News?

- Prime Minister of India paid tributes to Ayya Vaikunda Swamikal on his birth anniversary.

Defence

1) iDEX

About iDEX

- Innovations for Defence Excellence (iDEX) framework was launched in 2018 by the Government with the aim to **foster innovation and technology development in Defence and Aerospace Sector** by engaging Industries including MSMEs, start-ups, individual innovators, R&D institutes and academia to **promote self-reliance**.
- The underlying objective is to **make the country self-reliant and self-sufficient in matters of Defence**.
- Fundamentally, iDEX fosters the **culture of technology co-creation and co-innovation** within the Defence and Aerospace sectors.

Implementing Agency

- **Defence Innovation Organization (DIO)**, a **special purpose vehicle** under the aegis of the **Department of Defence Production, Ministry of Defence**, implements the iDEX framework.
- DIO has been formed as a '**not for profit**' company as per Section 8 of the Companies Act 2013 by Hindustan Aeronautics Limited (HAL) and Bharat Electronics Limited (BEL), both Defence Public Sector Undertakings.
- DIO acts as a bridge between the requirements of the Armed Forces and the solution providers.

Why in News?

- More than 100 iDEX start-ups have been provided grants/funds under the iDEX framework since 2018.

2) India remains world's largest importer of arms

What's in the news?

- According to a recent report of the Swedish think tank Stockholm International Peace Research Institute (SIPRI), **India** remains as the **world's largest arms importer**.
 - *SIPRI is an independent international institute dedicated to research into conflict, armaments, arms control and disarmament.*
 - *Established in 1966, SIPRI provides data, analysis and recommendations, based on open sources, to policymakers, researchers, media and the interested public.*

Highlights of the Report

- **India** remained the **world's largest arms importer** for the five-year period between 2018 and 2022 even though its **arms imports dropped by 11%** between 2013-2017 and 2018-2022.
- The decrease can be attributed to several factors including India's slow and complex arms procurement process, efforts to diversify its arms suppliers, and attempts to replace imports with major arms that are designed and produced domestically.
- **Russia was the largest supplier of arms to India** from 2013 to 2022, but its **share of total imports fell** from 64% to **45%** while **France is the second largest supplier**.
- Among the top 10 arms exporters for the period 2018 to 2022, **India was the biggest arms export market to three countries** —

Russia, France and Israel — and the second largest export market to South Korea.

- For the same period, **India remained the largest arms importer followed by Saudi Arabia.** Russia accounted for 45% of India's imports followed by France (29%) and the U.S. (11%).
- Also, **India was the third largest arms supplier to Myanmar** after Russia and China accounting for 14% of its imports.
- **India's tensions with Pakistan and China** largely drive its demand for arms imports. With an 11% share of total global arms imports, **India was the world's biggest importer of major arms in 2018 to 2022, a position it has held for the period 1993 to 2022.**

3) IFC-IOR

About

- The **Information Fusion Centre – Indian Ocean Region (IFC-IOR)** was inaugurated in 2018 within the premises of the **Indian Navy's Information Management and Analysis Centre (IMAC)** in Gurugram, Haryana.
 - *The IMAC is the single-point centre linking all the coastal radar chains to generate a seamless real-time picture of the nearly 7,500-km coastline and several Indian Ocean littoral states have joined the coastal radar chain network. It was operationalized in 2014.*
- IFC-IOR aims at **strengthening maritime security in the region and beyond**, by building a common coherent maritime

situation picture and acting as a maritime security information sharing hub for the region.

- Since its inception, the Centre has established working level linkages with more than 50 nations and multinational/maritime security centres.
- To enable better correlation, compressed information cycles and timely inputs, the Centre also **hosts International Liaison Officers (ILOs) from partner nations.**
- To further the national vision of **"Security and Growth of All in the Region (SAGAR)"** the Centre the **Maritime Information Sharing Workshop (MISW)**, a flagship workshop which is attended by delegates from a number of countries.

Why in News?

- Expanding the network of information sharing to further the existing cooperation in maritime safety and security, the IFC-IOR has signed an **Memorandum of Understanding (MoU) with the Regional Coordination Operations Centre (RCOC), Seychelles.**
- The MoU aims to promote collaboration between the two centres towards enhancing maritime domain awareness, information sharing and expertise development.
- It will allow the centres to develop a **common maritime understanding to counter non-traditional maritime security threats** such as piracy and armed robbery, human and contraband trafficking, Illegal Unregulated and Unreported (IUU) fishing, arms smuggling, poaching, terrorism – with a special focus on the Western Indian Ocean.