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# Current Affairs (CONSOLIDATION)

**JUNE 2022**  
**(PART – II)**

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# Polity and Governance

## Highlights

- Impact of Internet Shutdowns
- Performance Grading Index for Districts (PGI-D)
- Pradhan Mantri Awas Yojana-Urban
- Amrit Sarovar Mission
- Bharat Gaurav Scheme
- ODOP: Handicraft Sector
- Bharat NCAP
- National Initiative for Promotion of Upskilling of Nirman workers (NIPUN)
- Aspirational District Programme
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- NITI Aayog
- Increase in NREGS demand
- Digital News Report 2022

## Impact of Internet Shutdowns

### Why in News?

Recently, a report published by the **Office of the United Nations High Commissioner for Human Rights (OHCHR)** named **Internet shutdowns: Trends, causes, legal implications and impacts on a range of human rights**, stated that shutting down the internet affects people's safety & well-being, hampers information flow and harms the economy.

### What is an Internet Shutdown?

#### ➤ About:

- Internet shutdowns are **measures taken by a government or by any entity on behalf of a government, to intentionally disrupt access to and the use of information and communications systems online.**
- Shutdowns often include complete blocks of Internet connectivity or accessibility of the affected services. However, **governments increasingly resort to throttling bandwidth or limiting mobile service to 2G**, which, while nominally maintaining access, renders it extremely difficult to make meaningful use of the Internet.
- Governments across the world have resorted to shutting down the internet citing a range of reasons.

- Further makes it difficult to share and watch videos, live broadcasts, and other journalistic work, often ordered during civil society movements, security measures as well as electoral proceedings, and severely restricts human rights monitoring and reporting.

#### ➤ Related International Frameworks:

- Internet shutdowns deeply affect many human rights, they most immediately affect freedom of expression and access to information – one of the foundations of free and democratic societies and an indispensable condition for the full development of the person.
- It is a touchstone for all other rights guaranteed in the International Covenant on Civil and Political Rights and other **human rights** instruments (i.e. **Universal Declaration of Human Rights**).
- The **Sustainable Development Goals** reinforce States' human rights obligations to work towards universally available and accessible Internet, free from unjustified restrictions.
- Founded to facilitate international connectivity in communications networks, the **International Telecommunication Union (ITU)** works on the adoption of standards that ensure that networks and technologies interconnect, and strives to improve access to the Internet.

Note:



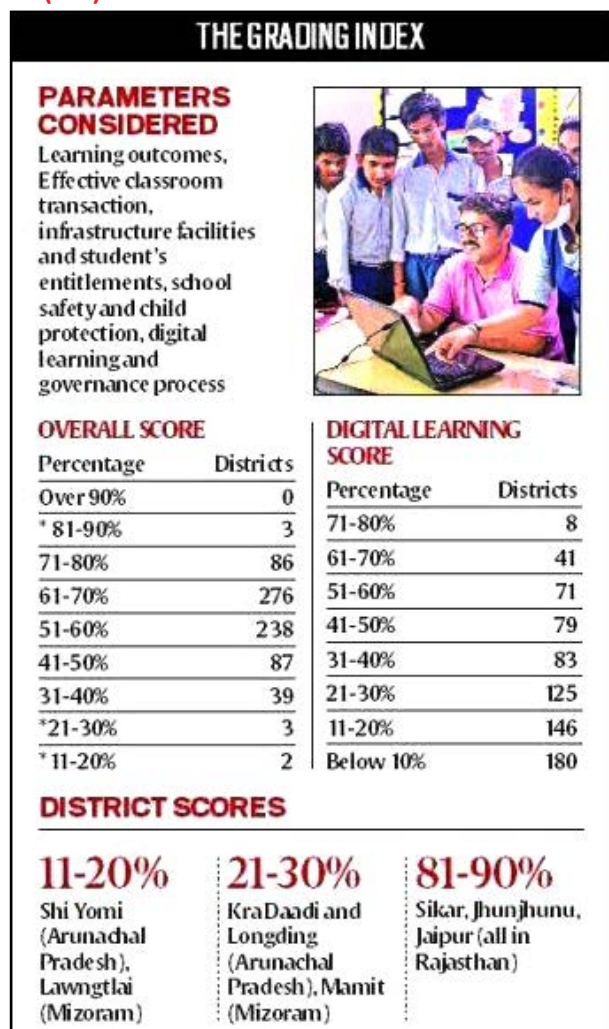
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## Performance Grading Index for Districts (PGI-D)

### Why in News?

Recently, the Department of School Education and Literacy (DoSE&L), Ministry of Education (MoE) released the **Centre's first-ever Performance Grading Index for Districts (PGI-D)** for 2018-19 and 2019-20.

- In June, 2021, the Union Education Minister has approved the release of **Performance Grading Index (PGI) 2019-20 for States and Union Territories**.



### What is the Index All About?

- **About:**
  - PGI-D assesses the performance of the school education system at the **district level by creating an index for comprehensive analysis**.

- The PGI-D assessed district-level performance in school education based on the data collected from various sources, including **Unified District Information System for Education Plus (UDISE +), National Achievement Survey (NAS), 2017** and data provided by respective districts.

### ➤ Methodology:

- **Structure:** The PGI-D structure **comprises a total weightage of 600 points across 83 indicators**, which are grouped under **six categories**:
  - Outcomes, Effective Classroom Transaction, Infrastructure Facilities & Student's Entitlements, School Safety & Child Protection, Digital Learning and Governance Process.
    - Two categories — digital learning and effective classroom transaction have been **added in the backdrop of the Covid-19 pandemic**. However, these categories were not part of the state-level PGI.
  - These **categories are further divided into 12 domains**.
- **Assessment Grades:** The PGI-D grades the districts into 10 grades. **The highest achievable grade is 'Daksh'**, which is for districts scoring more than 90% of the total points in that category or overall.
  - It is followed by **'Utkarsh'** (81% to 90%), **'Ati Uttam'** (71% to 80%), **'Uttam'** (61% to 70%), **'Prachesta-1'** (51% to 60%) and **'Prachesta-2'** (41% to 50%).
  - The lowest grade in PGI-D is **'Akanshi-3'** which is for scores upto 10% of the total points.
    - None of the districts figured in the highest 'Daksh' grade in both these years.

### ➤ Significance:

- The indicator-wise PGI score **shows the areas where a district needs to improve**. The PGI-D will reflect the relative performance of all the districts in a uniform scale which **encourages them to perform better**.
- At the same time, it will also **act as a good source of information for best practices followed by States and UTs** which can be shared.
- It **helps all the stakeholders in the school education system**, including the students, parents, teachers, and administrators to know the performance of their district vis-à-vis other districts.

Note:

### What are the Key Highlights of the Report?

- **Best Performers:**
  - Three districts from Rajasthan performed the best in the assessment.
    - According to the report, the **three districts — Sikar, Jhunjhunu, and Jaipur** figured in 'Utkarsh' grade in 2019-20 in contrast to a year before when no district featured in that category.
  - Rajasthan has the highest 24 districts in this grade, **followed by Punjab (14), Gujarat (13), and Kerala (13).**
- **Lowest Performers:**
  - The **districts with the lowest scores** (1 out of 50) **in this category were:**
    - South Salmara-Mankachar (Assam), Alirajpur (Madhya Pradesh), North Garo Hills and South Garo Hills in Meghalaya, and Khowai (Tripura) in 2019-20.
  - The 12 states/ UTs which **don't have a single district in the Ati-Uttam and Uttam are:**
    - Bihar, Goa, Jammu and Kashmir, Arunachal Pradesh, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim, Tripura and Uttarakhand.
- **Progress:**
  - As per the report, **the number of districts in all categories has increased.**
    - In the '**Ati Uttam**' grade, the number of districts increased from 49 to 86 during 2018-19 to 2019-20 showing "**remarkable improvements**".
    - 33 districts improved their score in outcomes, but there is **no grade-level improvement.**
      - The outcomes category includes **learning outcomes of students, teachers' availability and professional outcomes.**
    - **Digital Learning Category:** As compared to 2018-19, **20 districts have shown over 20% improvement** while 43 districts bettered their score by **over 10%** during 2019-20.
    - **Infrastructural Facilities:** 478 districts improved their score in 2019-20 as compared to 2018-19.
      - Out of these 478, 37 districts made an improvement of over **20% improvement in score** and **115 districts** made an improvement of over **10% implying grade-level improvement.**

### What are the Other Government Initiatives in this Direction?

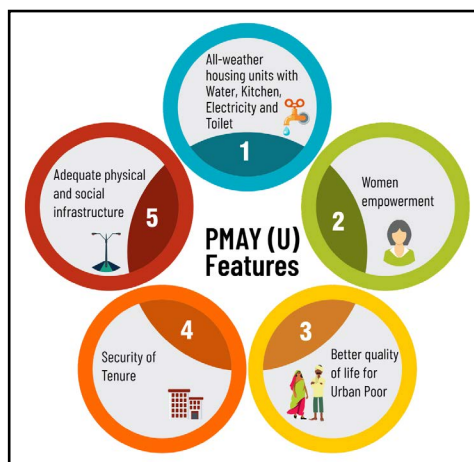
- **National Education Policy, 2020:** It aims at making "India a global knowledge superpower" by introducing several changes from the school to college level in the Indian education system.
- **Samagra Shiksha:** It is an integrated scheme for school education extending from pre-school to class XII to ensure inclusive and equitable quality education at all levels of school education.
- **Mid Day Meal Scheme:** It provides that every child within the **age group of six to fourteen years studying in classes I to VIII** who enrolls and attends the school, shall be provided hot cooked nutritional meals, free of charge every day except on school holidays.
- **Eklavya Model School and Rajiv Gandhi National Fellowship Scheme (RGNF):** These aim to **encourage the students belonging to Scheduled Tribes (ST)** community to pursue higher education.

## Pradhan Mantri Awas Yojana-Urban

### Why in News?

Recently, **Pradhan Mantri Awas Yojana (PMAY)-Urban** has completed **seven years** of successful implementation.

- With a total investment of Rs 8.31 Lakh Crore, PMAY-U has **so far sanctioned 122.69 lakh houses**, out of which more than 1 crore houses have been grounded and over 61 lakh houses have been completed and delivered to the beneficiaries.



Note:



### What is Pradhan Mantri Awas Yojana-Urban?

#### ➤ About:

- Pradhan Mantri Awas Yojana (PMAY) falls under the Government's mission - **Housing for All by 2022** for urban housing being implemented by the Ministry of Housing and Urban Affairs (MoHUA).
- It makes **home loans affordable for the urban poor by providing a subsidy on the Interest Rate of a home loan** during repayment by way of EMI (Equated Monthly Installments).

#### ➤ Beneficiaries:

- The **Mission addresses urban housing shortage** among the EWS/LIG and MIG categories **including the slum dwellers**.
  - **Economically Weaker Section (EWS)** - with a maximum annual family income of Rs. 3,00,00.
  - **Low Income Group (LIG)** - with maximum annual family income of Rs. 6,00,000) and
  - **Middle Income Groups (MIG I & II)** - with a maximum annual family income of Rs. 18,00,000)
  - A **beneficiary family** will comprise **husband, wife, unmarried sons and/or unmarried daughters**.

#### ➤ Four Verticals of PMAY-U:

- **In Situ Slum Redevelopment (ISSR)** :
  - This vertical will be implemented with the concept "**Land as a resource**" with private sector participation for providing houses to eligible slum dwellers.
    - **Slum:** It is a compact area of at least 300 people or about 60 - 70 households of poorly built congested tenements in an unhygienic environment usually with inadequate infrastructure and lacking in proper sanitary and drinking water facilities
- **Affordable Housing through Credit Linked Subsidy (CLSS):**
  - Beneficiaries of **EWS, LIG, MIG (I & II)** seeking housing loans from Banks, Housing Finance Companies and other such institutions for acquiring, new construction or enhancement of houses are **eligible for an interest subsidy of:**
    - 6.5% on loan amount up to Rs. 6 Lakh
    - 4% on loan amount up to Rs. 9 Lakh
    - 3% on loan amount up to Rs. 12 Lakh

#### ○ Affordable Housing Through Partnership (AHP):

- An affordable housing project can be a mix of houses for different categories but it will be **eligible for Central Assistance, if at least 35% of the houses in the project are in the EWS category**.

#### ○ Beneficiary-led individual house construction (BLC):

- **Central Assistance up to Rs. 1.5 lakh** per EWS house is **provided to eligible families** belonging to EWS categories for individual house construction/enhancement.

#### ➤ Demand-driven Approach:

- PMAY-U adopts a **demand-driven approach** strengthening the ethos of cooperative federalism, housing shortage is decided based on demand assessment by States/Union Territories (UTs).
- The Mission is **implemented as a Centrally Sponsored Scheme (CSS)** except the CLSS vertical of the PMAY-U which is being implemented as a Central Sector Scheme.
  - **Central Sector Schemes** are **100% funded by the Union government** and implemented by the Central Government machinery.
  - **Centrally Sponsored Scheme (CSS)** a certain percentage of the funding is borne by the States and the implementation is by the State Governments.

#### ➤ Geotagging:

- Geotagging is a process of adding geographical identification to various media like photography.
- Under the PMAY-U guidelines, it is **mandatory for the state government to ensure that all houses built under the scheme are geotagged to the Bhuvan HFA (housing for all) application**.
  - **Bhuvan** is an Indian Geo Platform developed by the **Indian Space Research Organisation (ISRO)**.
  - It is a web-based application which allows users to access various map related services.

#### ➤ Women Empowerment:

- The Mission **promotes Woman Empowerment by providing the ownership of houses in the name of a female member or in joint names**.
- Preference is also given to women (with **overriding preference to widows, single women**), persons

Note:



belonging to Scheduled Castes/Scheduled Tribes/ Other Backward Classes, **Minorities**, **Persons with disabilities** and **Transgender**.

➤ **Initiatives under PMAY-U:**

- **Affordable Rental Housing Complexes (ARHCs) :**
  - It is a **sub-scheme** under PMAY-U.
  - This will provide **ease of living to urban migrants/ poor** in the Industrial Sector as well as in non-formal urban economies **to get access to dignified affordable rental housing** close to their workplace.
- **Global Housing Technology Challenge :**
  - It aims to identify and mainstream a basket of **innovative construction technologies** from across the globe for the housing construction sector that are **sustainable, eco-friendly and disaster-resilient**.
- **CLSS Awas Portal (CLAP):**
  - It is a **common platform** where all stakeholders i.e., **MoHUA, Central Nodal Agencies, Primary Lending Institutions, Beneficiaries and Citizens** are integrated in a real-time environment.
  - The portal facilitates processing of applications along with **tracking of subsidy status by beneficiaries**.

## Amrit Sarovar Mission

### **Why in News?**

The Union government has asked the Ministry of Railways and the National Highways Authority of India (NHAI) to use the soil/silt excavated from ponds/tanks in all districts across the country under the Amrit Sarovar Mission for their infrastructure projects.

### **What is Amrit Sarovar Mission?**

➤ **About:**

- Amrit Sarovar Mission was launched on 24<sup>th</sup> April 2022 with a view to conserve water for the future.

➤ **Aim:**

- The Mission is aimed at developing and rejuvenating 75 water bodies in each district of the country as a part of celebration of **Azadi ka Amrit Mahotsav**.

- In total, it would lead to the creation of **50,000 water bodies** of a size of about an Acre or more.
- The Mission encourages **mobilisation of citizen and non-govt resources** for supplementing these efforts.

➤ **Ministries Involved:**

- This Mission has been launched with a whole Government Approach with 6 Ministries/ Department namely:
  - Department of Rural Development
  - Department of land resources
  - Department of Drinking Water and Sanitation
  - Department of Water resources
  - Ministry of Panchayati Raj
  - Ministry of Forest, Environment and Climate Changes.

➤ **Technical Partner:**

- **Bhaskaracharya National Institute for Space Application and Geo-informatics (BISAG-N)** has been engaged as technical partner for the Mission.

➤ **Refocusing with Various Schemes:**

- The Mission works through the States and Districts, through refocusing of various schemes such as **Mahatma Gandhi NREGS, XV Finance Commission Grants, PMKSY** sub schemes such as **Watershed Development Component, Har Khet Ko Pani** besides States' own schemes.

➤ **Target:**

- Mission Amrit Sarovar is to be completed by 15<sup>th</sup> August 2023.
- Around **50,000 Amrit Sarovar** may be constructed in the country.
  - Each of these Amrit Sarovar will have **approx. area of 1 acre** with a water holding capacity of **10,000 cubic meters**.
- People's participation in the Mission is the focal point.
  - **Local freedom fighter, their family members, Martyr's family members, Padma Awardee and citizens of the local area** wherein an Amrit Sarovar is to be constructed, will be engaged at all stages.
- On every **15<sup>th</sup> August, National Flag hoisting will be organized on every Amrit Sarovar site**.

Note:



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➤ **Achievements:**

- So far, 12,241 sites have been finalized for construction of Amrit Sarovars by States/Districts, out of which **works has started on 4,856 Amrit Sarovars.**

**What is Azadi Ka Amrit Mahotsav?**

- Azadi Ka Amrit Mahotsav is an **initiative of the Government of India** to celebrate and commemorate **75 years of independence and the glorious history of its people, culture and achievements.**
- This Mahotsav is dedicated to the people of India who have not only been instrumental in bringing India thus far in its evolutionary journey but also hold within them the power and potential to enable Prime Minister Narendra Modi's vision of activating **India 2.0**, fuelled by the spirit of **Aatmanirbhar Bharat.**
- The official journey of Azadi ka Amrit Mahotsav commenced on **12<sup>th</sup> March 2021** which started a **75-week countdown to our 75th anniversary of independence and will end** post a year on **15th August 2023.**

## Bharat Gaurav Scheme

**Why in News?**

India's first private train, under the **Bharat Gaurav scheme** has been flagged off from Coimbatore.

- The train will cover **several historical destinations on the route while giving the passengers an insight into the cultural heritage** of the country.

**What is Bharat Gaurav Scheme?**➤ **About:**

- **Launched in November 2021**, under the scheme, trains now **have a third segment for tourism.** Till now, the Railways had passenger segments and goods segments.
  - These trains are **not regular trains that will run as per a timetable but will be more on the lines of the Ramayana Express** being run by the **IRCTC.**
- It was announced under the **theme-based tourist circuit trains.** These trains will be run **by both private players and IRCTC**, in theme-based circuits.

- By theme-based tourism (circuits), the railways mean trains like **Guru Kripa that go to all places related to Guru Nanak or a Ramayan-themed train** to touch upon places related to Lord Ram.

- Anyone, from **societies, trusts, consortia and even state governments** can apply to take these trains and run them on special tourism circuits based on a theme.

- Service Provider will offer all-inclusive packages to tourists including rail travel, hotel accommodation, sightseeing arrangement, visit to historical/heritage sites, tour guides etc.

➤ **Benefits of such Scheme:**

- These trains **will help realise India's rich cultural heritage and magnificent historical places** to the people of India and the world.
- They will also help in **tapping the vast tourism potential** of India.

**What are the other Related Scheme?**➤ **Swadesh Darshan Scheme:**

- Swadesh Darshan, a **Central Sector Scheme**, was launched in 2014-15 for integrated development of theme-based tourist circuits in the country.

➤ **PRASHAD Scheme:**

- The 'National Mission on Pilgrimage Rejuvenation and Spiritual Augmentation Drive' (PRASAD) was launched by the Ministry of Tourism in the year 2014-15 with the **objective of holistic development of identified pilgrimage destinations.**

➤ **Buddhist Conclave:**

- Buddhist Conclave is **organised every alternate year with the objective of promoting India as a Buddhist Destination** and major markets around the globe.

➤ **Dekho Apna Desh' Initiative:**

- It is an **initiative to encourage the citizens to travel widely within the country** and explore the wonders of India thus enabling the development of Domestic Tourism tourist facilities and infrastructure in tourism spots in the country.

**What is the State of Tourism in India?**

- Tourism in India is important **for the country's economy and is growing rapidly.**

Note:

- According to the World Travel and Tourism Council, the travel & tourism industry's contribution to the **Gross Domestic Product (GDP)** was USD 121.9 billion in 2020 and this is expected to reach **USD 512 billion by 2028**.
- In India, the industry's direct contribution to the GDP is expected to record an annual growth rate of 10.35% between 2019 and 2028.
- Also, the **Travel and Tourism Competitiveness Report 2019** ranked India **34<sup>th</sup> out of 140 countries** overall, showing India's efforts to improve in the field

## ODOP: Handicraft Sector

### Why in News?

Recently, the **Ministry of Textile** inaugurated the 'Lota Shop' at National Crafts Museum, New Delhi.

- The shop was opened by **Central Cottage Industries Corporation of India Limited (CCIC)**, popularly known as the Central Cottage Industries Emporium.
  - It **showcases fine handcrafted curios, souvenirs, handicrafts and textiles** based on the traditional craft forms of India.
- The government also reiterated that it is working towards '**One District One Product**' which will give impetus to the **Handicraft sector as well as the Artisans**.

### What is One District One Product?

- **About:**
  - The 'One District, One Product' (ODOP) was launched by the Ministry of Food Processing Industries, to **help districts reach their full potential, foster economic and socio-cultural growth**, and create employment opportunities, especially, in rural areas.
    - It was launched in January, 2018, by the Uttar Pradesh Government, and due to its success, was later adopted by the Central Government.
  - This initiative is carried out with the 'Districts as Exports Hub' initiative by the **Directorate General of Foreign Trade (DGFT)**, Department of Commerce.
    - 'Districts as Exports Hub' initiative provides **financial and technical assistance to the district level industries** so that the small-scale industries can be helped and they can provide employment opportunities to the local people.

### Objectives:

- It aims to **identify, promote and brand a product** from one district.
- To turn every district in India, **into an export hub through promotion of the product in which the district specialises**.
- It envisions to accomplish this by scaling manufacturing, supporting local businesses, finding potential foreign customers and so on, thus helping to achieve the '**Atmanirbhar Bharat**' vision.

### What is the Status of Handicraft Sector in India?

#### About:

- Handicrafts are items **that are constructed by hand using simple tools rather than mass production methods** and equipment. While very similar to basic arts and crafts, there is **one key difference with handicrafts**.
  - The items produced as a result of the efforts are designed for a specific function or **use as well as being ornamental in nature**.
- The handloom and handicraft industry **has been the backbone of India's rural economy for decades**.
- India **produces** woodware, artmetal wares, handprinted textiles, embroidered goods, zari goods, imitation jewellery, sculptures, pottery, glassware, attars, agarbattis, etc.

#### Trade:

- India is one of the **largest handicraft exporting countries**.
- In March 2022, the total handicraft export excluding handmade carpets from India was USD 174.26 million which **was an 8% increase from February 2022**. During 2021-22, the total exports of Indian handicrafts were valued at USD 4.35 billion; a **25.7% increase from the previous year**.

#### Significance of the Sector:

- **Largest Employment Generator:**
  - It is one of the **largest employment generators after agriculture**, providing a key means of **livelihood to the country's rural and urban population**.
  - Handicraft is one of the most important sectors in the Indian economy employing more than seven million people.

Note:



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- **Eco-Friendly:**
  - The sector functions on a **self-sustaining business model**, with craftsmen often growing their own raw materials and is well known for being a pioneer of environment-friendly zero-waste practices.

➤ **Challenges:**

- Artisans face challenges such as **inaccessibility of funds, low penetration of technology, absence of market intelligence and poor institutional framework** for growth.
- In addition, the sector is plagued by implicit contradiction of handmade products, which are **typically at odds with scale of production**.

**What Factors Support the Growth of the Sector?**

➤ **Government Schemes:**

- The central government is actively **working towards developing the industry to maximize its potential**.
- The introduction of several schemes and initiatives is helping craftsmen to overcome the challenges they face.

➤ **Rise of Dedicated Trade Platforms:**

- Few platforms like Craftezy, have emerged that lend the much-needed support to Indian artisans in finding visibility in domestic and global markets.
- These global handicraft trade **platforms come with a free supplier induction process and aim at giving it an organized image in the global market**.

➤ **Using Technology for Inclusion:**

- Technology that can help cross boundaries has proven to be a boon for the handicraft industry.
- **E-commerce** has opened **doors to seamless access to consumer goods, and this has enabled inclusive growth** as all manufacturers in any part of the globe can showcase their products through these online platforms.
- Even social media platforms are helping immensely with marketing Indian handicrafts globally.

➤ **Exports Vs Imports:**

- In the last five years, **exports of Indian handicrafts have gone up by more than 40 %**, as three-fourths of handicrafts are exported.
- Indian handicrafts are majorly exported to more than a hundred countries, and the US alone constitutes about a third of India's handicrafts exports.

➤ **Change in Behavior of Artisans:**

- To **generate enhanced income, artisans adapt to new skills** and create products that meet new market demands.
- Thus, on account of the introduction of technology and the ease it brings to their table, there is a significant change in the behaviors of sellers and buyers of handicrafts.

**What are the Related Government Initiatives?**

➤ **Ambedkar Hastshilp Vikas Yojana:**

- To support artisans with their infrastructure, technology and human resource development needs.
- The objective of **mobilising artisans into self-help groups and societies with the agenda of facilitating bulk production and economies in procurement** of raw materials.

➤ **Mega Cluster Scheme:**

- The objective of this scheme includes **employment generation and improvement** in the standard of living of artisans.
- This programme **follows a cluster-based approach in scaling infrastructure** and production chains at handicraft centres, specifically in remote regions.

➤ **Marketing Support and Services Scheme:**

- This scheme **provides interventions for domestic marketing events to artisans in the form of financial assistance** that aids them in organising and participating in trade fairs and exhibitions across the country and abroad.

➤ **Research and Development Scheme:**

- This initiative was introduced to **generate feedback on economic, social, aesthetic and promotional aspects of crafts and artisans** in the sector, with the objective of supporting implementation of aforementioned schemes.

➤ **National Handicraft Development Programme:**

- The important component of this programme is carrying out surveys, upgrading design and technology, developing human resources, providing insurance and credit facilities to artisans, R&D, infrastructure development and marketing support activities.

Note:



- **Comprehensive Handicrafts Cluster Development Scheme:**
  - The approach of this scheme is to scale up infrastructure and production chain at handicraft clusters. Additionally, this scheme aims to provide adequate infrastructure for production, value addition and quality assurance.
- **Export Promotion Council for Handicrafts:**
  - The main objective of the council is to promote, support, protect, maintain and increase the export of handicrafts.
  - The other activities of the council are knowledge dissemination, providing professional advice and support to members, organizing delegation visits and fairs, providing liaison between exporters and the government and carrying out awareness workshops.

## Bharat NCAP

### Why in News?

Recently, the Ministry of Road Transport and Highways has approved the **draft GSR (General Statutory Rules)** notification to introduce **Bharat NCAP (New Car Assessment Programme)**.

- NCAP will be rolled out from 1<sup>st</sup> April 2023 and will mean auto manufacturers in India as well as importers will have the option of getting cars star rated within country.
- The **USA was the first country to introduce a programme** for testing the safety standards of a car through crash tests.

### What is Bharat NCAP?

- **About:**
  - It is a **new car safety assessment program** which proposes a mechanism of awarding 'Star Ratings' to automobiles based upon their performance in crash tests.
  - Bharat NCAP standard is aligned with global benchmarks and it is beyond minimum regulatory requirements.
- **Bharat NCAP Rating:**
  - The proposed Bharat NCAP assessment **will allocate Star Ratings from 1 to 5 stars**.
  - The testing of vehicles for this programme will be carried out at testing agencies, with the necessary infrastructure.

### Applicability:

- It will be applicable on **type approved motor vehicles of category M1 with gross vehicle weight less than 3.5 tonnes**, manufactured or imported in the country.
- **M1 category motor vehicles are used for the carriage of passengers**, comprising eight seats, in addition to driver's seat.

### What is the Significance of Bharat NCAP?

- **Empower Consumers to Make Informed Decisions:**
  - The new regulations introduces the concept of safety rating of passenger cars and **empowers consumers to take informed decisions**.
- **Increases Export-Worthiness:**
  - Star Rating of Indian Cars based on Crash Tests **will not only ensure structural and passenger safety in cars but also increase the export-worthiness of Indian automobiles**.
- **Make Automobile Industry Aatmanirbhar:**
  - It will also **prove to be a critical instrument in making our automobile industry Aatmanirbhar** with the mission of making India the Number 1 automobile hub in the world.

### What are the Challenges?

- A large scale **testing will require bigger infrastructure** and to implement it successfully and in an expedited manner, **a huge budgetary support will be required**.
- Major cities in India have dedicated hardly 6-10% (barring Delhi, which has allocated almost 20% to transport infrastructure) of their total land allocation to the construction of transport infrastructure, which has **led to inadequate transport infrastructure in the cities with reference to the population and its requirements**.

## National Initiative for Promotion of Upskilling of Nirman workers (NIPUN)

### Why in News?

Recently, an innovative project for skill training of construction workers called '**NIPUN**' i.e. **National Initiative for Promoting Upskilling of Nirman Workers** was launched.

Note:

- **NIPUN** is creating a **future labour force** for the construction industry which will propel **innovation** and **large-scale development** in the country.
- The construction sector is on track to become the **largest employer** by **2022**, and it will require **45 million more qualified workers** over the **next ten years**.

### ***What is Project NIPUN?***

- **About:**
  - The basic motive of the project is to **train over 1 lakh construction workers**, through fresh skilling and upskilling programmes.
  - The project NIPUN is an initiative of the **Ministry of Housing & Urban Affairs (MoHUA)**.
  - This project is running under the flagship programme of the **Deendayal Antyodaya Yojana-National Urban Livelihoods Mission (DAY-NULM)**
    - The transformational impact of the **National Urban Livelihoods Mission (NULM)** has reduced the **vulnerability of urban poor households** by providing **upskilling** and **employment opportunities** to urban dwellers, especially the youth.
- **Implementing Agency:**
  - **National Skill Development Corporation (NSDC)**.
    - NSDC is the nodal agency and workers under the **Ministry of Skill Development & Entrepreneurship (MSDE)**.
    - NSDC will be responsible for the overall execution of **training, monitoring and candidate tracking**.

### ***How will the NIPUN Project be Implemented?***

- The project implementation is divided into three parts:
  - **Training through Recognition of Prior Learning (RPL)** at construction sites.
    - Onsite skill training will be provided to approximately **80,000 construction workers through industry associations** under the **RPL certification**, co-branded with **MoHUA**.
  - **Training through Fresh Skilling by Plumbing and Infrastructure Sector Skill Council (SSC)**.
    - About **14,000 candidates** will receive fresh skilling through **plumbing and infrastructure Sector**

**Skill Council (SSC)** in trades having promising placement potentials.

- **International Placement through industries/builders/ contractors.**
  - The courses are aligned with the **National Skills Qualifications Framework (NSQF)**.
  - It will be imparted at accredited and affiliated training centers only.
  - It is also envisaged that **NSDC** will place approximately **12,000 people** in foreign countries such as the **Kingdom of Saudi Arabia, UAE** and other **GCC countries**.

### ***What are the Benefits associated with the Project NIPUN?***

- **Access to New Opportunity:**
  - The **NIPUN Project** will enable the construction workers to seek **better job opportunities**, increase their **wages** and even **pursue overseas placements**.
- **Spirit of Entrepreneurship:**
  - It has been encouraged and supported by giving **urban workers access to self-employment** and **skilled wage employment opportunities**.
    - This initiative will enable **Nirman workers to be more proficient and skilled**.
- **Skill Advancement:**
  - **Nirman workers** can adopt **advanced skills** keeping in mind the **future trends** associated with the **construction industry** by upgrading their capabilities and diversifying their **skill sets**.
    - The Ministry also undertook **technology challenges** which led to implementation of **six Light House Projects** in a record time wherein technology and local material was used to construct **sustainable green buildings**.
- **Growth of Economy:**
  - Construction industry is a significant contributor to the **nation's GDP** so this scheme will catalyse the **GDP growth**.
- **Social Security:**
  - It will provide trainees with '**Kaushal Bima**', a **three-year accidental insurance** with coverage of **INR 2 lakhs**, **digital skills** such as **cashless transactions** and **EPF and BOCW facilities**.

Note:



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**Note****➤ NIPUN Bharat Mission**

- The Ministry of Education has launched a **National Initiative for Proficiency in Reading with Understanding and Numeracy (NIPUN Bharat)**, for ensuring that every child in the country necessarily attains foundational literacy and numeracy (FLN) by the end of Grade 3, by 2026-27.
- It was launched in 2021 as part of the **National Education Policy (NEP) 2020**.

**What do we Know about DAY-NRLM?****➤ About:**

- **DAY-NULM** is a **Centrally Sponsored Scheme**, being implemented since **2014-15**.
- Its aim is to **reduce poverty and vulnerability of urban poor households** in the country by enabling them to **access self-employment and skilled wage employment opportunities**.
- **Deendayal Antyodaya Yojana - National Livelihoods Mission (DAY-NULM)** was launched by the **Ministry of Rural Development (MoRD), Government of India** in **2011**.

**➤ Aim:**

- The Mission aims at creating efficient and effective institutional platforms of the rural poor enabling them to **increase household income** through **sustainable livelihood and improved access to financial services**.

**➤ Salient Features:**

- **DAY-NRLM** lays special emphasis on targeting the **poorest of the poor and the most vulnerable communities** and their **financial inclusion**.
- Innovative projects are to be undertaken under **NRETP** to pilot alternate channels of financial inclusion, creating value chains around rural products, introduce innovative models in livelihoods promotion and access to finance and scale-up initiatives on digital finance and livelihoods interventions.
- **DAY-NRLM** provides for mutually beneficial working relationship and formal platforms for consultations between **Panchayati Raj Institutions (PRIs) and Community Based Organizations (CBOs)**.

- **NRLM** has also developed activity map to facilitate convergence in different areas of interventions where **NRLM** institutions and **PRIs** could work together which has been disseminated to all state **Rural Livelihood Missions**.

## Aspirational District Programme

**Why in News?**

Recently, the Prime Minister has expressed his desire to extend the **Aspirational District Programme to block and city levels**.

**What is Aspirational Districts Programme?****➤ About:**

- It was launched in 2018 which aims to **transform districts** that have shown relatively **lesser progress in key social areas**.
- Aspirational Districts are those districts in India, that **are affected by poor socio-economic indicators**.

**➤ Broad Contours of the Programme:**

- **Convergence** (of Central & State Schemes)
- **Collaboration** (of Central, State level 'Prabhari' Officers & District Collectors),
- **Competition** among districts through monthly **delta ranking**.
  - The delta ranking of the Aspirational Districts combines the innovative use of data with pragmatic administration, keeping the district at the locus of inclusive development.

**➤ Objectives:**

- It focuses **on the strength of each district, identifying low-hanging fruits for immediate improvement and measuring progress** by ranking districts on a monthly basis.
- Districts are prodded and encouraged to first catch up with the best district within their state, and subsequently aspire to become one of the best in the country, by **competing with, and learning from others** in the **spirit of competitive & cooperative federalism**.
- The Government is committed to raising the living standards of its citizens and ensuring inclusive growth for all – **"Sabka Saath Sabka Vikas aur Sabka Vishwas"**.

Note:



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- The ADP is essentially aimed at **localizing Sustainable Development Goals**, leading to the progress of the nation.

➤ **Parameters for Ranking:**

- The ranking is based on the incremental progress made across 49 Key Performance Indicators (KPIs) under **5 broad socio-economic themes** -
  - **Health & Nutrition (30%)**
  - **Education (30%)**
  - **Agriculture & Water Resources (20%)**
  - **Financial Inclusion & Skill Development (10%)**
  - **Infrastructure (10%)**

➤ **Various Programmes:**

- Various programmes such as – **Saksham Bitiyan Abhiyan, Anemia Mukh Bharat and Surakshit Hum Surakshit Tum**, are some of the flagship initiatives that have been taken up by **NITI Aayog** in this regard.

➤ **Challenges Associated with ADP**

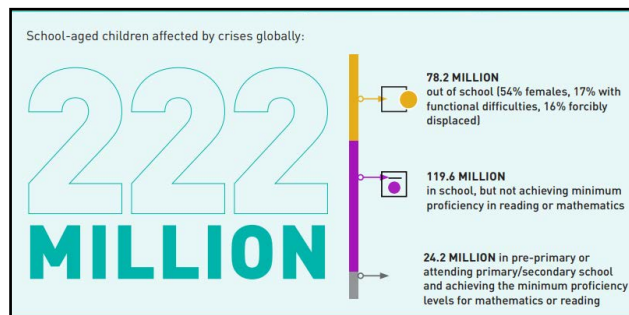
- **Insufficient Budgetary Resources:**
  - ADP is affected by the issue pertaining to **insufficient budgetary resources**.
- **Lack of Coordination:**
  - ADP is implemented by **multiple ministries** which leads to a **lack of coordination**.
- **Data High-quality administrative data:**
  - Data High-quality administrative data is critical to improving programme implementation and design at the local level.
- **Ranking Method:**
  - The **Delta ranking** itself is **largely focused on assessing quantity** (that is, coverage of access) rather than quality.
- **Quality of Education:**
  - Also, the quality of education in India is in a dismal condition, as highlighted by **the ASER report**.

## Children and Adolescents in Need of Education Support

### Why in News?

The **United Nations global fund for education in emergencies and protracted crises, Education Cannot Wait (ECW)**, released a report that indicates the **number**

**of crisis-impacted school-aged children requiring educational support has grown from an estimated 75 million in 2016 to 222 million.**



### What are the Major Highlights of the Report?

- The study indicates that as many as **78.2 million** are **out of school**, and **close to 120 million** are **in school, but not achieving minimum proficiency** in math or reading. In fact, just one in ten crisis-impacted children attending primary or secondary education are actually achieving these proficiency standards.
- The analysis indicates that **84% of the out-of-school crisis-impacted children are living in areas with protracted crises**. The vast majority of these are in countries specifically targeted through ECW's ground-breaking multi-year investments, including Afghanistan, Democratic Republic of the Congo, Ethiopia, Mali, Nigeria, Pakistan, Somalia, South Sudan and Yemen.
- The **war in Ukraine** is **pushing even more children out of school**, with recent estimates indicating the conflict has impacted 5.7 million school-aged children.
- Around **119.6 million children living in crisis-prone areas** attended school but **did not achieve minimum proficiency in mathematics or reading**.
- **#222 Million Dreams:** To respond to this pressing global education crisis, ECW and strategic partners launched the **#222Million Dreams** resource mobilization campaign in Geneva.
  - The campaign **calls on donors, the private sector, philanthropic foundations and high-net-worth individuals to urgently mobilize more resources to scale up ECW's investments**, which are already delivering quality education to over 5 million children across more than 40 crisis-affected countries.

Note:

### What is Education Cannot Wait (ECW)?

#### ➤ About:

- It is the **United Nations global, billion-dollar fund for education in emergencies and protracted crises.**
- It is **administered under UNICEF's** financial, human resources, and administrative rules and regulations; operations are run by the Fund's own independent governance structure.

#### ➤ Mission:

- ECW works to **generate greater shared political, operational and financial commitment to meet the educational needs of millions of children** and youth affected by crises, with a focus on more agile, connected and faster response that spans the humanitarian-development continuum to lay the ground for sustainable education systems.

## Registered Unrecognised Political Parties (RUPP)

### Why in News?

- The **Election Commission** ordered the **deletion of 111 registered unrecognised political parties** that it found to be "non-existent" and referred three of the parties to the Department of Revenue for legal action for **"serious financial impropriety.** This was the second such action in the recent past against registered parties that have been found violating the **Representation of the People Act, 1951.**
- Earlier, the EC had deleted 87 non-existent registered unrecognised political parties.
- The EC said the 111 parties in question had violated sections of the Act that required them to submit their address of communication and any change in address to the EC.

### What are the Key Points related to the Political Parties?

- **Registered Unrecognised Political Parties (RUPP):**
  - Either **newly registered parties** or those **which have not secured enough percentage of votes in the assembly or general elections** to become a state party, or those **which have never contested elections** since being registered are considered **unrecognised parties.**

- Such parties **don't enjoy all the benefits extended to the recognised parties.**

#### ➤ Recognised Political Party:

- A **recognised political party** shall **either be a National party or a State party** if it meets certain laid down conditions.
- **To become a recognised political party** either at the state or national level, a party **has to secure a certain minimum percentage of polled valid votes or certain number of seats** in the state legislative assembly or the Lok Sabha during the last election.
- The **recognition granted by the Commission to the parties determines their right to certain privileges** like allocation of the party symbols, provision of time for political broadcasts on the state-owned television and radio stations and access to electoral rolls.

#### What are the Conditions for Recognition of Political Parties?

Conditions For Recognition of National Parties	<ul style="list-style-type: none"> <li>➤ A party is recognised as a national party if any of the following conditions is fulfilled: <ul style="list-style-type: none"> <li>○ If it <b>secures 6% of valid votes polled</b> in any <b>four or more states</b> at a general election to the Lok Sabha or to the legislative assembly and in addition, it wins four seats in the Lok Sabha from any state or states, or</li> <li>○ If it <b>wins 2% of seats in the Lok Sabha</b> at a general election and these candidates are elected from three states, or</li> <li>○ If it is recognised as a <b>state party in four states.</b></li> </ul> </li> </ul>
Conditions for Recognition as a State Party	<ul style="list-style-type: none"> <li>➤ A party is recognised as a state party in a state if any of the following conditions is fulfilled: <ul style="list-style-type: none"> <li>○ If it <b>secures 6% of the valid votes polled</b> in the state at a general election to the legislative assembly of the state concerned and in <b>addition, it wins 2 seats</b> in the assembly of the state concerned or.</li> </ul> </li> </ul>

Note:



- If it secures **6% of the valid votes polled in the state** at a general election to the Lok Sabha from the state concerned and in addition, it wins 1 seat in the Lok Sabha from the state concerned or
- If it wins **3% of seats in the legislative assembly** at a general election to the legislative assembly of the state concerned or 3 seats in the assembly, whichever is more or
- If it **wins 1 seat in the Lok Sabha for every 25 seats** or any fraction thereof allotted to the state at a general election to the Lok Sabha from the state concerned or
- If it **secures 8% of the total valid votes polled in the state at a General Election** to the Lok Sabha from the state or to the legislative assembly of the state. This condition was added in 2011

### The Representation of the People Act (RPA)

#### ➤ Introduction:

- The holding of **free and fair elections** is the sine-qua-non of democracy. To ensure the conduct of elections in free, fair and in an impartial manner, the constitution-makers incorporated **Part XV (Articles.324-329)** in the constitution and empowered Parliament to make laws to regulate the electoral process.
- In this context, the Parliament has enacted the Representation of the People Act (**RPA**), 1950 and Representation of the People Act,1951.

#### ➤ Representation of the People Act (RPA), 1950

##### ○ Key Provisions:

- Lays down procedures for **delimitation of constituencies**.
- Provides for the **allocation of seats** in the House of the People and in the Legislative Assemblies and Legislative Councils of States.
- Lays procedure for the **preparation of electoral rolls** and the manner of filling seats.
- Lays down the **qualification of voters**.

### ➤ Representation of the People Act (RPA) of 1951:

#### ○ Key Provisions:

- It regulates the **actual conduct of elections** and by-elections.
- It provides administrative **machinery** for conducting elections.
- It deals with the **registration of political parties**.
- It specifies the **qualifications and disqualifications for membership** of the Houses.
- It provides provisions to **curb corrupt practices and other offences**.
- It lays down the procedure for settling **doubts and disputes arising out of elections**.

## Indian Railway Innovation Policy

### Why in News?

Recently, the Minister of Railways has launched **Indian Railway Innovation Policy- "StartUps for Railways"**.

### What are the Key Highlights of the Policy?

#### ➤ About:

- Grant up to **Rs. 1.5 Crore to innovators on equal sharing** basis with provision of milestone-wise payment.
- The complete process from floating of problem statement to development of prototype is online with defined time line to make it transparent and objective.
- Trials of prototypes will be done in Railways.
- **Enhanced funding will be provided** to scale up deployment on successful performance of prototypes.
- **Selection of Innovator/s will be done by a transparent and fair system** which will be dealt through an online portal inaugurated today by the Minister of Railways.
- Developed **Intellectual property rights (IPR)** will remain with innovators only.
- De-centralization of complete product development process at divisional level to avoid delays.

Note:



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➤ **Issues Identified:**

- **Eleven problem statements** such as rail fracture, headway reduction, etc., have been taken up for this program's phase 1 out of the more than 100 problem statements received from various divisions, field offices or zones of Indian Railways.

➤ **Expected Benefits:**

- This policy will **bring scale and efficiency in the field of operation, maintenance** and infrastructure creation through participation of a very large and untapped startup ecosystem.
- It also aims to **leverage innovative technologies** developed by Indian **Startups/MSMEs/Innovators/Entrepreneurs** to improve operational efficiency and Safety of Indian Railways.
- It will Promote **"Innovation Culture" in the country for co-creation** and co-innovation in the Railway sector.

**What are the Key Facts about Indian Railways?**

➤ **About:**

- The Indian Railways network is **one of the longest in the world.**
- It **facilitates the movement of both freight and passengers** and contributes to the growth of the economy.
- The Indian Railway was introduced in **1853**, when a line was constructed **from Bombay to Thane** covering a distance of 34 km.
- Indian Railways is the **largest government undertaking in the country.**
- The length of the Indian Railways network was 67,956 km (Railway yearbook 2019-20).

➤ **Zones:**

- In India, the railway system has been divided into 16 zones.

➤ Indian Railways is the proud owner of **four UNESCO accorded World Heritage Sites** namely **Darjeeling Himalayan Railway** (1999), **Nilgiri Mountain Railway** (2005), **Kalka Shimla Railway** (2008) and **Chhatrapati Shivaji Terminus**, Mumbai (2004).

- There are two more in waiting or in the tentative list namely **Matheran Light Railway** and **Kangra Valley Railway.**

Railway Zone	Headquarters
Central	Mumbai CST
Eastern	Kolkata
East Central	Hajipur
East Coast	Bhubaneswar
Northern	New Delhi
North Central	Allahabad
North Eastern	Gorakhpur
North East Frontier	Maligaon (Guwahati)
North Western	Jaipur
Southern	Chennai
South Central	Secunderabad
South Eastern	Kolkata
South East Central	Bilaspur
South Western	Hubli
Western	Mumbai (Church Gate)
West Central	Jabalpur

## Governor's Powers to Call for a Floor Test

### Why in News?

In Maharashtra's political crisis, the Governor's decision to call for the floor test has been in the spotlight once again.

### What are the Constitutional Provisions related to the Governor in calling for a Floor Test?

➤ **About:**

- **Article 174** of the Constitution **authorizes the Governor to summon, dissolve and prorogue** the state legislative assembly.
- **Article 174(2)(b)** of the Constitution gives powers to the Governor to dissolve the Assembly on the aid and advice of the cabinet. However, the Governor can apply his mind when the advice comes from a Chief Minister whose majority could be in doubt.

Note:



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- According to **Article 175(2)**, the Governor can summon the House and call for a floor test to prove whether the government has the numbers.
- However, the Governor can exercise the above only **as per Article 163** of the Constitution which says that the **Governor acts on the aid and advice of the Council of Ministers** headed by the Chief Minister.
- **When the House is in session, it is the Speaker who can call for a floor test.** But when the Assembly is not in session, the Governor's residuary powers under Article 163 allow him to call for a floor test.
- **Governor's Discretionary Power:**
  - Article 163 (1) essentially **limits any discretionary power of the Governor only to cases where the Constitution expressly specifies** that the Governor must act on his own and apply an independent mind.
  - The Governor can exercise his discretionary power under Article 174, **when the chief minister has lost the support of the House** and his strength is debatable.
  - Generally, when doubts are cast on the chief minister that he has lost the majority, the opposition and the Governor would rally for a **floor test**.
  - On numerous occasions, the courts have also clarified that when the majority of the ruling party is in question, a floor test must be conducted at the earliest available opportunity.

### **What is the Supreme Court's View on the Governor's Power in Calling the Floor Test?**

- In 2016, the **Supreme Court** in **Nabam Rebia and Bamang Felix vs Deputy Speaker case** (the Arunachal Pradesh Assembly case) said that the power to summon the House is **not solely vested in the Governor** and should be exercised with aid and advice of Council of Ministers and not at his own.
- The Court highlighted the facts that the **Governor is not an elected authority and is a mere nominee of the President**, such a nominee cannot have an **overriding authority over the representatives of the people**, who constitute the House or Houses of the State Legislature.
- Allowing the Governor to overrule the State Legislature or the State executive **would not harmoniously augur with the strong democratic principles** enshrined

in the provisions of the Constitution. Specially so, because the Constitution is founded on the principle of **ministerial responsibility**.

- In 2020, the Supreme Court, in **Shivraj Singh Chouhan & Ors versus Speaker, Madhya Pradesh Legislative Assembly & Ors**, upheld the powers of the Speaker to call for a floor test if there is a prima facie view that the government has lost its majority.
  - "The Governor is not denuded of the power to order a floor test where on the basis of the material available to the Governor it becomes evident that the issue as to whether the government commands the confidence of the House requires to be assessed on the basis of a floor test,

### **What is a Floor Test?**

- It is a **term used for the test of the majority**. If there are **doubts against the Chief Minister (CM)** of a State, he/she can be **asked to prove the majority in the House**.
  - In case of a **coalition government**, the **CM** may be **asked to move a vote of confidence and win a majority**.
- In the **absence of a clear majority**, when there is more than one individual staking claim to form the government, the **Governor may call for a special session** to see who has the majority to form the government.
  - Some legislators may be absent or choose not to vote. The numbers are then considered based only on those MLAs who were present to vote.

## **NITI Aayog**

### **Why in News?**

**NITI (National Institution for Transforming India) Aayog** CEO Amitabh Kant is set to leave and will be replaced by former Secretary of the Ministry of Drinking Water and Sanitation - **Parameswaran Iyer**.

### **What is NITI Aayog?**

- **Background:**
  - **Planning Commission** was replaced by a new institution – **NITI Aayog** on **1<sup>st</sup> January, 2015** with emphasis on '**Bottom-Up**' approach to envisage the vision of **Maximum Governance, Minimum Government**, echoing the spirit of '**Cooperative Federalism**'.

Note:

- It has two Hubs.
  - **Team India Hub** acts as interface **between States and Centre**.
  - **Knowledge and Innovation Hub** builds the think-tank acumen of NITI Aayog.
- **Composition:**
  - **Chairperson:** Prime minister
  - **Vice-Chairperson:** To be appointed by Prime-Minister
  - **Governing Council:** Chief Ministers of all states and Lt. Governors of Union Territories.
  - **Regional Council:** To address specific regional issues, Comprising Chief Minister and Lt. Governors Chaired by the Prime Minister or his nominee.
  - **Ad-hoc Membership:** Two members in ex-officio capacity from leading Research institutions on a rotational.
  - **Ex-Officio membership:** Maximum four from the Union council of ministers to be nominated by the Prime Minister.
  - **Chief Executive Officer:** Appointed by the Prime-minister for a fixed tenure, in the rank of Secretary to Government of India.
  - **Special Invitees:** Experts, Specialists with domain knowledge nominated by the Prime Minister.
- **Objectives:**
  - To foster **cooperative federalism** through structured support initiatives and mechanisms with the States on a continuous basis, recognizing that strong States make a strong nation.
  - To develop **mechanisms to formulate credible plans** at the village level and aggregate these progressively at higher levels of government.
  - To ensure, on areas that are specifically referred to it, that the interests of **national security are incorporated in economic strategy** and policy.
  - To pay special attention to the sections of our society that may be at risk of not benefiting adequately from economic progress.
  - To provide **advice and encourage partnerships between key stakeholders** and national and international like-minded Think Tanks, as well as educational and policy research institutions.

- To create a **knowledge, innovation and entrepreneurial support system** through a collaborative community of national and international experts, practitioners and other partners.
- To offer a **platform for resolution of inter-sectoral and inter-departmental issues** in order to accelerate the implementation of the development agenda.
- To maintain a state-of-the-art Resource Centre, be a repository of research on good governance and best practices in sustainable and equitable development as well as help their dissemination to stakeholders.

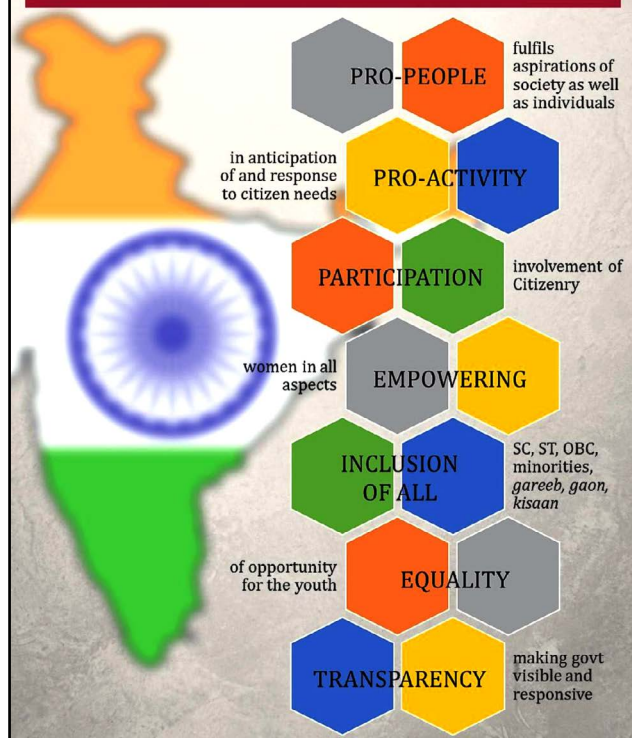
NITI Aayog	Planning Commission
It serves as an advisory Think Tank.	It served as extra-constitutional body.
It draws membership from a wider expertise.	It had limited expertise.
It serves in spirit of Cooperative Federalism as states are equal partners.	States participated as spectators in annual plan meetings.
Secretaries to be known as CEO appointed by Prime- Minister.	Secretaries were appointed through usual process.
It focuses upon 'Bottom-Up' approach of Planning.	It followed a 'Top-Down' approach.
It does not possess mandate to impose policies.	Imposed policies on states and tied allocation of funds with projects it approved.
It does not have powers to allocate funds, which are vested in Finance Minister.	It had powers to allocate funds to ministries and state governments.

### **Why is the Creation of NITI Aayog is Significant?**

- The 65 year-old Planning Commission **had become a redundant organization**. It was relevant in a **command economy structure**, but not any longer.
- India is a diversified country and its states are in various phases of economic development along with their own strengths and weaknesses.
- In this context, a 'one size fits all' approach to **economic planning is obsolete**. It cannot make India competitive in today's global economy.

Note:

## #NITIaayog is based on the 7 Pillars of Effective Governance



### What are the Related Concerns and Challenges?

- NITI Aayog has **no powers in granting discretionary funds to states**, which renders it toothless to undertake a transformational intervention.
- It acts as an advisory body only that advises the government on various issues **without ensuring the enforceability of its ideas**.
- NITI Aayog has **no role in influencing private or public investment**.
- **Politicization of the organization** has been in recent times.
- NITI Aayog has been transformed into a glorified recommendatory body which lacks the requisite power to bring positive change in the government's actions.

### What are the Initiatives of NITI Aayog?

- **SDG India Index**
- **Composite Water Management Index**
- **Atal Innovation Mission**
- **SATH Project.**

- **Aspirational District Programme**
- **School Education Quality Index**
- **District Hospital Index**
- **Health Index**
- **Agriculture Marketing And Farmer Friendly reform Index**
- **India Innovation Index**
- **Women Transforming India Awards**
- **Good Governance Index**

## Increase in NREGS demand

### Why in News?

In May 2022, 2.61 crore households worked under the NREGS (National Rural Employment Guarantee Scheme), which is **17.39% more** than in the same month last year.

### What are the Key Findings?

- There was a rise in demand for NREGS after the dip in April. In **April 2022**, 1.86 crore families availed the NREGS, which is **12.27% lower** than the number recorded in April last year.

### NUMBER OF HOUSEHOLDS UNDER NREGS

State/UTs	May 2021	May 2022	Absolute Increase	% Increase
<b>STATES WITH MAXIMUM INCREASE</b>				
Uttar Pradesh	8,89,849	2,628,416	1,738,567	195.38
Tamil Nadu	1,717,622	3,310,400	1,592,778	92.73
Rajasthan	1,141,332	2,500,200	1,358,868	119.06
Bihar	1,615,010	2,305,982	690,972	42.78
Kerala	87,077	659,872	572,795	657.80
<b>STATES WITH MOST DECLINE</b>				
Chhattisgarh	1,589,642	678,644	-910,998	-57.31
Jharkhand	957,992	295,608	-662,384	-69.14
West Bengal	1,103,183	705,009	-398,174	-36.09
Madhya Pradesh	2,209,462	1,854,538	-354,924	-16.06
Tripura	375,239	133,347	-241,892	-64.46
<b>ALL INDIA</b>	<b>22238482</b>	<b>26139395</b>	<b>3900913</b>	<b>17.54</b>

- The number of households that availed the **NREGS** is lower than May 2020, when the demand sharply

Note:



rose to 3.30 crore as migrant workers returned to their villages in wake of lockdown during the first wave of Covid-19.

- But it is **higher than the 2.10 crore figure recorded in May 2019 (pre-pandemic times).**
- In terms of states, **Uttar Pradesh saw the maximum increase** in terms of the absolute increase in the number of families availing the NREGS, **followed by Tamil Nadu.**
- Whereas, the **maximum decline was recorded in Chhattisgarh followed by Jharkhand.**

### **What is NREGS?**

- The Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA), also known as Mahatma Gandhi **National Rural Employment Guarantee Scheme (MNREGS)** is legislation enacted on **25<sup>th</sup> August, 2005.**
- It provides a **legal guarantee for one hundred days of employment in every financial year to adult members of any rural household willing to do public work-related unskilled manual work at the statutory minimum wage.**
- The **Ministry of Rural Development (MRD)** is monitoring the entire implementation of this scheme in association with state governments.
- This act was introduced with an **aim of improving the purchasing power of the rural people**, primarily semi or unskilled work to people living below poverty line in rural India. It attempts to bridge the gap between the rich and poor in the country.
- According to the law **roughly one-third of the stipulated work force must be women.**
- The registered person can submit an application for work in writing (for at least fourteen days of continuous work) either to Panchayat or to Programme Officer.
- **Employment will be provided within a radius of 5 km.** And if it is beyond 5 km, an extra wage will be paid.
- A majority of the works that are notified under NREGS are related to **agricultural and allied activities, besides the works that facilitate rural sanitation projects in a major way.**
- NREGS is a **demand-driven wage employment programme** and resource transfer from the Centre to the states is based on the demand for employment in each state.

- It **provides a legal guarantee for wage employment** by providing allowances and compensation both in cases of failure to provide work on demand and delays in payment of wages for work undertaken.
- In May 2021, the Ministry of Rural Development launched the **National Mobile Monitoring Software (NMMS) app**, a new application meant for “improving citizen oversight and increasing transparency” in National Rural Employment Guarantee Act (NREGA) works.

### **What have been the Outcomes of NREGS?**

- In the past 15 years, it has created more than **31 billion person-days of employment.**
- In the last 15 years, the government has **invested more than Rs 6.4 lakh crore in this demand-driven programme.**
- In the rural sections of the nation, more than **30 million water conservation-related assets have been developed since 2006.**

### **What are the Challenges?**

- **Low wage rates:** NREGS wages are currently around Rs. 180 per day, which is far below the market rate. For almost a decade, the wages have been adjusted only for inflation, ignoring the average wage rate for the same kind of work. And right now, they have fallen below the minimum wage rate in 23 states, leading to a dip in participation.
- **Late Payments:** Another issue is that despite the scheme mandating that workers be paid within 15 days; these people often don't get paid at all. The past few financial years have opened with a **large balance of wage arrears- nearly Rs. 10,000 crores in 2019–20.** According to the government's portal, over 30% of wage requests have been pending since October 2019.
- **Corruption:** The biggest issue with the scheme is that even if the funding allocation increases, it's very hard to root out corrupt middlemen from the system.
- **Wasteful work:** Most officials simply offer pointless busy work that adds no value to the agricultural infrastructure in the country.

Note:



## Digital News Report 2022

### Why in News?

Recently, Digital News Report 2022 was released by Reuters Institute.

- The Reuters Institute for the Study of Journalism is **dedicated to exploring the future of journalism** worldwide through debate, engagement, and research.
- This year's report, the eleventh overall, is **based on a survey conducted by YouGuv**, a British market research and data analytics firm, in January/February 2022 through online questionnaires.
  - It covers 46 markets in six continents.

#### Fraying connections

Fewer people are reading news. This is why.

■ Too much politics/COVID-19 
 ■ Negative effect on mood 
 ■ Worn out by amount of news  
■ News is untrustworthy/biased 
 ■ Leads to arguments 
 ■ Nothing I can do with information  
■ Feelings of powerlessness 
 ■ Don't have time for news 
 ■ Hard to understand



### What are the Key Highlights of the Report?

- **Trust Issue:**
  - People are trusting news content less and less.
- **Decline in Traditional News Media:**
  - Consumption of traditional news media declined in nearly all the countries surveyed.
- **Increase in Consumers who Avoid News:**
  - The proportion of news consumers who **avoid news** has risen sharply across countries, with the report describing the phenomenon as “**selective avoidance**”.
- **Growth in Digital Subscription:**

- Despite small increases in the proportion of people willing to pay for online news (mostly in richer countries), the growth in digital subscriptions for news content seems to be leveling off.

#### ➤ Access Way:

- The **smartphone has become the dominant way** in which most people first access news in the morning.
- While Facebook remained the most-used social network for news, it is TikTok that has become the fastest-growing network, reaching 40% of 18-24-year-olds, with 15% using the platform for news.

### What is ‘Selective Avoidance’ of News?

#### ➤ About:

- Even though the majority of people remain engaged with news, the report finds that a **growing minority are increasingly rationing or limiting their exposure**.
  - The report calls this behavior “**selective avoidance**”.
- The avoidance of news has doubled in **Brazil (54%)** and the **U.K. (46%)** since 2017.

#### ➤ Reasons for the Avoidance:

- Due to the repetitiveness of the news agenda — especially around politics and **Covid-19** (43%)
- Worn out by the news (29%)
- Trust issues (29%)
- Negative effects on mood (36%)
- Leads to arguments (17%)
- Led to feelings of powerlessness (6%)
- No time for news (14%)
- Hard to understand (8%)

### What about Preferred Modes of News Consumption?

- Across markets and age groups, **text is still king** when it comes to **news consumption**.
- However, **younger audiences** were more likely to say they **watch the news**.
  - In India, **58% mostly read the news while 17% mostly watch it**.

Note:

- On the other hand, the comparable figures for Finland, which has a historic pattern of high newspaper consumption, was 85% and 3% respectively.

### ***What about the Main Gateway to News?***

- **Smartphone** being the preferred mode of access, direct access to apps and websites were becoming less important over time, giving ground to social media, which is becoming more important as a gateway to news due to its ubiquity and convenience.
- At an aggregate level, with social media preference (28%) surging ahead of direct access (23%)” notes the report.

### ***What about the Trends in India?***

- India is a strongly mobile-focused market.
- **72%** of the survey respondents accessed news through **smartphones** and **35%** did so **via computers**.
- Also, **84% of the Indian** respondents sourced news **online**, **63%** from **social media**, **59%** from **television**, and **49%** from **print**.
- **YouTube (53%) and WhatsApp (51%)** were the top social media platforms for sourcing news.
- India registered a **small increase in the level of trust, with 41% trusting news overall**.
- A minority of respondents - 36% and 35% - felt that legacy print brands and public broadcasters lacked undue political influence and business influence, respectively.



Note:

# Economic Scenario

## Highlights

- International MSMEs Day
- Salt Sector Crisis
- Participatory Notes
- Payment Vision 2025: RBI
- Sovereign Gold Bond Scheme
- Digitization of PACS
- India's Gig Economy
- Cooperative Banks
- 12th WTO Ministerial Conference
- Surety Bonds
- Card Tokenisation
- Periodic Labour Force Survey 2020-21
- World Competitiveness Index 2022
- Economic Impact of Select Decisions of the SC and NGT
- Amendments in IBBI Regulations, 2017
- Linking Credit Cards With UPI
- Open Network for Digital Commerce
- Goods and Services Tax Council

## International MSMEs Day

### Why in News?

**International MSME Day** is observed every year on 27<sup>th</sup> June all over the world to highlight the significance of MSMEs and how they play a crucial role in being the backbone of the country's economy.

- Earlier, Ministry for Micro, Small and Medium Enterprises has launched the **MSME (Micro, Small and Medium Enterprises) Sustainable (ZED-Zero Defect Zero Effect) Certification Scheme**.

### What are the Key Points?

- **History:**
  - The **United Nations (UN)** designated 27<sup>th</sup> June as Micro, Small and Medium-sized Enterprises Day through a resolution passed in the UN General Assembly in April 2017.
  - In May 2017, a program titled 'Enhancing National Capacities for Unleashing Full Potentials of MSMEs in Achieving the **Sustainable Development Goals (SDGs)** in Developing Countries was launched.
  - It has been funded by the **2030 Agenda for Sustainable Development** Sub-Fund of the United Nations Peace and Development Fund.
- **Theme for 2022:**
  - **Resilience and Rebuilding: MSMEs for Sustainable Development.**

- The theme mainly highlights that for the socio-economic development of a country **Micro-Small and Medium-Sized Enterprises is a necessary component.**

### ➤ Objectives:

- World MSME Day 2022 recognizes the potential of MSMEs and their role in strengthening the economies globally.
- It also aims to raise public awareness regarding the contribution of MSMEs to global economic growth and sustainable development.

### ➤ Significance:

- As per the **United Nations**, the formal and informal MSMEs account for 70 % of the total employment and 50 % of the **Gross Domestic Product (GDP)**.
- Moreover, **MSMEs make up 90 % of all the firms**. With such a significant contribution to the country's economy, **MSMEs are essential for the job creation, innovation and productivity growth.**
- However, despite being a key player in generating jobs, MSMEs worldwide face challenges in **working conditions, productivity, and informality** apart from the lack of support from the governments and administrations.
- World **MSME Day is celebrated to unlock the potential of such enterprises** and also to utilize it for bolstering the global economy.

Note:



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### What is MSME?

#### ➤ About:

- Micro-Small and Medium-Sized Enterprises are the organizations that do not usually employ more than 250 employees, however, are responsible for creating more than two-thirds of all jobs globally.

Revised MSME Classification			
Composite Criteria : Investment And Annual Turnover			
Classification	Micro	Small	Medium
Manufacturing & Services	Investment < Rs 1 cr and Turnover < Rs 5 cr	Investment < Rs 10 cr and Turnover < Rs 50 cr	Investment < Rs 20 cr and Turnover < Rs 100 cr

#### ➤ Role of MSME in Indian Economy:

- They are the **growth accelerators of the Indian economy**, contributing about 30% of the country's **Gross Domestic Product (GDP)**.
- In terms of exports, they are an integral part of the supply chain and contribute about 48% of the overall exports.
- MSMEs also play an **important role in employment generation**, as they employ about 110 million people across the country.
  - Interestingly, MSMEs are intertwined with the rural economy as well, as more than half of the MSMEs operate in rural India.

### What are the Related Initiatives?

- **The Micro Small and Medium Enterprises Development (MSMED) Act:** It was notified in 2006 to address policy issues affecting MSMEs as well as the coverage and investment ceiling of the sector.
- **Prime Minister's Employment Generation programme (PMEGP):** It is a credit linked subsidy scheme, for setting up of new micro-enterprises and to generate employment opportunities in rural as well as urban areas of the country.
- **Scheme of Fund for Regeneration of Traditional Industries (SFURTI):** It aims to properly organize the artisans and the traditional industries into clusters and thus provide financial assistance to make them competitive in today's market scenario.
- **A Scheme for Promoting Innovation, Rural Industry & Entrepreneurship (ASPIRE):** The scheme promotes innovation & rural entrepreneurship through rural Livelihood Business Incubator (LBI), Technology Business Incubator (TBI) and Fund of Funds for start-up creation in the agro-based industry.

- **Interest Subvention Scheme for Incremental Credit to MSMEs:** It was introduced by the **Reserve Bank of India** wherein relief is provided upto 2% of interest to all the legal MSMEs on their outstanding fresh/incremental term loan/working capital during the period of its validity.
- **Credit Guarantee Scheme for Micro and Small Enterprises:** Launched to facilitate easy flow of credit, guarantee cover is provided for collateral free credit extended to MSMEs.
- **CHAMPIONS portal:** It aims to assist Indian MSMEs march into the big league as National and Global CHAMPIONS by solving their grievances and encouraging, supporting, helping and hand holding them.
- **MSME Innovative Scheme:** It ensures support through guidance, financial support, technical support, and more to MSMEs to scale up.
- **Udyam Registrations Portal:** This new portal assists the government in aggregating the data on the number of MSMEs in the country.
- **MSME SAMBANDH:** It is a Public Procurement Portal. It was launched to monitor the implementation of the Public Procurement from MSEs by Central Public Sector Enterprises.

## Salt Sector Crisis

### Why in News?

The Salt Industry is facing enormous challenges in meeting the demand and handling the crisis faced by salt farmers and workers.

- While **farmers are facing low prices due to the non-availability of minimum support prices**, workers are also in distress due to lack of proper arrangements for wages and social security.

### What is the position of Salt Sector?

- **India:**
  - India ranks **third in the production of salt in the world** next to the USA and China.
  - **Sea salt** constitutes about **70% of the total salt production in the country**.
  - Salt manufacturing activities are carried out in the **coastal states** of Gujarat, Tamil Nadu, Andhra

Note:



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Pradesh, Maharashtra, Karnataka, Orissa, West Bengal Goa and hinterland State of Rajasthan.

- **Gujarat produces about 28.5 million tonnes of salt per year**, which is more than **80% of the country's total production**.

➤ **Worldwide:**

- The **worldwide salt production is currently 200 million tons** and exceeding the mark rapidly.
- Worldwide industries manufacture this huge quantity of salt **not only for consumption but for non-edible and industrial purposes as well**.

### ***What are the Methods of Production?***

➤ **Solar Evaporation Method:**

- Solar salt production is, typically, the capturing of salt water in shallow ponds where the sun evaporates most of the water.

➤ **Rock Salt Mining Method:**

- Salt exists as deposits in ancient underground seabed, which became buried through tectonic changes over thousands of years. Many salt mines use the **"room and pillar"** system of mining.
  - Shafts are sunk down to the floor of the mine, and rooms are carefully constructed by drilling, cutting and blasting between the shafts, creating a checkerboard pattern.
  - After the salt is removed and crushed, a conveyor belt hauls it to the surface. Most salt produced this way is used as **rock salt**.
- **Vacuum Evaporation Method:**
  - It involves evaporation of salt brine by steam heat in large commercial evaporators, called **vacuum pans**.
  - This method yields a very high purity salt, fine in texture, and principally used in those applications requiring the highest quality salt.

### ***What is the Salt Sector Crisis?***

➤ **Minimum Support price:**

- The **Indian Salt Manufacturers' Association (ISMA)** has demanded the classification of salt production as agricultural activity under the ministry of agriculture instead of its current status as an industry governed by the ministry of industries & mines.

- **Mining produces hardly 0.5% salt**. 99.5% of salt is produced either from sea water or from sub soil water and the whole process is done by **seeding, farming and harvesting**.

- Unseasonal rains and floods are resulting in demand for Minimum Support Price.

- **Minimum Support Price (MSP)** is a form of market intervention by the Government of India to insure agricultural producers against any sharp fall in farm prices.

- ◆ The major objectives are to **support the farmers from distress sales** and to **procure food grains for public distribution**.

➤ **Wages and Social Security:**

- Companies have replaced cooperatives and they decide the wages of these workers and the production of farmers. Most of them are migrant labourers.
- The cooperative sector is more or less passive. Workers are going through serious health issues and economic distress with no minimum wages or social security.
- 12 workers died when the wall of a packing unit collapsed in Morbi.
- Projects such as **Rann Sarovar**, a freshwater lake construction project in 5,000 square kilometers of this area, will render about 50,000 people jobless.

### ***What is the Role of Government in Development of Salt Industries?***

- Salt is a **central subject** listed as item number 58 of the Union List of the **7th Schedule of the Constitution**. It is listed as a **mining industry**.
  - The Government of India has **de-licensed the Salt Industry** by deleting provisions relating to Salt in the **Central Excise & Salt Act, 1944**.
- The **Salt Commissioner's Organization** plays a facilitating role in overall growth and development of the Salt Industry in the country.
- A separate **nodal agency with common rules and regulations** regarding salt production is required. Minimum wages and social security must be ensured with a **uniform policy for the entire country**.

Note:



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## Participatory Notes

### Why in News?

Investment in the Indian capital markets through **Participatory notes (P-notes)** dropped to Rs 86,706 crore till May-end, 2022.

- However, according to experts, foreign investors will reverse their selling stance and return to the country's equities in the coming 1-2 quarters.
- In line with a decline in P-note investment, the assets under the custody of **Foreign Portfolio Investors (FPIs)** dropped 5% to Rs 48.23 trillion end-May, 2022 from Rs 50.74 trillion end-April, 2022.
  - This was the eighth consecutive month of net pull-out by FPIs from **equities**.

### What are the Participatory Notes?

- P-notes are **Offshore Derivative Instruments (ODIs)** issued by registered **Foreign Portfolio Investors (FPIs)** to overseas investors who wish to be a part of the Indian **stock markets without registering themselves directly**.
  - P-notes have **Indian stocks as their underlying assets**.
  - FPIs are **non-residents who invest in Indian securities like shares, government bonds, corporate bonds, etc.**
- Though P-note holders have less stringent registration requirements, **they have to go through a proper due diligence process** of the **Security and Exchange Board of India (SEBI)**.

### What are the reasons for Declining P- Notes?

- **Uncertainty around Inflation Levels:**
  - There is still uncertainty around inflation levels and the US Federal Reserve's (Fed's) actions.
  - Decline in P-Notes is being attributed due to the tightening of monetary policy by the US Fed which has been on a rate hiking spree to control inflation.
    - Other central banks, including in Britain and the Eurozone, are following suit.
- **Currency correction:**
  - Currency correction has happened to a large extent.

- A correction is a **price rebound which can be observed after every trend impulse**. After a correction takes place, the price returns to the trend. A correction on the currency market takes place due to the overselling or overbuying of instruments at the current moment in time.
- A large part of this reduction to **market correction in equity and debt portfolios**.

### What are the Expectations for P-Notes in the Future?

- Equity markets are offering some attractive valuations at these levels.
- **Supply-chain and inflation** issues should begin to **subside in the months to come**.
- Markets usually move ahead of the economic cycle.
  - It is believed that the next one/two quarters, FPIs should be coming back to allocating capital towards Indian equities.

## Payment Vision 2025: RBI

### Why in News?

The **Reserve Bank of India (RBI)** has come out with "**Payments Vision 2025**" with an objective to provide every user with **safe, secure, fast, convenient, accessible and affordable e-payment options**.

### What is Payment Vision 2025?

- **About:**
  - Payments Vision 2025 has been prepared by considering the guidance from the **Board for Regulation and Supervision of Payment and Settlement Systems of the RBI**.
  - It builds on the initiatives of **Payments Vision 2019-21**.
  - The Payments Vision 2025 document is presented across the five anchor goalposts of **Integrity, Inclusion, Innovation, Institutionalisation and Internationalisation**.
- **Theme:** E-Payments for Everyone, Everywhere, Everytime (4Es).
- **Objectives:**
  - To elevate the **payment systems towards a realm of empowering users with affordable payment options** accessible anytime and anywhere with convenience.

Note:



- To enable **geotagging of digital payment infrastructure and transactions and revisiting guidelines for Prepaid Payment Instruments (PPIs)**, including closed system PPIs.
- **Regulating all significant intermediaries in payments ecosystems** and linking credit cards and credit components of banking products to UPI.
- **To bring in enhancements to Cheque Truncation System (CTS)**, including **One Nation One Grid clearing and settlement perspective**, and creating a payment system for processing online merchant payments using internet and mobile banking.
- **Regulation of BigTechs and FinTechs** in the payments space.
- **Examining of BNPL (Book Now Pay Later) methods** and exploration of appropriate guidelines on payments involving BNPL.
- **Goals to Achieve:**
  - Volume of cheque-based payments to be less than 0.25% of the total retail payments.
  - **Tripling the number of digital payment transactions.**
  - UPI to register average annualised growth of 50% and IMPS / NEFT at 20%.
  - Increase of payment transaction turnover vis-à-vis GDP to 8.
  - Increase in **debit card transactions at PoS (Point of Sale) by 20%.**
  - Debit card usage to **surpass credit cards in terms of value.**
  - Increase in **PPI transactions** by 150%.
  - Card acceptance infrastructure to **increase to 250 lakh.**
  - Increase of registered customer base for mobile based transactions by 50% CAGR.
  - Reduction in Cash in Circulation (CIC) as a percentage of GDP.

### ***What is the Significance of the Move?***

- **Shaping India's Payment Ecosystem:**
  - The RBI's Payments Vision 2025 will be significant in shaping **India's payment ecosystem, propelling a safer, more secured, and seamless payment infrastructure.**
- **Yardstick to All Payment Players:**

- This document will act as a **yardstick for all payment players**, FinTech's and other stakeholders, encouraging them to enhance their capabilities by aligning with the RBI's overall objectives.

### ➤ **Global Reach:**

- Through initiatives such as UPI, the RBI has democratised payments within India. With the 2025 vision, payments will be available for 'Everyone, Everywhere, Every time', giving **global reach to Indian payment systems**, making them safe, secure, fast, convenient, and affordable.

### **What are the Achievements of Payments Vision 2019-21?**

- The Payments Vision 2021 had envisaged **empowering every Indian with access to a bouquet of e-payment options** that is safe, secure, convenient, quick and affordable, and had set four goalposts of Competition, Cost, Convenience and Confidence.
- These goalposts have been accomplished through the following initiatives:
  - **Competition:**
    - Creation of **regulatory sandbox**, opening access of **Centralised Payment Systems (CPS)** to non-bank PSOs, facilitation of **small value digital payments in offline mode, 'on tap' authorisation** for payment systems, internationalisation of domestic payment systems, feature phone-based payment services, framework for self regulatory organisation for payment systems, etc.
  - **Cost:**
    - Waiver of charges levied by RBI for transactions processed in the Real Time Gross Settlement (RTGS) and National Electronic Funds Transfer (NEFT) systems etc.
  - **Convenience:**
    - Availability of NEFT, RTGS and National Automated Clearing House (NACH) on 24x7x365 basis, harmonisation of Turn-Around-Time (TAT) for resolution and compensation in respect of failed transactions etc.
  - **Confidence:**
    - Framework for regulating Payment Aggregators (PAs), e-mandates for recurring transactions, tokenisation of card transactions and Card-on-File Tokenisation (CoFT) etc.

Note:

## Sovereign Gold Bond Scheme

### Why in News?

The Government of India, in consultation with the **Reserve Bank of India**, will issue **Sovereign Gold Bonds** in tranches for 2022-23.

- Investment in SGBs went up sharply during **Covid-impacted years** as investors looked for safer options amid volatility in equity markets with 2020-21 and 2021-22 accounting for nearly 75% of total sales of the bonds since the inception of the scheme in November 2015.

### What is the Sovereign Gold Bond Scheme?

#### ➤ Launch:

- The SGB scheme was launched in November 2015 with an objective to reduce the demand for physical gold and shift a part of the domestic savings - used for the purchase of gold - into financial savings.

#### ➤ Issuance:

- The Gold Bonds are issued as **Government of India Stock under the Government Securities (GS) Act, 2006**.
- These are issued by the **Reserve Bank of India (RBI)** on behalf of the Government of India.
- Bonds are sold through Commercial banks, Stock Holding Corporation of India Limited (SHCIL), designated post offices and recognised stock exchanges viz., **National Stock Exchange of India Limited** and Bombay Stock Exchange, either directly or through agents.

#### ➤ Eligibility:

- The bonds are **restricted for sale to resident individuals, Hindu Undivided Families (HUFs), trusts, universities and charitable institutions**.

#### ➤ Features:

- **Issue Price:** Gold bond prices are linked to the price of gold of 999 purity (24 carats) published by **India Bullion and Jewellers Association (IBJA)**, Mumbai.
- **Investment Limit:** Gold bonds can be purchased in the multiples of one unit, up to certain thresholds for different investors.
  - The upper limit for retail (individual) investors and HUFs is **4 kilograms (4,000 units) each per**

**financial year.** For trusts and similar entities, an upper limit of 20 kilograms per financial year is applicable.

- Minimum permissible investment is 1 gram of gold.
- **Term:** The gold bonds come with a **maturity period of eight years**, with an option to exit the investment after the first five years.
- **Interest Rate:** A fixed rate of 2.5% per annum is applicable on the scheme, payable semi-annually.
  - The interest on Gold Bonds shall be taxable as per the provision of Income Tax Act, 1961.
- **Benefit:**
  - Bonds can be used as **collateral for loans**.
  - The capital gains tax arising on **redemption of SGB to an individual has been exempted**.
    - Redemption is the **act of an issuer repurchasing a bond** at or before maturity.
    - **Capital gain is the profit earned on the sale of an asset** like stocks, bonds or real estate. It results in when the selling price of an asset exceeds its purchase price.
- **Disadvantages of Investing in SGB:**
  - This is a **long term investment** unlike physical gold which can be sold immediately.
  - Sovereign gold bonds are **listed on exchange but the trading volumes are not high**, therefore it will be difficult to exit before maturity.

## Digitization of PACS

### Why in News?

The Cabinet Committee on Economic Affairs (CCEA) approved to digitise around 63,000 **Primary Agricultural Credit Societies (PACS)**.

- PACS will be digitised at a cost of RS 2,516 crore, which will benefit about **13 crore small and marginal farmers**. Each PACS will get around RS 4 lakh to upgrade its capacity and even old accounting records will be digitised and linked to a cloud based software.

### What is the Significance of the Move?

- Computerisation of PACS will **increase their transparency**, reliability and efficiency, and will also facilitate the accounting of multipurpose PACS.

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- It will also help PACS to become a nodal centre for providing various services such as **Direct Benefit Transfer (DBT)**, **Interest Subvention Scheme (ISS)**, **Crop Insurance Scheme (PMFBY)**, and inputs like **fertilizers** and seeds.
- The move will **help generate around 10 jobs in each centre** and the aim was to increase the number of PACs to upto 3 lakh in the next five years.

### What is PACS?

- **About:**
  - PACS are the **ground-level cooperative credit institutions** that provide short-term, and medium-term agricultural loans to the farmers for the various agricultural and farming activities.
  - It works at the grassroots gram Panchayat and village level.
  - The first **Primary Agricultural Credit Society (PACS)** was formed in the year 1904.
  - The PACS functioning at the base of the co-operative banking system constitute the major retail outlets of short term and medium term credit to the rural sector.
- **Objectives:**
  - To **raise capital for the purpose of making loans** and supporting members' essential activities.
  - To **collect deposits from members** with the goal of improving their savings habit.
  - To supply agricultural inputs and services to members at reasonable prices,
  - To arrange for the supply and development of improved breeds of livestock for members.
  - To **make all necessary arrangements** for improving irrigation on land owned by members.
  - To **encourage various income-generating activities** through supply of necessary inputs and services.

### What is the Significance of PACS?

- They are **multifunctional organizations that provide a variety of services** such as banking, on-site supplies, marketing produce, and consumer goods trading.
- They function as **mini-banks to provide finance**, as well as counters to provide agricultural inputs and consumer goods.

- These societies also **provide warehousing services to farmers** in order to preserve and store their food grains.
- PACS account for 41% (3.01 crore farmers) of the **Kisan Credit Card (KCC)** loans given by all entities in the country, and 95% of these KCC loans (2.95 crore farmers) through PACS are to small and marginal farmers.

### What are the Issues with the PACS?

- **Inadequate Coverage:**
  - Though geographically active PACS cover about 90% of 5.8 villages, there are parts of the country, **especially in the north-east, where this coverage is very low.**
  - Further, the rural population covered **as members is only 50% of all the rural households.**
- **Inadequate Resources:**
  - The resources of the PACS are **much too inadequate in relation to the short-and medium-term credit needs** of the rural economy.
  - The bulk of even these inadequate funds come from higher financing agencies and not through owned funds of 'societies or deposit mobilization by them.
- **Limited Credit:**
  - First, the PACS provide **credit to only a small proportion** of the total rural population.
  - The credit given is **confined mainly to crop finance** (seasonal agricultural operations) and medium-term loans for identifiable purposes such as the digging of wells, installation of pump sets, etc.
- **Overdues:**
  - Large over-dues have become a big problem for the PACS.
  - They curb the **circulation of loanable funds, reduce the borrowing as well as lending power of societies**, and give them the bad image of the societies of defaulting debtors are willful.
  - Bigger **landowners take undue advantage of their relatively stronger position** in villages in both appropriating cheaper cooperative credit and not paying back their loans in time.

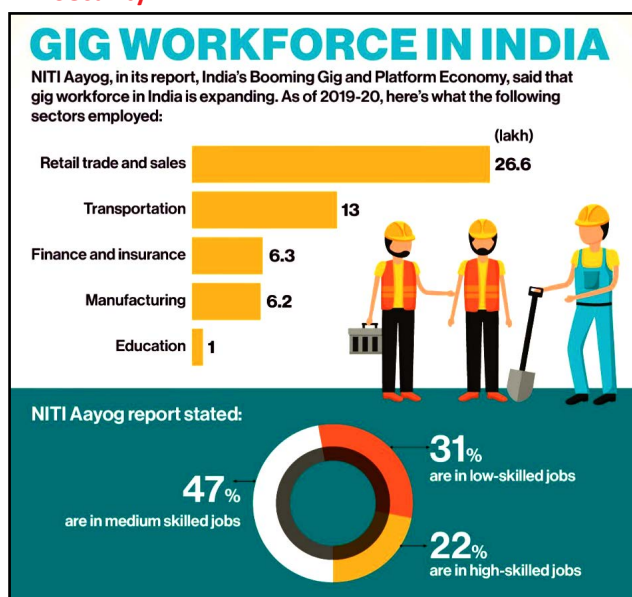
Note:

## India's Gig Economy

### Why in News?

**NITI Aayog** today launched a report titled 'India's Booming Gig and Platform Economy'.

- According to the report, **India's gig workforce is expected to expand to 2.35 crore by 2029-30.**
  - The report estimates that in 2020-21, 77 lakh (7.7 million) workers were engaged in the **gig economy**. **They constituted 2.6% of the non-agricultural workforce or 1.5% of the total workforce in India.**
- NITI Aayog recommended extending social security measures for such workers and their families in partnership mode as envisaged in the **Code on Social Security**.



### What are the Major Issues Raised by the Report?

- **Accessibility:**
  - Even though the gig economy, with the wide variety of employment options it offers, is accessible to all those who are willing to **engage in such employment, access to internet services and digital technology** can be a restrictive factor.
    - This has made the gig economy largely an **urban phenomenon**.
- **Job and Income Insecurity:**
  - Gig Workers do not **get benefit from labor regulations pertaining to wages, hours, working conditions**, and the right to collective bargaining.

- **Occupational Safety and Health Risks:**
  - Workers engaged in employment with the digital platforms, particularly, **women workers in the app-based taxi and delivery sectors, face various occupational safety and health risks.**
- **Skills Mismatch:**
  - Varying degrees of vertical and horizontal skills mismatch can be observed on online web-based platforms.
  - According to **International Labour Organization(ILO)** surveys, workers with higher educational achievements are not necessarily finding work commensurate with their skills.
- **Challenges faced due to Terms of Contract:**
  - Working conditions on digital platforms are largely regulated by the terms of **service agreements**. They tend to characterize the **contractual relationship between the platform owner and worker** as other than one of employment.

### What is the Gig Economy?

- A Gig economy is a **free market system in which temporary positions are common and organizations contract with independent workers** for short-term engagements.
  - **Gig Worker** : A person who performs work or participates in a work arrangement and earns from such activities outside of traditional employer-employee relationship"
- According to a report by Boston Consulting Group, **India's gig workforce comprises 15 million workers** employed across industries such as software, shared services and professional services.
- According to a 2019 report by the India Staffing Federation, **India is the fifth largest in flexi-staffing globally, after the US, China, Brazil and Japan.**

### What is the Potential of India's Gig Sector?

- An estimated **56% of new employment in India is being generated by the gig economy** companies across both the blue-collar and white-collar workforce.
- While the gig economy is prevalent among blue-collar jobs in India, the demand for gig workers in white-collar jobs such as project-specific consultants, salespeople, web designers, content writers and software developers are also emerging.

Note:



- The gig economy can serve up to 90 million jobs in the non-farm sectors in India with a potential to add 1.25% to the GDP over the “long term”.
- As India moves towards its stated goal of becoming a USD 5 trillion economy by 2025, the gig economy will be a major building block in bridging the income and unemployment gap.

### What are the Key Drivers of the Gig Sector?

- **Flexibility to Work from Anywhere:**
  - In the digital age, the worker need not sit at a fixed location—the job can be done from anywhere, so employers can select the best talent available for a project without being bound by geography.
- **Changing Work Approach:**
  - The millennial generation seems to have quite a different attitude to careers. They seek to do work that they want to do rather than have careers that may not satisfy their inner urges.
- **Business Models:**
  - Gig employees work on various compensation models such as fixed-fee (decided during contract initiation), time & effort, actual unit of work delivered and quality of outcome. The fixed-fee model is the most prevalent, however, the time & effort model comes a close second.
- **Emergence of a Start-up Culture:**
  - The start-up ecosystem in India has been developing rapidly. For start-ups, hiring full-time employees leads to high fixed costs and therefore, contractual freelancers are hired for non-core activities.
  - Start-ups are also looking at hiring skilled technology freelancers (on a per project basis) in areas such as engineering, product, data science and ML to bolster their tech platforms.
- **Rising demand of Contractual Employees:**
  - MNCs are adopting flexi-hiring options, especially for niche projects, to reduce operational expenses after the pandemic.
  - This trend is significantly contributing to the gig culture in India.

### What are Platform Workers?

- **About:**
  - A platform worker implies a worker working for an organisation that provides specific services using an online platform directly to individuals or organisations.

- **Examples:** Ola or Uber drivers, Swiggy or Zomato delivery agents, etc.

### Concerns:

- They fall outside of the purview of the traditional dichotomy of formal and informal labour.
- Platform workers are independent contractors as they cannot access many aspects of workplace protection, and entitlements.

### What are the Recommendations?

- **‘Platform India Initiative’:**
  - On the lines of the ‘Startup India initiative’, accelerating platformization, skill development and social financial inclusion, can provide a framework to balance the flexibility offered by platforms and social security of workers.
    - Self-employed Individuals engaged in the business of selling regional and rural cuisine, street food, etc., can be linked to platforms so that they can sell their produce to wider markets in towns and cities.
- **Funding support:**
  - Access to institutional credit may be enhanced through financial products specifically designed for platform workers and those interested in setting up their own platforms.
  - Venture capital funding, grants and loans from banks and other funding agencies should be provided to platform businesses of all sizes.
- **Gender Sensitization:**
  - Encouragement of behavior modification through raising awareness of gender equality concerns.

## Cooperative Banks

### Why in News?

Recently, the Minister of Home Affairs and Cooperation has addressed a conclave, organised by the National Federation of Urban Cooperative Banks and Credit Societies (NAFCUB), emphasising the needed Reforms for Urban Cooperative Banks (UCB).

- The NAFCUB is an Apex Level Promotional body of Urban Cooperative Banks and Credit Societies Ltd. in the Country. Its objective is to promote the urban cooperative credit movement and protect the interest of the Sector.

Note:

## What are the Cooperative Banks?

### ➤ About:

- It is an institution **established on a cooperative basis to deal with the ordinary banking business**. Cooperative banks are **founded by collecting funds through shares, accepting deposits, and granting loans**.
- They are **Cooperative credit societies** where members from a community group together to extend loans to each other, at favorable terms.
- They are registered under the **Cooperative Societies Act of the State** concerned or the **Multi-State Cooperative Societies Act, 2002**.
- The Co-operative banks are governed by the,
  - **Banking Regulations Act, 1949.**
  - **Banking Laws (Co-operative Societies) Act, 1955.**
- They are broadly divided into **Urban and Rural cooperative banks**.

### ➤ Features:

- **Customer Owned Entities:** Co-operative bank members are both customer and owner of the bank.
- **Democratic Member Control:** These banks are **owned and controlled by the members, who democratically elect a board of directors**. Members usually have equal voting rights, according to the cooperative principle of "one person, one vote".
- **Profit Allocation:** A significant part of the yearly profit, benefits or surplus is usually allocated to constitute reserves and a part of this profit can also be distributed to the co-operative members, with legal and statutory limitations.
- **Financial Inclusion:** They have played a significant role in the financial inclusion of unbanked rural masses. They provide cheap credit to masses in rural areas.

### ➤ Urban Cooperative banks (UCB):

- The term Urban Cooperative Banks (UCBs) is not formally defined but refers to primary cooperative banks **located in urban and semi-urban areas**.
- The Urban Cooperative Banks (UCBs), the Primary Agricultural Credit Societies (PACS), the Regional Rural Banks (RRBs), and Local Area Banks (LABs) could be **considered as differentiated banks as they operate in localized areas**.

- Till 1996, these banks were allowed to lend money only for non-agricultural purposes. This distinction does not hold today.
- These banks were **traditionally centred on communities and local workgroups as they essentially lent to small borrowers and businesses**. Today, their scope of operations has widened considerably.

## What are the Challenges Faced by the Cooperative Banks?

### ➤ Changing Trends in Financial Sector:

- Changes in the financial sector and evolving microfinance, FinTech companies, payment gateways, social platforms, e-commerce companies, and **Non-Banking Financial Companies (NBFCs)** challenge the continued presence of the UCBs, which are mostly small in size, lack professional management, and have geographically less diversified operations.

### ➤ Dual Control:

- The UCBs were **under dual regulation by the state registrar of societies and the RBI**.
- But in 2020, all UCBs and multi-state cooperatives were brought under the supervision of RBI.

### ➤ Money Laundering and Corruption:

- Cooperatives have also become avenues for **regulatory arbitrage, circumventing lending and anti-money laundering regulations**.
- Investigations into the case of **Punjab and Maharashtra Cooperative (PMC) Bank** scam have **shown gross financial mismanagement** and a complete breakdown of internal control mechanisms.

### ➤ Declining of Agricultural Lending:

- The RBI report noted that despite **a crucial role played by the sector, its share in total agricultural lending diminished** considerably over the years, from as high as 64 % in 1992-93 to just 11.3 % in 2019-20.

### ➤ Unfair Audit:

- It is well known that **audits are done entirely by department officials & are neither regular nor comprehensive**. Delays in the conduct of audits and submission of reports are widespread.

Note:

- **Government Interference:**
  - Right from the beginning the government has adopted an attitude of patronizing the movement. Cooperative institutions were treated as if these were part & parcel of the administrative set up of the government.
- **Limited Coverage:**
  - The size of these societies has been very small. Most of these societies are confined to a few members and their operations extended to only one or two villages. as a result their resources remain limited, which make it impossible for them to expand their means and extend their area of operations.

### ***What are the Recent Developments?***

- In January 2020, the RBI revised the **Supervisory action Framework (SAF)** for UCBs.
- In June 2020, the Central government approved an Ordinance to bring all urban and multi-state cooperative banks **under the direct supervision of RBI**.
- In 2021 RBI appointed a committee that suggested **4 tier structure for the UCBs**.
  - **Tier 1** with all unit UCBs and salary earner's UCBs (irrespective of deposit size) and all other UCBs having deposits up to Rs 100 crore.
  - **Tier 2** with UCBs of deposits between Rs 100 crore and Rs 1,000 crore,
  - **Tier 3** with UCBs of deposits between Rs 1,000 crore and Rs 10,000 crore and
  - **Tier 4** with UCBs of deposits more than Rs 10,000 crore.

## **12th WTO Ministerial Conference**

### ***Why in News?***

Recently, the 12<sup>th</sup> Ministerial Conference of the **World Trade Organization (WTO)** concluded.

- The key areas of discussions were WTO's **response to the pandemic, Fisheries subsidies negotiations, Agriculture issues** including **Public Stockholding for Food security, WTO Reforms** and **Moratorium on Custom Duties on Electronic Transmission**.

- The **164-member World Trade Organization** held its first ministerial conference in nearly five years, following **Covid-19** postponements.

### ***What are the Key Outcomes of the 12<sup>th</sup> Ministerial Conference?***

- **WTO Reform:**
  - **Members reaffirmed the foundational principles of the WTO** and committed to an open and inclusive process to reform all its functions, from deliberation to negotiation to monitoring.
  - Notably, they committed to work towards having a **well-functioning dispute settlement system** accessible to all members by 2024.
- **Agreement on Curtailing Harmful Fishing Subsidies:**
  - It would **curb 'harmful' subsidies** on illegal, unreported and unregulated fishing for **the next four years**, to better protect global fish stocks.
  - Since 2001, member states have been negotiating the banning of subsidies that promote overfishing.
  - **India and other developing countries were able to win some concessions** in this agreement. They successfully lobbied to remove a section of the proposal that would threaten some subsidies which would assist **small-scale artisanal fishing**. **Artisanal and traditional farmers would not face any restrictions under this agreement.**
- **Agreement on Global Food Security:**
  - Members agreed to a **binding decision to exempt food purchased by the UN's World Food Programme (WFP)** for humanitarian purposes, from any export restrictions.
  - **In light of the global food shortages and rising prices** caused by the **war between Ukraine and Russia**, the group's members issued a declaration on the importance of trade in global food security and that they **would avoid bans on food exports**.
  - However, countries would be allowed to restrict food supplies to ensure domestic food security needs.
- **Agreement on E-commerce Transactions:**
  - From 2017-2020, developing countries lost a potential tariff revenue of around USD 50 billion on imports from only 49 digital products.
  - **WTO members had first agreed to not impose custom duties on electronic transmissions in**

Note:



1998, when the internet was still relatively new. The moratorium has been periodically extended since then.

- However, **all members agreed to continue the long standing moratorium on custom duties on e-commerce transmissions until the subsequent Ministerial Conference or until 31<sup>st</sup> March 2024, depending on whichever comes first.**

➤ **Agreement on 'Covid-19' Vaccine Production:**

- WTO members agreed to **temporarily waive intellectual property patents on Covid-19 vaccines without the consent of the patent holder for 5 years**, so that they can more easily manufacture them domestically.
- This “will contribute to ongoing efforts to concentrate and diversify vaccine manufacturing capacity so that a crisis in one region does not leave others cut off.”
- The current agreement is a **watered down version** of the original **proposal made by India and South Africa in 2020**. They had wanted broader intellectual property waivers on vaccines, treatments and tests.
- Rich pharmaceutical companies had strongly opposed this, arguing that IP's do not restrict access to Covid vaccines and that the removal of patent protections gives researchers that quickly produced life saving vaccines, a negative message.
- The waiver agreed by the WTO was criticized by advocacy groups for being **narrow in scope, as it did not cover all medical tools like diagnostics and treatments**. “This agreement fails overall to offer an effective and meaningful solution to help increase people's access to needed medical tools during the pandemic as it does not adequately waive IP on all essential Covid-19 medical tools and it does not apply to all countries.

**What are the Issues Raised by India?**

➤ **On WTO Reforms:**

- India believes that WTO reforms discussions must focus on strengthening its fundamental principles.
- At this time, reserving **Special and Differential Treatment (S&DT)**, which includes consensus-based decision making, non-discrimination, and special and differential treatment, should not result in the preservation of inherited disparities or aggravate the imbalances.

- India takes the initiative to suggest reforms for developing countries (**Developing countries reform paper “Strengthening the WTO to Promote Development and Inclusion”**).

- India offered a proposal in which it took the lead in criticizing the **European Union** and Brazil's suggestions, both on the process and its goals. It was against an open-ended exercise on WTO amendments.

➤ **E-commerce Transactions:**

- India had asked the WTO to review the extension of the moratorium on custom duties on e-commerce transactions, which include digitally-traded goods and services.
- It argued that developing countries faced the brunt of the financial consequences of such a moratorium.

➤ **On Food Security:**

- WTO should **renegotiate subsidy rules for government-backed food purchasing programs** aimed at feeding poor citizens in developing and poor countries.
- India wants **assurances that its public stock-holding program**, which buys exclusively from the nation's farmers and has exported in the past, **cannot be challenged at the WTO as illegal**.

**What are the Important Facts about the World Trade Organization?**

➤ **About:**

- It came into being in **1995**. The **WTO** is the successor to the **General Agreement on Tariffs and Trade (GATT)** established in the wake of the **Second World War**.
  - **Its objective is to help** trade flow smoothly, freely and predictably.
  - It has **164 members**, accounting for **98%** of world trade.
- It was **developed through a series of trade negotiations**, or rounds, held under the GATT.
  - GATT is a **set of multilateral trade agreements** aimed at the abolition of quotas and the reduction of tariff duties among the contracting nations.
- The WTO's rules – the agreements – are the result of negotiations between the members.

Note:



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- The current set is largely the outcome of the 1986-94 Uruguay Round negotiations, which included a major revision of the original GATT.
- The WTO Secretariat is based in **Geneva (Switzerland)**.
- **WTO Ministerial Conference:**
  - It is the WTO's **top decision-making body and usually meets every two years**.
  - All members of the WTO are involved in the MC and they can take decisions on all matters covered under any multilateral trade agreements.

## Surety Bonds

### Why in News?

Recently the Ministry for Road Transport & Highways (MORTH) has asked insurance regulator **Insurance Regulatory and Development authority (IRDAI)** to develop a model product on Surety Bonds in consultation with general insurers.

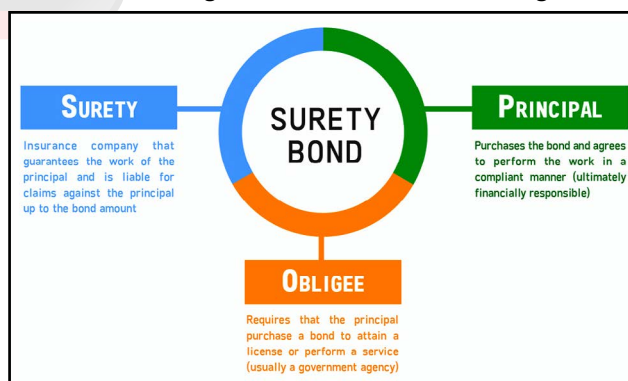
- **Several challenging issues which made Surety Bond a complete non-starter** with the insurers have also been discussed and it was proposed to IRDAI that it should design a model product.
- The issue of Changes to the Indian Contract Act as well as the **Insolvency and Bankruptcy Code (IBC)** was also highlighted so that Surety Bonds are on the same footing as bank guarantees when it comes to recourse available to them in the case of default - are also being considered.

### What is Surety Bond?

- **About:**
  - A surety bond can be defined in its simplest form as a **written agreement to guarantee compliance, payment, or performance of an act**.
  - Surety is a unique type of insurance because it involves a **three-party agreement**. The three parties in a surety agreement are:
    - **Principal** – the party that purchases the bond and undertakes an obligation to perform an act as promised.
    - **Surety** – the insurance company or surety company that guarantees the obligation will

be performed. If the principal fails to perform the act as promised, the surety is contractually liable for losses sustained.

- **Obligee** - the party who requires, and often receives the benefit of— the surety bond. For most surety bonds, the obligee is a local, state or federal government organization.
- Surety bond is **provided by the insurance company** on behalf of the contractor to the entity which is awarding the project.
- **Aim:**
  - **Surety bonds are mainly aimed at infrastructure development, mainly to reduce indirect cost for suppliers and work-contractors thereby diversifying their options and acting as a substitute for bank guarantee.**
- **Benefits:**
  - Surety bonds **protect the beneficiary** against acts or events that impair the underlying obligations of the principal.
  - They **guarantee the performance** of a variety of obligations, from construction or service contracts to licensing and commercial undertakings.



### What are the issues with the Surety Bonds?

- Surety bonds, a new concept, are **risky and insurance companies in India are yet to achieve expertise** in risk assessment in such business.
- Also, there's no clarity **on pricing, the recourse available against defaulting contractors and reinsurance options**.
  - These are critical and may impede the creation of surety-related expertise and capacities and eventually deter insurers from writing this class of businesses.

Note:

### How can it boost the Infra Project?

- The move to frame rules for surety contracts will **help address the large liquidity and funding requirements** of the infrastructure sector.
- It will **create a level-playing field for large, mid and small contractors**.
- The Surety insurance business will assist in developing an alternative to bank guarantees for construction projects.
  - This shall **enable the efficient use of working capital and reduce the requirement of collateral** to be provided by construction companies.
- Insurers shall work together with financial institutions to share risk information.
  - Hence, this shall assist in releasing liquidity in infrastructure space without compromising on risk aspects.

### What are the IRDAI Guidelines on Surety Bonds?

- IRDAI (Surety Insurance Contracts) Guidelines, 2022 came into force in April 2022.
- The regulator has said the premium charged for all surety insurance policies underwritten in a financial year, including all installments due in subsequent years for those policies, **should not exceed 10% of the total gross written premium** of that year, subject to a maximum of Rs 500 crore.
- As per **Insurance Regulatory and Development Authority of India (IRDAI)**, Insurers can issue **contract bonds**, which provide assurance to the public entity, developers, subcontractors and suppliers that the contractor will fulfil its contractual obligation when undertaking the project.
  - **Contract bonds may include:** Bid Bonds, Performance Bonds, Advance Payment Bonds and Retention Money.
    - **Bid Bonds:** It provides **financial protection to an obligee** if a bidder is awarded a contract pursuant to the bid documents, but fails to sign the contract and provide any required performance and payment bonds.
    - **Performance Bond:** It provides **assurance that the obligee will be protected if the principal or contractor fails to perform the bonded contract**. If the obligee declares the principal or contractor as being in default and terminates the contract, it can call on the Surety to meet the Surety's obligations under the bond.

- **Advance Payment Bond:** It is a promise by the Surety provider to pay the outstanding balance of the advance payment in case the contractor fails to complete the contract as per specifications or fails to adhere to the scope of the contract.
- **Retention Money:** It is a **part of the amount payable** to the contractor, which is retained and payable at the end after successful completion of the contract.

- The limit of guarantee **should not exceed 30%** of the contract value.
- Surety Insurance contracts **should be issued only to specific projects and not clubbed for multiple projects**.

## Card Tokenisation

### Why in News?

The **Reserve Bank of India (RBI)** extended the timeline for tokenisation of debit and credit cards by three months till 30<sup>th</sup> September, 2022 to avoid disruption and inconvenience to cardholders.

- After 30<sup>th</sup> September, no entity in the card transaction or payment chain, other than the card issuers and card networks, should store the CoF (Card-on-File data or storage of actual card data) and any such data stored previously will be done away with.

### What is Tokenisation and Card-on-File?

- **Tokenisation:** It refers to replacement of actual credit and debit card details with an alternate code called the **"token"**, which will be unique for a combination of card, token requestor and device.
  - A **tokenised card** transaction is **considered safer** as the actual card details are not shared with the merchant during transaction processing.
  - Customers who do not have the tokenisation facility will have to key in their name, 16-digit card number, expiry date and CVV each time they order something online.
  - As of now, about 19.5 crore tokens have been created. Opting for CoFT (**creating tokens**) is **voluntary for the cardholders**.
- **Card-on-File:** A CoF transaction is a transaction where a cardholder has authorised a merchant to store the cardholder's Mastercard or Visa payment details.
  - The cardholder then authorises that same merchant to bill the cardholder's stored Mastercard or Visa account.

Note:

- **E-commerce** companies and airlines and supermarket chains normally store card details in their system.

### PROCESS TO GET MORE TEDIOUS?

- |  |   |
|--|---|
| <ul style="list-style-type: none"> <li>➤ E-tailers &amp; payment gateways <b>currently offer to store card details</b>, including the 16-digit number</li> <li>➤ RBI's ban on storing card data would require e-commerce firms to <b>opt for tokenisation</b> or ask customers to enter the card number</li> <li>➤ Tokenisation refers to payment networks <b>linking card data to a token</b>, which is given to the merchant</li> <li>➤ This token can be used for payments but <b>only by the specified merchant</b></li> </ul> | <ul style="list-style-type: none"> <li>➤ The new rule will become the norm for all card-based transactions in e-commerce <b>from Jan 2022</b></li> <li>➤ According to a source, the <b>threat of ransomware attacks</b> have increased manifold</li> <li>➤ Online firms <b>won't be able to store card info &amp; debit recurring payments</b> (won't affect billers added with bank directly)</li> <li>➤ It is thought RBI's move is aimed at <b>increasing customer safety &amp; improving data security</b></li> </ul> |
|--|---|

### Why is Tokenisation of Cards Required?

- Many entities involved in an online card transaction chain store card data like card number and expiry date — Card-on-File (CoF) for undertaking transactions in future. While this practice **does render convenience**, **availability of card details with multiple entities increases the risk of card data being stolen or misused.**
  - There have been instances where such data stored by merchants have been compromised.
- Many jurisdictions **do not mandate Additional Factor of Authentication (AFA)** for authenticating card transactions, stolen data in the hands of fraudsters may result in **unauthorised transactions and resultant monetary loss to cardholders**. Within India as well, social engineering techniques can be employed to perpetrate frauds using such data.

## Periodic Labour Force Survey 2020-21

### Why in News?

Recently the **Periodic Labour Force Survey (PLFS)** for 2020-21 released by the **Ministry of Statistics and Programme Implementation (MOSPI)**

### What are the Other Highlights of PLFS?

- **Unemployment Rate:**
  - It shows that the **unemployment rate fell to 4.2% in 2020-21, compared with 4.8% in 2019-20.**

- **The rural areas** recorded an unemployment rate of **3.3%** and **urban areas** recorded an unemployment rate of **6.7%.**

### ➤ Labour Force Participation Rate (LFPR):

- The percentage of persons in the labour force (that is, working or seeking work or available for work) in the population **increased from 40.1%** in the previous year to **41.6%** during 2020-21.

### ➤ Worker Population Ratio (WPR):

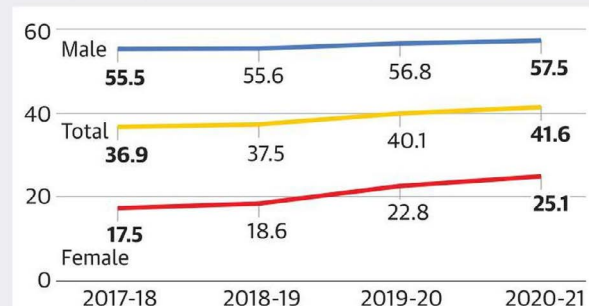
- It increased from **38.2%** of the previous year to **39.8%.**

### ➤ Migration Rate:

- The migration rate is 28.9%. The **migration rate among women was 48% and 47.8%** in rural and urban areas, respectively.

### Looking for work

The labour force participation rate (LFPR) has continued to improve further in 2020-21, according to the latest Periodic Labour Force Survey. The graph shows LFPR over years across genders



### Key Terms

- **Unemployment Rate:** The unemployment rate is defined as the **percentage of unemployed persons in the labour force.**
- **Labour Force:** The Labour force, according to **Current Weekly Status (CWS)**, is the number of persons either employed or unemployed on an average in a week preceding the date of the survey.
- **Current Weekly Status (CWS) Approach:** The urban unemployment PLFS is based on the CWS approach.
  - Under CWS, a person is considered **unemployed if he/she did not work even for one hour on any day during the week but sought or was available for work at least for one hour on any day during the period.**
- **Worker Population Ratio (WPR):** WPR is defined as the percentage of employed persons in the population.

Note:



### What is the Periodic Labour Force Survey?

- Considering the importance of the availability of labour force data at more frequent time intervals, the **National Statistical Office (NSO)** launched the Periodic Labour Force Survey (PLFS) in April 2017.
- The objective of PLFS is primarily two fold:
  - To estimate the key employment and unemployment indicators (viz. **Worker Population Ratio, Labour Force Participation Rate, Unemployment Rate**) in the short time interval of three months for the urban areas only in the **CWS**.
  - To **estimate employment and unemployment indicators** in both usual Status and CWS in both rural and urban areas annually.

### What are Recent Initiatives to fight Unemployment?

- **Support for Marginalised Individuals for Livelihood and Enterprise (SMILE)**
- **PM-DAKSH (Pradhan Mantri Dakshta Aur Kushalta Sampann Hitgrahi)**
- **Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA)**
- **Pradhan Mantri Kaushal Vikas Yojana (PMKVY)**
- **Start Up India Scheme**

#### Types of Unemployment in India

- **Disguised Unemployment:** It is a phenomenon wherein **more people are employed than actually needed**.
  - It is primarily traced in the agricultural and unorganised sectors of India.
- **Seasonal Unemployment:** It is unemployment that occurs **during certain seasons** of the year.
  - Agricultural labourers in India rarely have worked throughout the year.
- **Structural Unemployment:** It is a category of unemployment arising from the **mismatch between the jobs available in the market and the skills** of the available workers in the market.
  - Many people in India do not get jobs due to a lack of requisite skills and due to poor education levels, it becomes difficult to train them.
- **Cyclical Unemployment:** It is a **result of the business cycle**, where unemployment rises during recessions and declines with economic growth.

- Cyclical unemployment figures in India are negligible. It is a phenomenon that is mostly found in capitalist economies.
- **Technological Unemployment:** It is the loss of jobs due to **changes in technology**.
  - In 2016, World Bank data predicted that the proportion of jobs threatened by automation in India is 69% year-on-year.
- **Frictional Unemployment:** Frictional Unemployment also called **Search Unemployment**, refers to the **time lag between the jobs when an individual is searching for a new job** or is switching between the jobs.
  - In other words, an employee requires time for searching for a new job or shifting from the existing to a new job, this inevitable time delay causes frictional unemployment.
  - It is often considered voluntary unemployment because it is not caused due to the shortage of jobs, but in fact, the workers themselves quit their jobs in search of better opportunities.
- **Vulnerable Employment:** This means, people, working informally, **without proper job contracts and thus sans any legal protection**.
  - These persons are deemed 'unemployed' since records of their work are never maintained.
  - It is one of the main types of unemployment in India.

## World Competitiveness Index 2022

### Why in News?

Recently, the annual World Competitiveness Index was released by the **Institute for Management Development (IMD)**.

- **IMD is a Swiss foundation**, based in Switzerland, dedicated to the development of international business executives at each stage of their careers

#### WHO STANDS WHERE

2022	Country	2021
1	Denmark	3
2	Switzerland	1
3	Singapore	5
4	Sweden	2
5	Hong Kong	7
6	Netherlands	4
7	Taiwan, China	8
8	Finland	11
9	Norway	6
10	US	10
37	India	43

Note:



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- **India** has witnessed the **sharpest rise among the Asian economies**, with a six-position jump from **43<sup>rd</sup>** to **37<sup>th</sup>** rank on the, largely due to gains in economic performance.

### **What is World Competitiveness Index?**

- **About:**
  - The IMD World Competitiveness Yearbook (WCY), **first published in 1989**, is a comprehensive **annual report** and worldwide reference point on the competitiveness of countries.
  - It analyzes and ranks countries according to how they manage their competencies to achieve long-term value creation.
- **Factors:** It measures the prosperity and competitiveness of **countries** by examining the **Four factors** (334 competitiveness criteria):
  - **Economic performance**
  - **Government efficiency**
  - **Business efficiency**
  - **Infrastructure**

### **What are the Highlights of the Index?**

- **Top Global Performers:**
  - **Europe:** **Denmark** has moved to the **top of the 63-nation list** from the third position last year, while **Switzerland** slipped from the top ranking to the **second** position and **Singapore** regained the **third** spot from fifth.
  - **Asia:** The top-performing Asian economies are Singapore (3<sup>th</sup>), Hong Kong (5<sup>th</sup>), Taiwan (7<sup>th</sup>), China (17<sup>th</sup>) and Australia (19<sup>th</sup>).
  - **Others:** **Both Russia and Ukraine were not assessed** in this year's edition due to the limited reliability of data collected.
- **India's Performance:**
  - **Performance on four Parameters:**
    - **Economic performance:** It has improved from 37<sup>th</sup> in 2021 to 28<sup>th</sup> in 2022.
    - **Government efficiency:** It has improved from 46<sup>th</sup> in 2021 to 45<sup>th</sup> in 2022.
    - **Business efficiency:** It saw a huge improvement from 32<sup>nd</sup> rank in 2021 to 23<sup>rd</sup> in 2022.
    - **Infrastructure:** It on the other hand, **saw no change at 49.**

### **Reasons for India's Good Performance:**

- Major improvements in the context of **retrospective taxes** in 2021
- **Re-regulation of a number of sectors**, including **drones**, space and **geo-spatial mapping**.
- Significant improvement in the competitiveness of the Indian economy
- **India as a driving force in the global movement to fight climate change** and India's **pledge of net-zero by 2070** at the **COP26 summit** also sits in harmony with its strength in environment-related technologies in the ranking.

### **India's Weaknesses:**

- The **challenges that India faces include** managing trade disruptions and energy security, maintaining high **GDP** growth post the pandemic, skill development and employment generation, asset monetisation and resource mobilisation for infrastructure development.

### **India's Strengths:**

- The **top five attractive factors of India's economy** for business are - a skilled workforce, cost competitiveness, dynamism of the economy, high educational level and open and positive attitudes.

### **What are the Recent steps taken by India to Increase its Competitiveness?**

- **Towards Increasing Manufacturing Capacity:** India has made appreciable efforts to ensure resilience in manufacturing capacity such as via **Atmanirbhar Bharat** and **Make in India** initiatives which are aimed at domestic supply chains and heavy investment in manufacturing hubs.
  - The government has introduced the **Production-Linked Incentive (PLI) Scheme** in various sectors for enhancing India's manufacturing capabilities and exports.
- **Technological Advancement:** To facilitate technological advancement for increasing competitiveness, India's Department of Telecom (**DoT**) has constituted **six task forces on 6G technology**.
  - The Ministry of External Affairs, through its **New, Emerging And Strategic Technologies (NEST) division** is also ensuring India's active participation in international forums on technology governance.

Note:

- It acts as the **nodal division within the ministry for issues pertaining to new and emerging technologies** and assists in collaboration with foreign partners in the field of technology.

## Economic Impact of Select Decisions of the SC and NGT

### Why in News?

Recently, the report titled **Economic Impact of Select Decisions of the Supreme Court and National Green Tribunal of India (NGT)** has been submitted to the **Aayog**.

- The study was conducted by **CUTS (Consumer Unity and Trust Society)** which was **commissioned and fully funded by the NITI Aayog**.

### What are the Key Highlights of the Study?

- CUTS studies the **economic impacts of various judicial orders** which includes **five environment-related major orders** of the Supreme Court and the NGT.
- **The study includes:**
  - The Goa Foundation vs M/s Sesa Sterlite Ltd & Ors, 2018
  - The Hanuman Laxman Aroskar vs Union of India (Mopa Airport Case), 2019
  - The Tamil Nadu Pollution Control Board vs Sterlite Industries (I) Ltd (Sterlite Copper Plant Case), 2019
  - The National Green Tribunal Bar Association vs Ministry of Environment & Forests and Ors (Sand Mining Case), 2013
  - The Vardhman Kaushik vs Union of India & Ors (NCR Construction Ban Case), 2016
- **Economic Impacts of Environment Related Five Judicial Orders:**
  - The analysis of economic impacts due to five select environment-related court orders **estimates that 75,000 persons were adversely impacted from mid-2018 to mid-2021** due to restrictive orders related to environment.
  - The Government of India **lost revenue worth Rs 8,000 crore from mid-2018 to mid-2021**.
    - If this revenue had been spent as capital expenditure, the economic returns would have been to the tune of Rs 20,000 crore.

- Of the five verdicts, the study estimated **16,000 persons lost their jobs**.
- The industry lost close to **Rs 15,000 crore in revenues and workers lost around Rs 500 crore of income**.

### ➤ Case Study of Ban on Mining in Goa:

- **State Public Debt Increases:**
  - Due to the ban on mining in Goa, **the state public debt increased** at a Compound Annual Growth Rate (CAGR) of **10.06% from 2007 through 2021**.
  - The market loans taken by the state increased at a CAGR of **19.93%**, consequently due to mining suspension.
- **Revenue Deficit in both Centre and State:**
  - The central and state revenues cumulatively suffered an estimated **deficit of Rs 668.39 crore in taxes paid by the mining companies**,
  - Whereas the state revenues exclusively suffered an estimated deficit of Rs 1,821.32 crore.
- **Loss in Mining Companies:**
  - Mining companies are estimated to have lost Rs 6,976.71 crore during 2018-19 and 2020-2021.
- **Loss of Employment:**
  - The **net loss of employment (both direct and indirect)** comes to almost **15,000 jobs** in mining closure case.

### What are the recommendations of the study?

- **Strike Balance:**
  - It recommends the need to equip the judiciary and judges on how to **strike a balance between the economy and the environmental factors**.
  - **For instance**, on the **National Capital Region construction ban case**, the ineffectiveness of procedures adopted by the judiciary and the executive in **curbing pollution** highlights the **existence of loopholes in set procedures and system** owing to various reasons such as **capacity and expertise constraints, paucity of resources, etc.**
- **Need for Subject Specialists:**
  - It highlighted the need for subject specialists / experts guiding the judges on cases that involved economic impacts.
  - It recommended that **selection procedures of judges** should also be **changed**.

Note:



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- For better quality of judges, the **law on National Judicial Commission** could be **revived**.
- However, it is equally important for **judicial officers to be exposed to (basic) economic issues** to recognize the **need for a holistic and balanced decision and approach**.
- **Accountability for the Judiciary:**
  - It also prescribed **accountability** for the judiciary to ensure a **high standard of jurisprudence analysis and decision-making**.
  - In cases where strict adherence to legal provisions may lead to substantive economic losses, the decision-making of the SC should be **guided by the larger public good**.
  - The apex court must demand accountability by levying fines and penalties on officers and politicians involved in outright corruption and maladministration cases.
- **Transparency at All Levels:**
  - It is thus important to **inform the decision-making process at all levels**, including the judiciary, keeping in mind the **larger objective of human-centricity of economic development and environmental sustainability**, with equal considerations to the objective of **equity, environment, and economy**.

## Amendments in IBBI Regulations, 2017

### Why in News?

Recently, the Insolvency and Bankruptcy Board of India has **amended Insolvency and Bankruptcy Board of India (Grievance and Complaint Handling Procedure) Regulations, 2017** and the Insolvency and Bankruptcy Board of India (Inspection and Investigation) Regulations, 2017.

#### What are IBBI Regulations, 2017?

- **Insolvency and Bankruptcy Board of India (Grievance and Complaint Handling Procedure) Regulations, 2017:**
  - It provides a mechanism for **redressal of complaints and grievances** filed against insolvency professionals, insolvency professional agencies and information utilities.

- **Insolvency and Bankruptcy Board of India (Inspection and Investigation) Regulations, 2017:**
  - It provides a mechanism for **carrying out inspections and investigations** on insolvency professional agencies, insolvency professionals and information utilities and passing orders by Disciplinary Committee.

### What are the Key Highlights of the Amendment?

- **About:**
  - **Revisions in various timelines** related to **enforcement process** provided in the **(Grievance and Complaint Handling Procedure) Regulations, 2017** and **(Inspection and Investigation) Regulations, 2017** for addressing the issue of delay in present mechanism.
  - **Effective participation of IPAs** (Insolvency Professional Agency) in regulating the IPs (Insolvency Professional) through **examination of grievances received against IPs**.
  - **Intimation to Committee of Creditor (CoC)/Adjudicating Authority (AA)** about the outcome of Disciplinary Committee (DC) order.
- **Reason for Amendment:**
  - To have **expeditious redressal and also to avoid placing an undue burden** on the service providers.

#### What is Insolvency and Bankruptcy Board of India?

- The Insolvency and Bankruptcy Board of India was established in 2016 under the **Insolvency and Bankruptcy Code, 2016 (Code)**.
- It is a key pillar of the ecosystem responsible for **implementation of the Code** that consolidates and amends the laws relating to reorganization and insolvency resolution of corporate persons, partnership firms and individuals in a time bound manner for maximization of the value of assets of such persons, to promote entrepreneurship, availability of credit and balance the interests of all the stakeholders.
- It is a **unique regulator** as it regulates a profession as well as processes.
- It has **regulatory oversight** over the Insolvency Professionals, Insolvency Professional Agencies, Insolvency Professional Entities and Information Utilities.

Note:

- It has also been designated as the 'Authority' under the Companies (Registered Valuers and Valuation Rules), 2017 for regulation and development of the profession of valuers in the country.

## Linking Credit Cards With UPI

### Why in News?

The Reserve Bank of India (RBI) has proposed to allow linking of credit cards with the Unified Payments Interface (UPI) platform.

- A credit card is a financial instrument issued by banks with a pre-set credit limit, help make cashless transactions. It enables cardholders to pay a merchant for goods and services based on her accrued debt.
- This is intended to provide additional convenience to users and enhance the scope of Digital Payments.

### What is Unified Payment Interface?

- **About:**
  - It is an advanced version of Immediate Payment Service (IMPS)- round-the-clock funds transfer service to make cashless payments faster, easier and smoother.
  - UPI is a system that powers multiple bank accounts into a single mobile application (of any participating bank), merging several banking features, seamless fund routing & merchant payments into one hood.
  - UPI is currently the biggest among the National Payments Corporation of India (NPCI) operated systems including National Automated Clearing House (NACH), Immediate Payment Service (IMPS), Aadhaar enabled Payment System (AePS), Bharat Bill Payment System (BBPS), RuPay etc.
- **Need to Link Credit Card with UPI:**
  - The UPI has, over time, become a popular mode of payment in India with more than 26 crore unique users and five crore merchants on the platform.
  - In May 2022, about 594 crore transactions amounting to Rs 10.4 lakh crore were processed through the interface.
  - At present, the UPI facilitates transactions by linking savings/current accounts through users' debit cards.

### What is the Significance of the Move?

- **Additional Avenue for Payment:**
  - The arrangement is expected to provide an additional avenue for payment to customers and hence enhance convenience.
- **Credit Card Usage will Increase:**
  - It will deepen the reach and usage of credit cards.
  - It is anticipated that credit card usage will be zooming up in India given UPI's widespread adoption.
- **Avenues to build Credit on UPI:**
  - It opens up avenues to build credit on UPI through credit cards in India, where in the last few years, a number of startups like Slice, Uni, One etc. have emerged.
- **Bolster Transactions at more Merchant Sites:**
  - It is expected to bolster transactions and acceptance at more merchant sites.
  - People who generally prefer to pay by credit card so as to avail of a longer pay-back period or loans on credit-card outstanding, or who do not wish to touch their savings at the moment of purchase, can pay using credit cards via UPI.
- **Boost Overall Spending:**
  - The move will provide a significant boost to overall spending via credit cards — currently, spending through the use of credit cards is more than double the average spend via debit cards. More spending is generally a force multiplier for the economy.
- **Increase Average Ticket Size of Financial Transactions:**
  - Besides accelerating digital transactions this measure is also expected to affect the average ticket size of financial transactions.
    - Currently the average ticket size per transaction is Rs 1,600 while it is Rs 4,000 in credit cards.
  - So, with the new development the UPI transaction ticket size is likely to go up to somewhere around Rs 3,000 to Rs 4,000, analysts claim.

### What are the Challenges?

- It is not clear how the Merchant Discount Rate (MDR) will be applied to UPI transactions done through credit cards.
  - The MDR is a fee that a merchant is charged by their issuing bank for accepting payments from their customers via credit and debit cards.

Note:



- According to a norm **that has been in effect since January 2020, UPI and RuPay attract zero-MDR, meaning that no charges are applied to these transactions.**
- Applicability of zero-MDR on UPI could also be a reason why other card networks such as Visa and Mastercard may not have been onboarded to UPI for credit cards yet.

## Open Network for Digital Commerce

### Why in News?

Recently, the government has launched the pilot phase of **Open Network for Digital Commerce (ONDC)** with an aim to “democratise” the country’s fast growing digital e-commerce space that is currently dominated by the two U.S.-headquartered firms — Amazon and Walmart.

### What is ONDC?

#### ➤ About:

- ONDC is a freely accessible government-backed platform that aims to democratize e-commerce by **moving it from a platform-centric model to an open network** for buying and selling goods and services.
  - Under ONDC, it is envisaged that **a buyer registered on one participating e-commerce site (for example, Amazon) may purchase goods from a seller on another participating e-commerce site (for example, Flipkart).**
  - Presently, buyers and sellers have to be on the same app for a transaction which happens through the same platform. For example, a buyer needs to go to Amazon, to buy a product from a seller on Amazon.
- It is **a not-for-profit organisation that will offer a network to enable local digital commerce stores** across industries to be discovered and engaged by any network-enabled applications.
  - The open network concept extends beyond the retail sector, to any digital commerce domains including wholesale, mobility, food delivery, logistics, travel, urban services, etc.

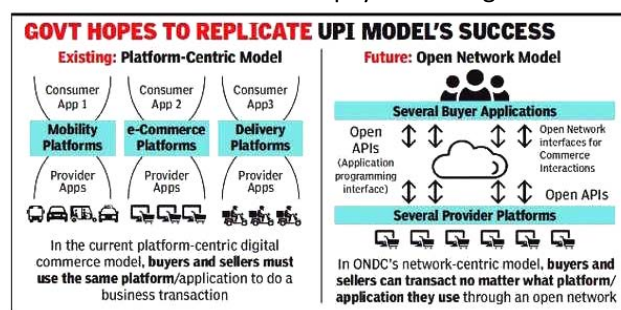
- It is neither an aggregator application nor a hosting platform, and **all existing digital commerce applications and platforms can voluntarily choose to adopt** and be a part of the ONDC network.
- The ONDC aims **at promoting open networks developed on open-sourced methodology**, using open specifications and open network protocols, independent on any specific platform.
- Implementation of ONDC, which is expected to be on the lines of **Unified Payments Interface (UPI)** could bring various operational aspects put in place by e-commerce platforms to the same level.
- The project to integrate e-commerce platforms through a network based on open-source technology has been tasked to the **Quality Council of India.**
  - Open source refers to a software program or platform with source code that is readily accessible and which can be modified or enhanced by anyone. Open-source access grants users of an application permission to fix broken links, enhance the design, or improve the original code.

#### ➤ Benefits:

- The ONDC will standardise operations like **cataloguing, inventory management, order management and order fulfilment, hence making it simpler and easier** for small businesses to be discoverable over network and conduct business.

#### ➤ Potential Issues:

- Experts have pointed out **some likely potential issues such as getting enough number of e-commerce platforms** to sign up, along with issues related to customer service and payment integration.



### What is the Significance?

- On ONDC, buyers and sellers **may transact irrespective of the fact that they are attached to one specific e-commerce portal.**

Note:



- This could give a **huge booster shot to smaller online retailers** and new entrants.
  - However, if mandated, this could be problematic for larger e-commerce companies, which have their own processes and technology deployed for these segments of operations.
- ONDC is expected to **digitise the entire value chain, standardise operations, promote inclusion of suppliers**, derive efficiency in logistics and enhance value for consumers.
- The platform envisages **equal-opportunity participation and is expected to make e-commerce more inclusive**

**and accessible** for consumers as they can potentially discover any seller, product or service by using any compatible application/platform, thus increasing their freedom of choice.

- It will **enable transactions of any denomination**, thus making ONDC a truly 'open network for democratic commerce'.
- Over the next five years, the ONDC expects to bring on board 90 crore users and 12 lakh sellers on the network, enabling **730 crore additional purchases**.

## Open Network for Digital Commerce

### What is ONDC?

ONDC is a freely accessible government backed platform that aims to democratise e-commerce by moving it from a platform centric model to an open network for buying and selling of goods and services. It aims to enable buying of products from all participating e-commerce platforms by consumers through a single platform. It is an initiative of the Department for Promotion of Industry and Internal Trade (DPIIT) under the Ministry of Commerce and Industry.

### What is a Platform Centric Model?

A platform is a business model that creates value by facilitating exchanges between two or more interdependent groups, usually buyers and sellers. Buyers and sellers have to be on the same app for a transaction which happens through the same platform. For example, a buyer needs to go to Amazon, to buy a product from a seller on Amazon.

### Advantages

Will standardise operations like cataloguing, inventory management, order management and order fulfilment, hence making it simpler and easier for small businesses to be discoverable over network and conduct business. For buyers, there would be access to more sellers and faster deliveries due to access to hyper-local retailers.

### How is ONDC different?

The ONDC model is trying to replicate the success of the Unified Payments Interface (UPI) in the field of digital payments. Under ONDC, it is envisaged that a buyer registered on one participating e-commerce site (for example, Amazon) may purchase goods from a seller on another participating e-commerce site (for example, Flipkart). The open network concept extends beyond the retail sector, to any digital commerce domains including wholesale, mobility, food delivery, logistics, travel, urban services, etc.

### Potential Issues

Getting enough number of e-commerce platforms to sign up, issues related to customer service and payment integration.



## Goods and Services Tax Council

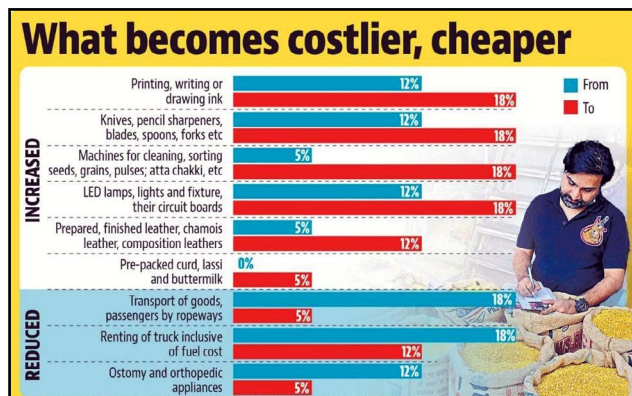
### Why in News?

Recently, at the 47<sup>th</sup> meeting of the **Goods and Services Tax (GST)** Council, chaired by Union Finance Minister, officials approved hiking the rates for some goods and services while removing exemptions for several mass consumption items to simplify the rate structure.

### What is the GST Council?

- **Background:**
  - The Goods and Services Tax regime came into force after the Constitutional (122<sup>nd</sup> Amendment) Bill was passed by both Houses of Parliament in 2016.
  - More than 15 Indian states **then ratified it in their state Assemblies**, after which the President gave his assent.

Note:



#### ➤ About:

- The GST Council is a joint forum of the Centre and the states.
- It was **set up by the President as per Article 279A (1)** of the amended Constitution.

#### ➤ Members:

- The members of the Council include the **Union Finance Minister (chairperson)**, the Union Minister of State (Finance) from the Centre.
- **Each state can nominate a minister in-charge** of finance or taxation or any other minister as a member.

#### ➤ Functions:

- The Council, according to Article 279, is meant to **“make recommendations to the Union and the states on important issues** related to GST, like the goods and services that may be subjected or exempted from GST, model GST Laws”.
- It also decides on various rate slabs of GST.
  - For instance, an interim report by a panel of ministers has suggested imposing 28 % GST on casinos, online gaming and horse racing.

#### ➤ Recent Developments:

- This is the **first meeting since a decision of the Supreme Court** in May 2022, Supreme Court stated that the **recommendations of the GST Council are not binding**.
- The court said **Article 246A of the Constitution gives both Parliament and state legislatures** “simultaneous” power to legislate on GST and recommendations of the Council “are the product of a collaborative dialogue involving the Union and States”.

- This was **hailed by some states, such as Kerala and Tamil Nadu**, who believe states can be more flexible in accepting the recommendations as suited to them.

### What is Goods and Services Tax?

#### ➤ About:

- GST was introduced **through the 101<sup>st</sup> Constitution Amendment Act, 2016**.
- It is **one of the biggest indirect tax reforms** in the country.
  - It was introduced with the slogan of **‘One Nation One Tax’**.
- The GST has subsumed indirect taxes like **excise duty, Value Added Tax (VAT), service tax, luxury tax etc.**
- It is essentially a consumption tax and is levied at the final consumption point.

#### ➤ Tax Structure under GST:

- Central GST to cover Excise duty, Service tax etc,
- State GST to cover VAT, luxury tax etc.
- Integrated GST (IGST) to cover inter-state trade.
  - IGST per se is not a tax but a system to coordinate state and union taxes.
- It has a 4-tier tax structure for all goods and services under the slabs- 5%, 12%, 18% and 28%.

#### ➤ Reasons for introducing GST:

- To **mitigate the double taxation**, cascading effect of taxes, multiplicity of taxes, classification issues etc., and has led to a common national market.
- The GST that a merchant **pays to procure goods or services** (i.e. on inputs) can be set off later against the tax applicable on supply of final goods and services.
  - The set off tax is called input tax credit.
- The GST **avoids the cascading effect or tax on tax** which increases the tax burden on the end consumer.

### What is the Significance of GST?

- **Create a Unified Common Market:** Help to create a unified common national market for India. It will also give a boost to foreign investment and **“Make in India”** campaign.

Note:

- **Streamline Taxation:** Through harmonization of laws, procedures and rates of tax between Centre and States and across States.
- **Increase Tax Compliance:** Improved environment for compliance as all returns are to be filed online, input credits to be verified online, encouraging more paper trail of transactions at each level of supply chain;
- **Discourage Tax evasion:** Uniform SGST and IGST rates will reduce the incentive for evasion by eliminating rate arbitrage between neighbouring States and that between intra and inter-state sales
- **Bring about Certainty:** Common procedures for registration of taxpayers, refund of taxes, uniform formats of tax return, common tax base, common system of classification of goods and services will lend greater certainty to taxation system;
- **Reduce Corruption:** Greater use of IT will reduce human interface between the taxpayer and the tax administration, which will go a long way in reducing corruption;
- **Boost Secondary Sector:** It will boost export and manufacturing activity, generate more employment and thus increase **GDP (Gross Domestic Product)** with gainful employment leading to substantive economic growth.

#### ***What are the Issues Associated with GST?***

- **Multiple Tax Rates:** Unlike many other economies which have implemented this tax regime, India has

multiple tax rates. This hampers the progress of a single indirect tax rate for all the goods and services in the country.

- **New Cesses crop up:** While GST scrapped multiplicity of taxes and **cesses**, a new levy in the **form of compensation cess was introduced for luxury and sin goods**. This was later expanded to include automobiles.
- **Trust Deficit:** The Union government's proclivity to levy and appropriate cess revenues for itself without sharing them with the states has lent credence to the wisdom of guaranteed compensation for states.
  - It turned out to be prescient as **GST failed to live up to its economic promises and states' revenues were protected** through this guarantee.
- **Economy Outside GST purview:** Nearly **half the economy remains outside GST**. E.g. petroleum, real estate, electricity duties remain outside GST purview.
- **The complexity of tax filings:** The GST legislation requires the **filing of the GST annual returns by specified categories of taxpayers** along with a GST audit. But, filing annual returns is a complex and confusing one for the taxpayers. Apart from that, the annual filing also includes many details that are waived in the monthly and quarterly filings.
- **Higher Tax Rates:** Though rates are rationalised, there is **still 50 % of items are under the 18 % bracket**. Apart from that, there are certain essential items to tackle the pandemic that was also taxed higher. For example, the 12% tax on oxygen concentrators, 5% on vaccines, and on relief supplies from abroad.



Note:



# International Relations

## Highlights

- China's Presence in the Horn of Africa
- Partners in Blue Pacific
- WTO's Appellate Body
- Listing of Terrorist under UNSC 1267 Committee
- I2U2 Initiative
- India-Malaysia Defence Cooperation
- 14<sup>th</sup> BRICS Summit
- 24th ASEAN-India Meeting
- What is the Significance of ASEAN for India?
- West Seti Power Project: Nepal
- 48th G-7 Summit
- Partnership for Global Infrastructure and Investment (PGII)

## China's Presence in the Horn of Africa

### Why in News?

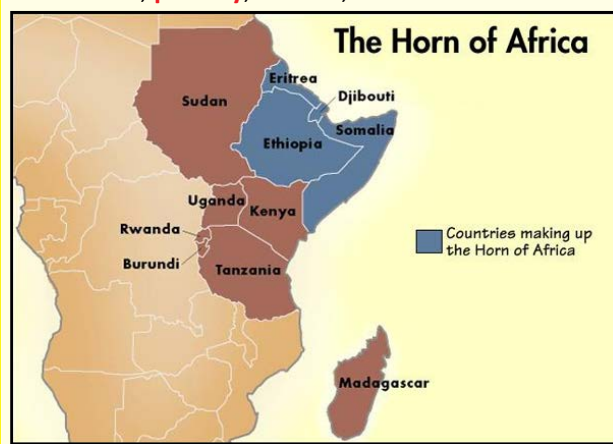
Recently, first "China-Horn of Africa Peace, Governance and Development Conference." was held.

- This is the first time China aims "to play a role in the area of security".
- The conference held in Ethiopia witnessed the / participation of foreign Ministries from the following countries of the Horn: Kenya, Djibouti, Ethiopia, Sudan, Somalia, South Sudan, and Uganda.

### What is Horn of Africa?

- The Horn of Africa is a **peninsula in Northeast Africa**.
- Located on the **easternmost part of the African mainland**, it is the fourth largest peninsula in the world.
- It lies **along the southern boundary of the Red Sea and extends hundreds of kilometres into the Guardafui Channel, Gulf of Aden, and Indian Ocean**.
- The Horn of Africa is equidistant from the equator and the Tropic of Cancer.
- The Horn contains such diverse areas as the **highlands of the Ethiopian Plateau, the Ogaden desert, and the Eritrean and Somalian coasts**.
- The Horn of Africa denotes the region containing the countries of **Djibouti, Eritrea, Ethiopia, and Somalia**.

- The area has experienced imperialism, neo-colonialism, **Cold War**, ethnic strife, **intra-African conflict**, **poverty**, disease, **famine** and much else.



### What are the Recent Chinese Projects?

- In January 2022, China asserted its three objectives in Africa: **controlling the pandemic, implementing a Forum on China-Africa Cooperation (FOCAC) outcomes, and upholding common interests while fighting hegemonic politics**.
- In the 2021 forum, the entire region of the Horn participated, and **four resolutions were adopted**:
  - **The Dakar Action Plan:**
    - The two sides commend the development of relations between China and Africa, and believe that over the past 21 years since its inception, the Forum has strongly promoted the development of relations between China and Africa, and become an important benchmark for international cooperation with Africa.

Note:

### ○ China-Africa Cooperation Vision 2035:

- It was formulated to determine the directions and objectives of mid- and long-term cooperation and promote a closer community with a shared future for China and Africa.

### ○ Sino-African Declaration on Climate Change:

- It is aimed at enhancing coordination and cooperation in the multilateral process on climate, and jointly safeguard the legitimate rights and interests of China, Africa and other developing countries.

### ○ Declaration of the Eighth Ministerial Conference of FOCAC:

- Under the theme “Deepen China-Africa Partnership and Promote Sustainable Development to Build a China-Africa Community with a Shared Future in the New Era” and committed to the development of FOCAC and to the deepening of the China-Africa comprehensive strategic and cooperative partnership, both adopted by consensus the **Dakar Declaration of the Eighth Ministerial Conference of FOCAC**.
- The FOCAC promotes China’s role in the **infrastructural and societal development of the Horn**.

- During the **Covid-19 pandemic**, China donated over 3,00,000 vaccines to Ethiopia and Uganda, and 2,00,000 vaccines to Kenya and Somalia. Sudan and Eritrea have also benefited from China’s vaccine diplomacy.

### **What are China’s Primary Interests in the Region?**

#### ➤ Infrastructure:

- One of its landmark projects was fully funding the USD 200 million African Union headquarters in Addis Ababa.
- China has also invested in the Mombasa-Nairobi rail link in Kenya, and has already delivered on railway projects in Sudan.
- It also has a **viable military hardware market in Ethiopia** and has built over 80 infrastructural projects in Somalia, including hospitals, roads, schools and stadiums.
- In Djibouti, 14 infrastructural projects are funded by China.

#### ➤ Financial Assistance:

- **Ethiopia, is one of the top five African recipients of Chinese investments**, and also has a debt of almost USD 14 billion.
- China accounts for **67% of Kenya’s bilateral debt**.
- In 2022, China promised to provide USD 15.7 million assistance to Eritrea.

#### ➤ Natural Resources (Oil and Coal):

- China is also interested in minerals such as gold, **iron-ore**, precious stones, chemicals, oil and **natural gas** in Ethiopia.
- South Sudan, a source for petroleum products, has had continued Beijing investment in the industry since the latter’s initial entry in 1995.

#### ➤ Maritime Interests:

- China’s first and only military base outside **its mainland is in Djibouti**.
- In 2022, China hinted its willingness to **develop Eritrea’s coast which would connect to China’s investments in land-locked Ethiopia**.
- The U.S. has **speculated that China wishes to build another military base in Kenya and Tanzania**, thereby increasing its military presence in the region.

### **Does China shift from its Principle of Non-Intervention?**

- For Africa, Chinese investments could lead to stable environments which could help the countries achieve their peace and development objectives. For China, conflict in the region comes at a heavy cost.
- In Ethiopia, when the conflict broke out, over **600 Chinese nationals, working on different projects, were evacuated, putting several investments at risk**.
- From a trading perspective, the region plays a significant role in achieving the objectives of the China-Africa Cooperation Vision 2035.
- China’s **move towards peace in Africa indicates a shift in its principle of non-intervention**.
- It is China’s message that **its presence in the continent has a larger objective** and is not likely to be limited to the Horn of Africa.
- This includes an aim to project **itself as a global leader and boost its international status**.
- Further, the recent developments imply that China is focusing on a multifaceted growth in the continent for the long run.

Note:



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- For Africa, **China's presence is an alternative to the European powers**, many of whom are facing criticism from African governments.
- Further, African governments, which do not conform to Western standards of democracy, interact better with powers like China and Russia.

### ***What is the Significance of Horn of Africa for India?***

- **Africa has been a Growing Interest:**
  - Africa has been of **growing interest to India for political, economic and security reasons**, especially the sub-region - the Horn of Africa.
- **Proximity to Oil Producing Region:**
  - The Horn of Africa is **strategically important since it is close to the oil-producing region of the Middle East**.
  - Approximately 40% of the oil produced in the Middle East **crosses through the shipping lanes of Red Sea**.
- **Shipping Routes:**
  - Djibouti is the choke point on this shipping route. It is due to this reason **that countries like the United States, France, and China have a military base in Djibouti**.
  - With the new reliance on the sea lines of communication for India's economic growth, **Delhi declared that its national interests were no longer limited to the Subcontinent but stretched from the "Aden to Malacca"**.

### ***What is India's Concern over China's presence?***

- **Dominance in the Indian Ocean:**
  - Situated on the north-western edge of the Indian Ocean, Djibouti could become **another of China's "string of pearls" of military alliances** and assets ringing India, including Bangladesh, Myanmar and Sri Lanka.
  - China has stepped up activity in the Indian Ocean, which India considers within **its sphere of influence, in recent days**, citing anti-piracy patrols and freedom of navigation. It has forced the Indian Navy to tighten surveillance of the strategic waters.
- **China seeks to control over Vital Shipping Routes:**

- The Indian Ocean shipping lanes **carry 80% of the world's oil and a third of the global bulk cargo**. China is looking to secure **its energy and trade transportation links along the vital shipping route**.
- **Influencing Indian Ocean Countries:**
  - The Indian Ocean is also emerging as the playground for countries eyeing a bigger role in world affairs. China is looking to **generate goodwill and influence in the Indian Ocean countries by investing in projects such ports, roads and railways**.
  - China is looking to expand its presence in the Indian Ocean, and is building ports and other infrastructure in Sri Lanka, Bangladesh and Pakistan.
- **Expanding through OBOR:**
  - The Indian Ocean figures prominently in China's ambitious **One Belt, One Road (OBOR) initiative** to build a new Silk Route.
  - India has kept away from OBOR as its centrepiece.

## **Partners in Blue Pacific**

### ***Why in News?***

Recently, **US and its allies- Australia, New Zealand, Japan and the United Kingdom** — have launched a new initiative called 'Partners in the Blue Pacific' for **"effective and efficient cooperation"** with the region's small island nations.

- Areas where PBP aims to enhance cooperation include **"climate crisis, connectivity and transportation, maritime security** and protection, health, prosperity, and education".

### ***What is the Partners in the Blue Pacific (PBP) initiative?***

- The PBP is a **five-nation "informal mechanism"** to support Pacific islands and to boost diplomatic, economic ties in the region.
- It speaks of enhancing **"prosperity, resilience, and security" in the Pacific** through closer cooperation.
- It means that through the PBP, these countries together and individually will **direct more resources** towards the Pacific Island Countries to **counter China's aggressive outreach**.
- The initiative members will **"elevate Pacific regionalism"**, and forge **stronger ties with the Pacific Islands Forum (PIF)**.

Note:

**What is Pacific Islands Forum (PIF)?**

- The Pacific Islands Forum is the region's premier political and economic policy organization.
- Founded in 1971, it comprises **18 members**: Australia, Cook Islands, Federated States of Micronesia, Fiji, French Polynesia, Kiribati, Nauru, New Caledonia, New Zealand, Niue, Palau, Papua New Guinea, Republic of Marshall Islands, Samoa, Solomon Islands, Tonga, Tuvalu, and Vanuatu.

**What is the Significance of the Pacific Region?**

- **Largest Exclusive Economic Zones (EEZs):**
  - The islands are divided on the basis of physical and human geography into three distinct parts- **Micronesia, Melanesia and Polynesia**.
  - Despite their small land area, the islands are spread out over a wide swath of the Pacific Ocean.
  - As a result, though they are some of the smallest and least populated states, they have some of the **largest Exclusive Economic Zones (EEZs) in the world**.
- **Economic Potential:**
  - Large EEZs have a great deal of economic potential since they can be used to exploit the wealth of fisheries, energy, minerals, and other marine resources present there.
  - Hence, they prefer to be identified as Big Ocean States, rather than Small Island States.
  - In fact, **Kiribati and FSM, both PICs, have EEZs larger than that of India**.
- **Role in Major Power Rivalry:**
  - The major powers of the colonial era competed with each other to gain control over these strategic territories.
  - The Pacific islands also acted as one of the major theatres of conflict during the **Second World War**- between imperial **Japan and the US**.
- **Potential Vote Bank:**
  - The Pacific Island Countries (PICs), bound together by shared economic and security concerns, account for as many votes in the **United Nations**, and act as a **potential vote bank for major powers to mobilise international opinion**.
- **Strategic Importance:**
  - In its 2019 strategy report, the **US Department of Defence** called the Indo-Pacific the "**single most consequential region for America's future**".

- Spanning a vast stretch of the globe from the west coast of the United States to the western shores of India, the region is **home to the world's most populous state (China), most populous democracy (India), and largest Muslim-majority state (Indonesia)**, and includes over half of the earth's population.

- Among the **10 largest standing armies in the world**, 7 reside in the Indo-Pacific; and 6 countries in the region possess nuclear weapons.
- **Nine of the world's 10 busiest seaports** are in this region, and **60% of global maritime trade transits through Asia**, with one-third of global shipping passing through the **South China Sea** alone.

**How is China trying to transform its ties in the Pacific?**

- As China signed a **security pact with Solomon Islands**, the deal flagged serious concerns about the **Chinese military getting a base in the southern Pacific**, close to the US island territory of Guam, and right next to Australia and New Zealand.
- China's quest to dominate crucial shipping lanes pushed **10 Pacific nations** to endorse a game-changing agreement called the "**Common Development Vision**".
  - Common Development Vision is a comprehensive strategic partnership featuring mutual respect and common development, **to build a closer China-Pacific Island Countries community with a shared future**.
  - The vision is to follow cooperative and sustainable security measures and promote regional peace - strengthening dialogue and cooperation in governance and **cybersecurity**.
- **China and the US are among 21 PIF dialogue partners**, but this year the regional forum had decided **not to engage with the dialogue partners in-person during the Fiji meet**.
- Apart from the vast marine richness of the PICs, the **Taiwan factor plays a major role in China's Pacific calculus**.
  - China, which considers Taiwan to be a breakaway territory, is **preparing for what seems like an inevitable military invasion**.
- The PICs are located geostrategically in what is referred to by China as its '**Far Seas**', the control of which will make China an effective **Blue Water capable Navy**, **an essential prerequisite for becoming a superpower**.

Note:



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- A **Blue Water Navy** is one that has the capacity to project itself over a much bigger maritime area than its maritime borders.

### **What is being done by the US and its allies to counter China?**

- Before launching the PBP, the US and its partners started the **Indo-Pacific Economic Framework for Prosperity (IPEF)**, a **trade-boosting play** in the region with **13 nations**-
  - Australia, Brunei, India, Indonesia, Japan, Malaysia, New Zealand, the Philippines, Singapore, South Korea, Thailand, Fiji and Vietnam.
- G7 announced a plan- **Partnership for Global Infrastructure and Investment (PGII)** to rival China's **Belt and Road Initiative** by promising to raise **600 billion dollars** to fund development projects in low and middle-income countries.

### **What are the Highlights of the India-PICs Relations?**

- **About:**
  - India's interaction with the PICs is still largely driven by the presence of sizable Indian Diaspora in the region.
  - Nearly **40% of Fiji's population is of Indian origin and about 3000 Indians live in Papua New Guinea at present.**
  - In terms of institutional engagements, India participates in the Pacific Island Forum (PIF) as one of the key dialogue partners of the Forum.
  - The most important development in facilitating India's interaction with the PICs in recent years has been the formation of an action-oriented **Forum for India and Pacific Islands Cooperation (FIPIC)**.
    - FIPIC, a multinational grouping, was launched in 2014.
- **Areas of Cooperation:**
  - **Blue Economy:**
    - The PICs with their resource-rich EEZs can be attractive sources of natural resources like Liquefied natural gas (LNG) and hydrocarbons to fuel India's growing economy and can also provide new markets.
    - India can engage with these countries particularly, given its own emphasis on the idea of 'Blue Economy'.

### **Climate Change and Sustainable Development:**

- The geography of these island countries makes them vulnerable to the adverse effects of climate challenges.
- The increasing soil salinity due to the rising sea level threatens the low-lying island states, also giving rise to the problem of displacement.
- Therefore, climate change and sustainable development are crucial areas of concern where a closer partnership can be developed for effective and concrete solutions.

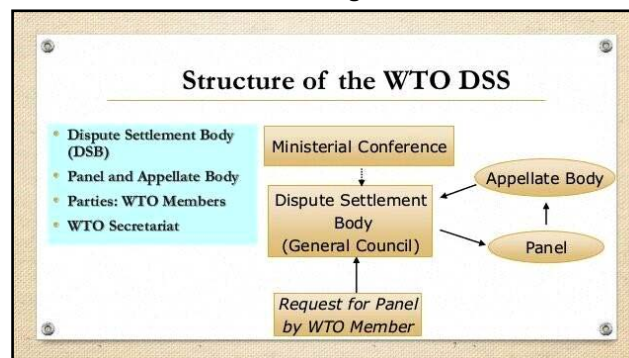
## **WTO's Appellate Body**

### **Why in News?**

There was no discussion to revive the **World Trade Organization's (WTO) Appellate Body (AB)**, which has been **redundant since 2019**, at the recently concluded **12<sup>th</sup> ministerial conference**.

### **What is WTO's Appellate Body?**

- **About:**
  - WTO was established to provide a platform for negotiations for liberating trade and creating rules, as well as to monitor and administer multilateral trades.
  - One of the key objectives was also to address the grievances between its members by acting as a court for global trade.
  - The Appellate Body, set up in 1995, is a **standing committee of seven members** with a limited four year term that presides over appeals against judgments passed in trade-related disputes brought by WTO members.
  - Disputes arise when a **member country observes that another member government is breaching a commitment or a trade agreement made at the WTO.**



Note:

### Structure

- The Appellate Body is composed of **seven Members** who are appointed by the **Dispute Settlement Body (DSB)** to serve for four-year terms.
- The **DSB has authority to establish dispute settlement panels**, refer matters to arbitration, adopt panel, Appellate Body and arbitration reports, maintain surveillance over the implementation of recommendations and rulings contained in such reports, and authorize suspension of concessions in the event of non-compliance with those recommendations and rulings.
- Each person may be **reappointed for another four-year term**.

### Appointment

- Each member of the Appellate Body is required to be a person with demonstrated expertise in law, international trade and the subject-matter of the covered agreements generally.
- They are also required to be **unaffiliated with any government and are to be broadly representative of the membership** of the WTO.
- A Chairman is elected among the Members to serve a one-year term, which can be extended for an additional period of one year.
- He is responsible for the **overall direction of Appellate Body business**.
- The current Chairperson is Hong Zhao of China.
- A Division of **three Members is selected to hear each appeal and each division elects a Presiding Member**.

### What are the Issues?

- **Stopping of the Judges' Appointment:**
  - The United States stopped the process of reappointing judges, after their terms expired in 2017. In December 2019, the number of judges in the court fell below three — the minimum required.
    - It believes the WTO is biased against it, and has criticised it for being "unfair".
  - At least three people are required to preside over an appeal, and **if new members are not appointed to replace** the two retiring ones, the body will cease to be relevant.

### ➤ Very Less Efficient at Rulings:

- Over 600 cases reached the body since its formation in 1995 and rulings were issued in some 350.
- It has even blamed that the AB has failed to issue rulings within the 90-day deadline.

### What are the Implications?

- With the Appellate Body unable to review new applications, **there is already great uncertainty over the WTO's dispute settlement process**.
- If the body is declared non-functional, countries may be **compelled to implement rulings by the panel even if they feel that gross errors** have been committed.
- Countries **may refuse to comply with the order of the panel** on the ground that it has no avenue for appeal. It will run the risk of facing arbitration proceedings initiated by the other party in the dispute.
- This also does not bode well for India, which is facing a rising number of dispute cases, especially on agricultural products.
- In the backdrop of rising trade tension between the US and China, the overall weakening of the WTO framework **could have the effect of undoing over two decades of efforts to avoid protectionism in global trade**.

### What are the Disputes Involving India at the WTO?

- The disputes where India is a **complaining party** are countervailing duty by the US on Indian steel products; measures by America concerning non-immigrant visas; renewable energy programmes of the US; and import duties imposed on steel and aluminium products by America.
- WTO disputes where **India is a responding party** include prohibition by India on import of poultry and poultry products filed by the US, and import duties on certain information and communication technology goods filed by the EU, Japan and Taiwan.
- In January 2022, India **appealed against a ruling of WTO** trade dispute settlement panel which ruled that the country's domestic support measures for **sugar and sugarcane** are inconsistent with global trade norms.

Note:



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## Listing of Terrorist under UNSC 1267 Committee

### Why in News?

India and the US jointly proposed to list **Makki, a top LeT (Lashkar-e-Taiba) Militant**, under the **UN Security Council's Al-Qaeda and ISIL (Islamic State of Iraq and the Levant) Sanctions Committee** which is also known as the **UNSC 1267 Committee**.

- But, China, placed a “technical hold” on the proposal to list Makki and this measure can last for up to six months at a time.
- Islamic State in Iraq and the Levant (ISIL), also called **Islamic State in Iraq and Syria (ISIS)** is the **Islamic State**, transnational **Sunni insurgent group operating primarily in western Iraq and eastern Syria**.

### What is United Nation Security Council?

#### ➤ About:

- The UNs **Charter established six main organs of the UN**, including the UNSC. Article 23 of the UN Charter concerns the composition of the UNSC.
  - The other **5 organs of the UN** are—the General Assembly, the Trusteeship Council, the Economic and Social Council, the International Court of Justice, and the Secretariat.
- The UNSC has been given **primary responsibility for maintaining international peace and security** and may meet whenever peace is threatened.

#### ➤ Headquarter:

- The council is **headquartered at New York**.

#### ➤ Members:

- The UNSC is composed of **15 members, 5 permanent and 10 non-permanent**.
  - **Five Permanent Members:** China, France, the Russian Federation, the United Kingdom, and the United States.
  - **Ten Non-Permanent Members:** Elected for two-year terms by the General Assembly.
    - **India, for the eighth time, has entered the UNSC as a non-permanent member last year (2021) and will stay on the council for two years i.e 2021-22.**

- Each year, the **General Assembly elects five non-permanent members** (out of ten in total) for a two-year term. The ten non-permanent seats are distributed on a regional basis.

### What is UNSC 1267 committee?

#### ➤ About:

- It was first set up in 1999, and strengthened after the September, 2001 attacks. It is now **known as the Da'esh and Al Qaeda Sanctions Committee**.
- It comprises **all permanent and non-permanent members** of the **United Nations Security Council (UNSC)**.
- The 1267 list of terrorists **is a global list, with a UNSC stamp**. It is full of Pakistani nationals and residents.
- It is one of the most important and active UN subsidiary bodies working on **efforts to combat terrorism, particularly in relation to Al Qaeda and the Islamic State group**.
- It discusses UN efforts to limit the movement of terrorists, especially those related to travel bans, the freezing of assets and arms embargoes for terrorism.
  - India has made **at least three attempts in the last decade** — in 2009, 2016 and 2017 — to list JeM chief as “global terrorist”. All attempts have been blocked by China at Pakistan’s behest.

#### ➤ Procedure of Listing:

- Any member state can **submit a proposal for listing an individual, group, or entity**.
- The proposal **must include acts or activities indicating the proposed individual/group/entity had participated “in the financing, planning, facilitating, preparing, or perpetrating of acts or activities”** linked to “ISIL (Da’esh), Al-Qaida or any cell, affiliate, splinter group or derivative thereof”.
- Decisions on listing and de-listing are adopted by consensus. The proposal is sent to all the members, and if no member objects within five working days, the proposal is adopted.
  - An “objection” means curtains for the proposal.
- Any member of the **Committee may also put a “technical hold” on the proposal and ask for more information from the proposing member state**. During this time, other members may also place their own holds.

Note:



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- The matter remains on the “**pending**” list of the **Committee until such time as the member state that has placed the hold decides to turn its decision into an “objection”**, or until all those who have placed holds remove them within a timeframe laid down by the Committee.
- Pending issues **must be resolved in six months**, but the member state that has placed the hold may ask for an additional three months. At the

end of this period, if an objection is not placed, the matter is considered approved.

#### What is Foreign Terrorist Organisation?

- FTO are foreign **organizations that are designated by the Secretary of State US**.
- This plays a critical role in fight against terrorism and is an effective means of curtailing support for terrorist activities and pressuring groups to get out of the terrorism business.

#### Prominent India-Centric Terror Organizations in Pakistan

Name	Formation	FTO Designation	About	Status in India as per the Unlawful Activities (Prevention) Act, 1967
Lashkar-e-Taiba (LET)	Late 1980s	2001	It was responsible for major 2008 attacks in Mumbai, as well as numerous other high-profile attacks.	Banned
Jaish-e-Mohammed (JEM)	2000	2001	Along with LET, it was responsible for the 2001 attack on the Indian parliament, among other attacks. JEM also has openly declared war on the United States.	Banned
Harakat-ul Jihad Islami (HUJI)	1980	2010	Initially it was formed to fight the soviet army, however after 1989, it redirected its efforts toward India, although it did supply fighters to the Afghan Taliban. HUJI today operates in Afghanistan, Pakistan, Bangladesh and India, and seeks annexation of Kashmir into Pakistan.	Banned
Harkat-ul-Mujahideen (HUM)	1985	1997	It operates mainly from Pak-Occupied Kashmir and from some Pakistani cities.	Banned
Hizb-ul Mujahideen	1989	2017	It is the militant wing of Pakistan’s largest Islamist political party and is one of the largest and oldest militant groups operating in Jammu and Kashmir.	Banned
Al Qaeda	1988	1999	It has operated primarily from the former Federally Administered Tribal Areas and in the megacity of Karachi, as well as in Afghanistan.	Banned

## I2U2 Initiative

### Why in News?

As part of I2U2 initiatives, India, Israel, UAE, and the US will hold its first virtual summit in July 2022.

### What is I2U2 Initiative?

#### ➤ Background:

- I2U2 was initially formed in October, 2021 following the **Abraham Accords** between Israel and the UAE, to deal with issues concerning **maritime security**, infrastructure and transport in the region.

Note:

- At that time, it was called the 'International Forum for Economic Cooperation'.
- That was referred as the 'West Asian Quad'.



- **About:**
  - I2U2 initiative is a new grouping of **India, Israel, USA and UAE**.
  - In the grouping's name, 'I2' stands for **India and Israel**, whereas 'U2' stands for **USA and the UAE**.
  - This is a great achievement which tells the geopolitical changes that happen in the region.
  - This will not only **revitalize and re-energize the system of alliances and partnerships** around the world, but also **stitch together partnerships** that did not exist previously or were not utilized to their full extent.
- **Significance:**
  - **Security Cooperation:**
    - This will help the countries in **exploring security cooperation** among the four nations within the framework of these new groupings.
  - **Technological Hubs:**
    - Each of these countries is a technological hub.
      - **Biotechnology**, of course, is prominent in each of these countries as well.
  - **Food Security:**
    - This initiative offers an opportunity to discuss **food security**.
  - **Work Together in Different Fields:**
    - These countries could cooperate on a number of levels, whether it's technologies, trade, climate, fighting against **Covid-19**, or even security.

### What will be the Significance of I2U2 for India?

- **Advantage from Abraham Accords:**
  - India will get **advantage of the Abraham Accords** to deepen engagement with Israel without risking its ties with the UAE and the other Arab states.
- **Benefit Market:**
  - India is a **massive consumer market**. It's a massive producer of high-tech and highly sought-after goods as well. India will benefit from this grouping.
- **Alliances:**
  - It will help India in building alliances — **political alliances, social alliances**.

## India-Malaysia Defence Cooperation

### Why in News?

Recently, Indian Defence Minister interacted with his Malaysian counterpart to deepen **Defence Cooperation** between the two countries.

- The Malaysian air force has been looking for 18 new light fighter jets with several nations, including South Korea, Pakistan, China and Sweden, making a pitch. The Indian offer is for the **LCA Mk1A version**.
- India has offered a **dual package for the indigenous fighter jets** as well as maintenance of the Russian origin Su30 MKM aircraft being operated by Malaysia.



### What are the Highlights of the Meeting?

- Both countries highlighted the areas in which **Indian defence industries could assist Malaysia**. India invited senior officers from Malaysia to India to **get a first-hand experience of the facilities and products of Indian defence industry**.

Note:

- Malaysia expressed the **need for inducting women personnel in peace keeping missions**. Both sides agreed to engage each other on this issue.
- Both countries agreed to **upgrade capability for Humanitarian Assistance and Disaster Relief (HADR) operations**.
- Both sides discussed the **existing defence cooperation activities and framework** between the two countries, and ways to further enhance them under the existing **Malaysia India Defence Cooperation Meeting (MIDCOM) framework**.
  - The next MIDCOM is scheduled to held in July 2022, and it was decided to use this **platform for a deeper engagement in defence**.

### ***What are the Key Points of India-Malaysia Relations?***

- India established **diplomatic relations with Malaysia in 1957**.
- **Economic Relation:** India and Malaysia have signed Comprehensive Economic Cooperation Agreement (CECA). CECA is a kind of **Free Trade Agreement (FTA)**.
  - India has also signed the Free Trade Agreement (FTA) in services and investments with the 10-member **Association of Southeast Asian Nations (ASEAN)**.
  - Malaysia is the third largest trading partner in ASEAN.
  - Bilateral trade between India and Malaysia is significantly biased in favour of Malaysia.
- **Defence & Security Cooperation:** Joint military exercises "Harimau Shakti" are held annually between the two countries.
- **Traditional medicine:** India and Malaysia have signed a MoU on cooperation in the field of Traditional Medicine in October 2010.
  - The Government of Malaysia has been working to popularize **AYUSH (Ayurveda, Yoga and Naturopathy, Unani, Siddha and Homoeopathy) systems** in Malaysia.
  - AYUSH systems are practiced in Malaysia.
- **Recent Developments:**
  - In 2020, India **resumed purchases of Malaysian palm oil after a gap of four-month** following a diplomatic row between the two countries.

- The former Prime Minister of Malaysia had **criticised India's Citizenship Amendment Act (CAA)** which was considered as an interference in the internal matter of India.

### ***What is the Significance of Malaysia for India?***

- As a country where 7.2 % of the population is of Indian origin, **Malaysia assumes an important place in India's foreign policy**.
- Surrounded by busy sea lines of communications such as the **Strait of Malacca** and the **South China Sea**, Malaysia is also a key pillar of **India's Act East policy** and critical to **India's maritime connectivity strategies**.

## **14<sup>th</sup> BRICS Summit**

### ***Why in News?***

Recently, Prime Minister of India attended the 14<sup>th</sup> BRICS summit which was virtually hosted by China.

- **Theme of the 14<sup>th</sup> BRICS Summit:** Foster High-quality BRICS Partnership, Usher in a New Era for Global Development.
- BRICS Plus virtual conference was also held as part of the main meeting **with ministers from countries, including the UAE, Saudi Arabia, Egypt, Kazakhstan, Indonesia, Argentina, Nigeria, Senegal, and Thailand**.

### ***What are the Key Highlights of the Summit?***

- **Adopting the Beijing Declaration:**
  - It states that **BRICS supports talks between Russia and Ukraine**.
  - The grouping is willing to support the United Nations' and the **International Committee of the Red Cross's (ICRC)** efforts to deliver humanitarian aid to Ukraine.
  - Countries also expressed concerns about the situation in Taliban-held Afghanistan.
- **Discussions on the Issues:**
  - **Humanitarian Situation in Ukraine:**
    - Concerns over the humanitarian situation in and around Ukraine and expressed **their support to efforts of the UN Secretary-General, UN Agencies and International Committee of the Red Cross (ICRC) to provide humanitarian assistance** in accordance with the basic principles of humanity, neutrality and impartiality.

Note:



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### ○ Terrorism:

- While discussing terrorism and terror cooperation, the BRICS countries said that only the **UN Security Council** has the authority for imposing sanctions.
- On Afghanistan, BRICS countries called for “**Afghanistan authorities to achieve national reconciliation** through dialogue and negotiation, and to establish a broad-based and inclusive and representative political structure”, adding that **Afghan territory must not be used to shelter terrorists or attack any other country.**

### ○ Initiative on Denial of Safe Haven to Corruption:

- The BRICS Initiative on **Denial of Safe Haven to Corruption** aims to further **strengthen anti-corruption capacity building** through education and training programs and **enhance anti-corruption exchanges and cooperation within multilateral frameworks.**

### ○ Framework for Consumer Protection in E-commerce:

- The declaration welcomed the establishment of the **Digital Economy Working Group** by upgrading the **E-commerce** Working Group.
- And the BRICS nations have agreed to promote consumer protection in e-commerce by advancing the implementation of BRICS Framework for Consumer Protection in E-commerce.

### ○ More Focus on Combating Transnational Drug Trafficking:

- The summit also expressed concern over the serious drug situation in the world. BRICS declaration appreciate **BRICS Anti-Drug Working Group's active role in combating transnational drug trafficking and promoting global drug governance** and will further strengthen drug control cooperation.

### What is BRICS?

#### ➤ About:

- BRICS is an **acronym** for the grouping of the world's leading emerging economies, namely **Brazil, Russia, India, China, and South Africa.**
- In **2001**, the **British Economist Jim O'Neill** coined the term BRIC to describe the four emerging economies of Brazil, Russia, India, and China.
- The grouping was **formalised** during the first meeting of BRIC Foreign Ministers' in **2006.**

- **South Africa was invited to join BRIC in December 2010**, after which the group adopted the acronym BRICS.

#### ➤ Share of BRICS:

- The BRICS brings together five of the largest developing countries of the world, representing 41% of the global population, 24% of the global GDP and 16% of the global trade.

#### ➤ Chairmanship:

- The **chairmanship of the forum is rotated annually** among the members, in accordance with the acronym B-R-I-C-S.

- **India is the chair for 2021.**

#### ➤ Initiatives of the BRICS:

##### ○ **New Development Bank:**

- During the **Sixth BRICS Summit in Fortaleza (Brazil) in 2014**, the leaders signed the Agreement establishing the **New Development Bank (NDB - Shanghai, China).**
- It has so far approved 70 infrastructure and sustainable development projects worth.

##### ○ **Contingent Reserve Arrangement:**

- In 2014, the **BRICS governments had signed a treaty on the setting up** of the contingent reserve arrangement
- The arrangement is **aimed at forestalling short-term balance of payments pressures, provide mutual support and strengthen financial stability of the BRICS nations.**

##### ○ **BRICS Payment System:**

- **BRICS countries are trying to create a payment system as an alternative to the SWIFT** payment system.
- This has taken on a new urgency as post Ukraine war, Russia has been frozen out of SWIFT.

##### ○ **Customs Agreements:**

- Customs agreement were signed to **coordinate and ease trade transport** between BRICS countries

##### ○ **Launched of Remote Sensing Satellite:**

- A **Remote Sensing constellation of satellites** has been launched – with 6 satellites including **2 from India, 2 from China, 1 from Russia, and 1 Brazil-China collaboration.**

Note:



## 24th ASEAN-India Meeting

### Why in News?

Recently, the **24<sup>th</sup> ASEAN-India Senior Official's Meeting (SOM)** was hosted in Delhi.

- India and ASEAN celebrated the 30<sup>th</sup> anniversary of their Dialogue Relations.
- Earlier, the **2<sup>nd</sup> ASEAN Digital Ministers' (ADGMIN) Meeting** with India held, where two sides **finalized India-ASEAN Digital work plan 2022** for future collaboration in the field.

### What is Association of Southeast Asian Nations?

#### ➤ About:

- It is a **regional grouping that promotes economic, political, and security cooperation**.
- It was **established in August 1967 in Bangkok, Thailand** with the signing of the ASEAN Declaration (Bangkok Declaration) by the founding fathers of ASEAN, namely Indonesia, Malaysia, Philippines, Singapore and Thailand.
- Its **chairmanship rotates annually**, based on the alphabetical order of the English names of Member States.
- ASEAN countries have a total population of 650 million people and a combined **Gross Domestic Product (GDP) of USD 2.8 trillion**. It is India's 4<sup>th</sup> largest trading partner with about USD 86.9 billion in trade.

#### ➤ Members:

- **ASEAN brings together ten Southeast Asian states** – Brunei, Cambodia, Indonesia, Laos, Malaysia, Myanmar, the Philippines, Singapore, Thailand and Vietnam – into one organisation.



### What are the Key Highlights?

- The SOM reviewed the ASEAN-India strategic partnership and its future direction.
- The leaders made their assessment on the progress of cooperation under three pillars of Partnership – **Political-Security, Economic and Socio-Cultural**.
- The meeting deliberated on the **steps for further implementation of the ASEAN-India Plan of Action (2021-2025)**.
- The two sides **exchanged views on regional and international issues of mutual interest** including the Covid-19 pandemic and post-pandemic recovery.
- Underlining the India's vision of the Indo-Pacific, emphasized the implementation of the **ASEAN-India Joint Statement on Cooperation on ASEAN Outlook on Indo-Pacific (AOIP)** to strengthen the ASEAN-India Strategic Partnership.
- The ASEAN side appreciated **India's support to ASEAN and ASEAN-led architecture** in the region.

### How has Been the ASEAN-India Relations?

#### ➤ About:

- ASEAN, a 10-nation grouping, is **considered one of the most influential groupings in Southeast Asia**.
- India and several other countries, including the US, China, Japan and Australia, are its dialogue partners.
- The **ASEAN-India dialogue relations started with the establishment of a sectoral partnership in 1992**.
- This graduated to full dialogue partnership in **December 1995 and summit-level partnership in 2002**.
- Traditionally the basis of India-ASEAN ties **has been trade and people-to-people ties due to shared historical and cultural roots**, a more recent and urgent area of convergence has been balancing China's rise.
  - Both **India and ASEAN aim to establish a rules-based security architecture** for peaceful development in the region, in contrast to China's aggressive policies.

#### ➤ Areas of Cooperation:

- **Economic Cooperation:**
  - ASEAN is India's **4<sup>th</sup> largest trading partner**.

Note:

- India signed **FTA (Free Trade Agreement)** in goods in 2009 and an FTA in services and investments in 2014 with ASEAN.
- India has a **Comprehensive Economic Cooperation Agreement (CECA)** with various countries of the ASEAN region which has resulted in concessional trade and a rise in investments.
- **Political Cooperation:**
  - ASEAN-India Centre (AIC) was established to undertake policy research, advocacy and networking activities with organizations and think-tanks in India and ASEAN.
- **Financial Assistance:**
  - India provides financial assistance to the ASEAN nations through various mechanism like ASEAN-India Cooperation Fund, ASEAN-India S&T Development Fund and ASEAN-India Green Fund.
- **Connectivity:**
  - India has been undertaking several connectivity projects like India-Myanmar-Thailand Trilateral (IMT) Highway and the Kaladan Multimodal Project.
  - India is also trying to establish a **Maritime Transportation Agreement** with ASEAN and also Plans for a Railway link between New Delhi in India to Hanoi in Vietnam.
- **Socio-Cultural Cooperation:**
  - Programmes to boost **People-to-People Interaction with ASEAN** are organized, such as inviting ASEAN students to India, Special Training Course for ASEAN diplomats, Exchange of Parliamentarians, etc.
- **Defence Cooperation:**
  - Joint Naval and Military exercises are conducted between India and most ASEAN countries.
  - Vietnam has traditionally been a close friend on defense issues, Singapore is also an equally important partner.

## What is the Significance of ASEAN for India?

- India needs a close diplomatic relationship with ASEAN nations both for economic and security reasons.

- Connectivity with the **ASEAN nations can allow India to improve its presence in the region.**
  - These connectivity projects keep Northeast India at the centre, ensuring the economic growth of the northeastern states.
- Improved trade ties with the ASEAN nations **would mean a counter to China's presence in the region and economic growth** and development for India.
- ASEAN occupies a centralised position in the rules-based security architecture in the **Indo-Pacific**, which is vital for India since most of its trade is dependent on maritime security.
- Collaboration with the ASEAN nations is necessary to counter insurgency in the Northeast, combat terrorism, tax evasions etc.

## West Seti Power Project: Nepal

### Why in News?

India will be taking over **West Seti Hydropower Project** nearly four years after China withdrew from it, ending a six-year engagement between 2012 and 2018.

- Earlier, the Indian **Prime Minister visited Lumbini**, where he celebrated **2566<sup>th</sup> Buddha Jayanti** celebrations, also Nepal invited India to invest in West Seti Hydropower Project.

### What is the West Seti Power Project?

- It is a proposed **750-megawatt Hydropower Project**, which is to be built on the **Seti river in far-western Nepal**, which has remained on the drawing board for the last six decades.
- Lately, the government has **remodeled the project as West Seti and Seti River (SR-6)**, a joint storage project, with the capacity to generate 1,200 megawatts of electricity.
- This storage or reservoir will **fill up during the monsoon season and the water will be drawn to generate power during peak hours** each day in the dry season.
- Its success is expected to **restore India's image in Nepal and give it weightage in future** considerations for hydropower projects, when competition is bound to be tough. West Seti, therefore, **has the potential to be a defining model for Nepal India's power relations in future.**

Note:



### How have been India-Nepal Power relations?

- Nepal is rich in power sources with around 6,000 rivers and an estimated potential for 83,000 MW.
- Mahakali treaty was signed back in 1996, to produce 6,480 MW, but India has still not been able to come out with the Detailed project Report.
- The Upper Karnali project, for which the multinational GMR signed the contract, has not made any headway for years.
- India's success in executing the 900-MW Arun Three project in eastern Nepal's Sankhuwa Sabha, and whose foundation was laid in 2018 and which is set for completion by 2023 has helped build faith in India recently.
- During the Indian PM's visit to Nepal in 2014, he had said India must start executing its projects timely.
- Nepal's Constitution has a provision under which any treaty or agreement with another country on natural resources will require Parliament's ratification by at least a two-thirds majority. That will also mean homework will be required before any hydro project is signed and given for execution.
- Nepal has a massive power shortfall as it generates only around 900 MW against an installed capacity of nearly 2,000 MW. Although it is currently selling 364 MW power to India, it has over the years importing from India.

### How have been India-Nepal Diplomatic Ties?

- After a standoff between Nepal and India led to the economic blockade of 2015, equations changed after the new PM Deuba took over Oli, who visited India recently where he decided to establish Fraternal Ties with India.
- Nepal is an important neighbour of India and occupies special significance in its foreign policy because of the geographic, historical, cultural and economic linkages/ties that span centuries.
- India and Nepal share similar ties in terms of Hinduism and Buddhism with Buddha's birthplace Lumbini located in present day Nepal.
- The two countries not only share an open border and unhindered movement of people, but they also have close bonds through marriages and familial ties, popularly known as Roti-Beti ka Rishta.
- The India-Nepal Treaty of Peace and Friendship of 1950 forms the bedrock of the special relations that exist between India and Nepal.
- Rivers originating in Nepal feed the perennial river systems of India in terms of ecology and hydropower potential.
- However, the border issue erupted in November 2019 when Nepal had released a new political map that claims Kalapani, Limpiyadhura and Lipulekh of Uttarakhand as part of Nepal's territory. The area of Susta (West Champaran district, Bihar) can also be noted in the new map.

## 48th G-7 Summit

### Why in News?

Recently, at the 48<sup>th</sup> G7 Summit, Indian Prime Minister invited the G7 Nations to tap into the huge market for clean energy technologies emerging in the country.

- Germany holds the presidency of the G7 in 2022.
- The German Presidency has invited Argentina, India, Indonesia, Senegal and South Africa to the G7 Summit.

### What is Group of Seven (G7)?

- It is an intergovernmental organisation that was formed in 1975.
- The bloc meets annually to discuss issues of common interest like global economic governance, international security and energy policy.

Note:

- The G7 countries are the **UK, Canada, France, Germany, Italy, Japan and the US.**
- **All the G7 countries and India are a part of G20.**
- **The G7 does not have a formal charter or a secretariat.** The presidency, which rotates among member countries each year, is in charge of setting the agenda. **Sherpas, ministers and envoys hammer out policy initiatives before the summit.**
- As of 2022, **G7 countries make up 10% of the world's population, 31% of global GDP, and 21% of global carbon dioxide emissions**, according to the **Summit website**. **China and India, the two most populous countries with among the largest GDP figures in the world, are not part of the grouping.**
- In all G7 countries, annual public sector expenditure exceeded revenue in 2021. Most G7 countries also had a **high level of gross debt**, especially **Japan (263% of GDP), Italy (151%) and the US (133%).**
- The G7 countries are important players in global trade. The US and Germany in particular are major export nations. Both sold goods worth well over a trillion US dollars abroad in 2021.

### What are the Other Highlights of G7 Summit?

- **PGII:**
  - G7 announced the collective mobilization of **600 billion dollars by 2027 under Partnership for Global Infrastructure and Investment (PGII)** to deliver “game-changing” and “transparent” infrastructure projects to developing and middle-income countries.
- **LiFE Campaign:**
  - Indian Prime Minister highlighted Global Initiative for **LiFE (Lifestyle for Environment) campaign**.
    - The goal of this campaign is to encourage an eco-friendly lifestyle.
- **Stand on Russia-Ukraine Crisis:**
  - Russia-Ukraine crisis has pushed the energy prices to a record high, Indian Prime Minister addressed the need for **equal energy distribution amongst the population of rich and poor nations.**
  - On **Russia-Ukraine war**, Prime Minister reiterated his stand that there must be an immediate end to the hostilities and a resolution should be reached by choosing the path of dialogue and diplomacy.

### What is Clean Energy Technology?

- **About:**
  - It refers to any process, product or service that **reduces negative environmental impacts** through significant energy efficiency improvements, **sustainable use of resources** or environmental protection activities.
  - Clean energy technologies **also endure economic growth** by enhancing the supply of energy demand and **tackling environmental challenges** and their impacts due to the use of other conventional sources of energy and their impacts due to the **use of other conventional sources of energy.**
  - Clean technology includes a broad range of technology related to recycling, **renewable energy (Wind power, solar power, biomass, hydropower, geothermal, biofuels, etc.)**, information technology, green transportation, electric motors, green chemistry, lightning, greywater, etc.
- **Emerging Market for Clean Technology in India:**
  - **Governmental Regulations:**
    - With a more active media and awareness of people towards the environment, India is driven towards adopting a **pro-environment stance in all its development strategies.**
  - **Adopting Newer & Cleaner Technologies:**
    - The adoption of newer and cleaner technologies will **help India in leap frogging into the sustainable growth** pathway as the Indian economy grows at an unprecedented rate.
  - **Global Climate Negotiations:**
    - The current global negotiations on climate change have put pressure on rapidly developing economies like India to adopt **green technologies.**
  - **Foreign Direct Investment (FDI):**
    - The Indian market offers strong **business prospects for foreign investors.**
    - India's growing economy and surging demand for clean power to strengthen energy security and reduce pollution, as well as ongoing sector reforms, is making **India one of the most attractive destinations in the world for environmentally-friendly investments.**

Note:

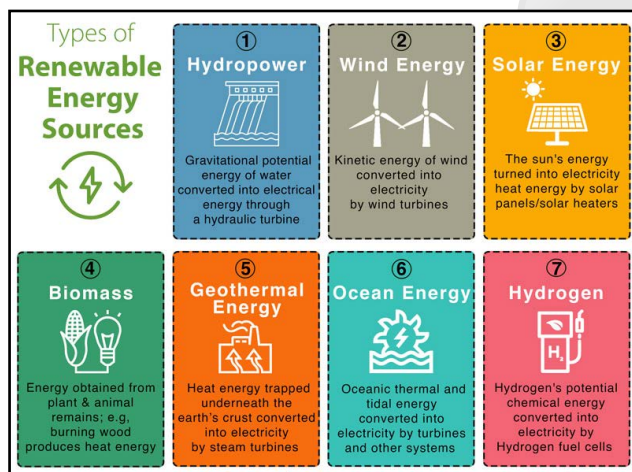


### ○ Low-carbon Technologies:

- India is particularly well placed to become a global leader in **renewable batteries and green hydrogen**.
- Other low-carbon technologies can create a market worth up to 80 billion dollars in India by 2030.

### ➤ Development in India:

- India has achieved the target of 40% energy-capacity from non-fossil sources and 10% **Ethanol-blending** in petrol.
- India has the **world's first fully solar power operated airport**.
- India is one of the largest energy producing countries from renewable sources. In the electricity sector, renewable energy (excluding large hydro) accounted for 20% of the total installed power capacity.



### **What are the Benefits of Clean Energy?**

- Clean energy provides a variety of environmental and economic benefits, including a **reduction in air pollution**.
- A diverse clean energy supply also **reduces the dependence on imported fuels**.
- Renewable clean energy also has inherent **cost savings**, as there is no need to extract and transport fuels, such as with oil or coal, as the resources replenish themselves naturally.
- Other industrial benefits of a clean energy mix are the **creation of jobs to develop, manufacture and install the clean energy resources of the future**.

## **Partnership for Global Infrastructure and Investment (PGII)**

### **Why in News?**

Recently, at the 48<sup>th</sup> G-7 Summit, the U.S. along with G7 allies unveiled the ambitious **Partnership for Global Infrastructure and Investment (PGII)**.

### **What is the Background?**

- The U.S. along with its allies had announced the launch of the **Build Back Better World (B3W)** in 2021 with the aim of narrowing the 40 trillion dollar infrastructure gap in the developing world.
  - **Partnership for Global Infrastructure and Investment** is therefore a relaunch of the B3W plan.
- The PGII is being seen as the G7's counter to China's multi-trillion dollar **Belt and Road Initiative (BRI)** to build connectivity, infrastructure, and trade projects in Asia, Europe, Africa, and Latin America.

### **What is Partnership for Global Infrastructure and Investment?**

#### ➤ About:

- PGII is a “**values-driven, high-impact, and transparent infrastructure partnership** to meet the enormous infrastructure needs of low and middle-income countries
  - And support the **United States and its allies** economic and national security interests.
- Under the PGII, **G7 will mobilize 600 billion dollars by 2027** to deliver “**game-changing**” and “**transparent**” infrastructure projects to developing and middle-income countries.
- **U.S. President** announced the country's pledge to channel **200 billion USD in grants**, public financing, and private capital over the next five years for the PGII.
- **The European Commission President** declared Europe's pledge of mobilizing **300 billion euros for the partnership** over the same period.
- **Pillars of PGII:**
  - **First:** G7 grouping aims to tackle the **climate crisis** and ensure global energy security through **clean energy** supply chains.

Note:



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- **Second:** The projects will focus on bolstering **digital Information and Communications technology (ICT)** networks facilitating technologies such as **5G** and **6G internet connectivity and cybersecurity**.

- **Fibre-optic cable project** to link Europe and Latin America.

- **Third:** The projects aim to advance **gender equality and equity**.

- **Gender Equality:** It requires equal enjoyment by women and men of socially-valued goods, opportunities, resources and rewards.

- **Gender Equity:** It recognizes that each person has different circumstances and allocates the exact resources and opportunities needed to reach an equal outcome.

- **Fourth:** The project stresses upgrading **global health infrastructure**.

- The **U.S International Development Finance Corporation (DFC)**, along with the G7 nations and the EU are disbursing a **3.3 million USD** technical assistance grant **to build a vaccine facility in Senegal**.

- The **European Commission's Global Gateway** initiative is also undertaking projects supporting the PGII such as **mRNA vaccine plants in Latin America**.

#### ➤ **Benefits to India:**

- **U.S. International Development Finance Corporation (DFC)** will invest up to USD 30 million in **Omnivore Agritech** and **Climate Sustainability Fund**.

- **Climate Sustainability Fund:** It is an impact venture capital fund that invests in entrepreneurs building the future of **agriculture, food systems, climate, and the rural economy in India**.

- The Fund seeks to **invest in companies that increase food security and promote both climate resilience and climate adaptation in India** and it will also improve the **profitability and agricultural productivity of smallholder farms**.

- **Omnivore Agritech:** It is a technology driven agricultural practice that will increase agricultural prosperity and transform food systems to make farming more resilient and sustainable.

- It includes farmer platforms, precision agriculture, Agri-biotech etc.

### **How will PGII Counter China's BRI?**

#### ➤ **Projects:**

- PGII has laid focus on **climate action and clean energy**, while **China** has built large **coal-fired plants** under BRI along with solar, hydro, and wind energy projects.

#### ➤ **Funding:**

- PGII aims to build **projects through grants and investments**. **China builds BRI's** projects by extending large, **low-interest loans to countries that have to usually be paid over 10 years**.

- While the **G7 has pledged 600 billion USD by 2027**, **It has been estimated** that **China's overall funding** for BRI by that time could reach **1.2 USD to 1.3 trillion USD** with the actual funding being higher. Under the PGII, **large private capital will be also mobilized** while **China's BRI is majorly state-funded**.

#### ➤ **Transparency:**

- While **G7 leaders emphasized 'transparency'** as the cornerstone of PGII projects, the **BRI has faced criticism for making countries sign confidential tenders** for extending massive loans, leaving countries indebted to China.

- For instance, after the **BRI's flagship 62 billion USD China-Pakistan Economic Corridor**, **Pakistan owes Beijing a large proportion of its foreign debt**.

- PGII aims to build projects through grants and investments.

### **What is the Belt & Road Initiative (BRI)?**

#### ➤ **About:**

- **Belt & Road Initiative (BRI)** is an ambitious project that focuses on **connectivity and cooperation** among multiple countries spread across the continents of **Asia, Africa, and Europe**. **BRI spans about 150 countries (China's Claim)**.

- Initially announced in the year 2013, the project involves building networks of roadways, railways, maritime ports, power grids, oil and gas pipelines, and associated infrastructure projects.

- The project covers two parts.

- **Silk Road Economic Belt:** It is land-based and is **expected to connect China with Central Asia, Eastern Europe, and Western Europe**.

Note:

- **21st Century Maritime Silk Road:** It is sea-based and is **expected to connect China's southern coast to the Mediterranean, Africa, South-East Asia, and Central Asia.**

➤ **Significance of BRI For China:**

- The Belt and Road Initiative (BRI) is the most **emblematic of China's economic and industrial might**, as of its ambitions for global, political and strategic influence.
- As infrastructure spending at home became less sustainable, China has shifted the emphasis to boost the global competitiveness of domestic businesses.
  - The large **infrastructure investments** in the least developed and developing countries have enabled China to leverage its influence around the world, potentially altering the established rules of the global order and challenging western powers.
- BRI will **strengthen China's presence in the Eurasian region** and put it in a commanding position over Asia's heartland.

➤ **Criticism:**

- Western critics have attacked the initiative as new colonialism, or the **Marshall Plan for the 21<sup>st</sup> century.**
- BRI is also being seen as a part of China's debt trap policy, wherein China intentionally extends excessive credit to another country with the intention of extracting economic or political concessions from the debtor country.

### **Why has India not joined BRI?**

- **China Pakistan Economic Corridor (CPEC)** is one of the flagship projects of BRI which is **seen by India as infringing its sovereignty.**
  - CPEC can aid Pakistan's legitimacy in the Kashmir dispute.
- China is building roads and infrastructure in the **disputed territory of Gilgit-Baltistan, which is under Pakistan's control but which India claims as a part of Jammu and Kashmir.**
- If the CPEC project gets implemented successfully, this would **hamper India's strategic interests in the South Asian region.** It will serve Beijing's strategic ambition to encircle India.
  - China's increasing footprints in the South Asian region is detrimental to India's strategic hold e.g., construction of the **Hambantota Port in Sri Lanka** provided China with a critical strategic location in the Indian Ocean.



Note:

# Social Issues

## Highlights

- Issue with the Juvenile Justice Amendment Act, 2021
- Global Trends Report on Forced Displacement in 2021
- One Nation One Ration Card
- Polio
- World Mental Health Report: WHO
- Drug Resistant Typhoid
- India State Support Programme for Road Safety

## Issue with the Juvenile Justice Amendment Act, 2021

### Why in News?

The Juvenile Justice Act Amendment is making it harder to report abuse at child care institutions by making abuse and cruelty by staffers or persons in-charge at Child Care Institutions (CCI) **non-cognisable**.

- The Juvenile Justice (Care and Protection of Children) Amendment Act, 2021 was passed to amend various provisions of the Juvenile Justice Act, 2015.

### What are the Provisions of Juvenile Justice (Care and Protection) Amendment Act 2021 ?

- **Non-Cognisable Offence:**
  - Crimes against children which are mentioned in the chapter "Other Offences Against Children" of the JJ Act, 2015 that allow an imprisonment between three and seven years will be deemed "non-cognisable".
- **Adoption:**
  - The amendment provides strength to the provision of protection and adoption of children. There are many adoption cases pending before the court and **to make proceedings of the court faster now the power is transferred to the district magistrate.**
  - Amendment provides that the **district magistrate has the authority to issue such adoption orders.**

### What are the Highlights about of Juvenile Justice Act, 2015?

- Parliament introduced and passed the **Juvenile Justice (Care and Protection of Children) Act in 2015** to **replace the Juvenile Delinquency Law and the Juvenile Justice (Care and Protection of Children Act) 2000.**
- The Act **offered provisions to allow trials of juveniles in the age group of 16-18 years** as an adult who were found to be in conflict with the law, especially heinous crimes.
- The Act also **offered provisions regarding adoption.** The Act replaced the **Hindu Adoptions and Maintenance Act (1956)** and Guardians of the ward Act (1890) with more universally accessible adoption law.
- The Act enabled smooth functioning of **adoption procedures for orphans, surrendered, and abandoned children** while making the **Central Adoption Resource Authority (CARA)** the statutory body for adoption-related matters.
- **Child Care Institutions (CCI):**
  - All Child Care Institutions, whether run by the State Government or by voluntary or non-governmental organisations are to be mandatorily registered under the Act within 6 months from the date of commencement of the Act.

### What is the Concern Associated with the Juvenile Justice Amendment Act, 2021?

- Specifically, the **amendment under challenge is the one to Section 86 of the JJ Act**, according to which **crimes under the special law**, with punishment between three to seven years, have been **reclassified as non-cognisable.**

Note:



- While the **victims themselves are unable to directly report them due to the imbalance in power**, most such crimes are **reported to the police by either parents or child rights bodies and Child Welfare Committees (CWC)**.
  - **Parents of these Children:** They are mostly daily wage labourers, are either unaware of how to, or not inclined to report the crimes to the police.
    - They **do not want to engage with the legal process** because that **would force them to take time off from work, resulting in loss of wages**.
  - **Child Welfare Committees (CWC):** CWCs' first instinct in most cases is to **"talk and arrive at a settlement"** without having to escalate the matter to the police.
- **Making these crimes non-cognisable** along with several other serious crimes under the special law **would make reporting an offence to the police even more difficult**.

#### What is a Cognizable and Non-Cognizable offence in India?

- The **Criminal Procedure Code** lays the rules for the conduct of proceedings against any person who has committed an offence under any Criminal law.
- **Cognizable Offences:**
  - A cognizable offence is an offence in which the **police officer** as per the first schedule or under any other law for the time being in force, **can arrest the convict without a warrant and can start an investigation without the permission of the court**.
  - Cognizable offences are generally heinous or serious in nature such as **murder, rape, kidnapping, theft, dowry death etc.**
  - The **first information report (FIR)** is registered **only in cognizable crimes**.
- **Non-Cognizable Offences:**
  - A non-cognizable offence is the offence listed under the first schedule of the **Indian Penal Code** and is bailable in nature.
  - In case of a non-cognizable offence, **the police cannot arrest the accused without a warrant as well as cannot start an investigation**.

- A **criminal complaint is lodged with the magistrate** who is supposed to order the concerned police station to initiate an investigation.
- The crimes of **forgery, cheating, defamation, public nuisance**, etc., fall in the category of non-cognizable crimes.
- **Cases consisting of both Cognizable and Non-Cognizable Offences:**
  - According to **Section 155(4) of the Criminal Procedure Code**, when two or more offences are there in a case, of which at least one is of cognizable nature, and other of non-cognizable nature.
    - Then the **entire case has to be dealt as a cognizable case**, and the investigating officer will have all the powers and authority as he has in investigating a cognizable case.

#### What does the Statistics Say?

- According to the **National Crime Records Bureau (NCRB)**, since it started recording these crimes in **2017**, they had risen by over **700 percent by 2019**.
- The NCRB in 2017 recorded **278 cases of crimes committed by CCI in-charges** across India involving 328 child victims. These cases rose to 1,968 by 2019, involving as many as 2,699 child victims.

#### What are Other Legal Frameworks for the Welfare of children?

- **The Protection Of Children from Sexual Offences Act (POCSO), 2013**
- **Child Labour (Protection and Regulation) Act, 2016**
- **United Nation Convention on the Right of the Child (UNCRC)**
- **National Commission for Protection of Child Rights, 2005**

### Global Trends Report on Forced Displacement in 2021

#### Why in News?

Recently, the 2022 annual Global Trends Report was published by **United Nations High Commissioner for Refugees (UNHCR)**.

Note:



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- June 20 is designated as World Refugee Day by the **United Nations**. The theme for World Refugee Day 2022 is **whoever, whatever, whenever. Everyone has got a right to seek safety.**

#### What is Global Trends Report?

- It presents key statistical trends and the latest numbers of refugees, asylum seekers, internally displaced and stateless persons worldwide as well as numbers of people who have returned to their countries or areas of origin.
- The report is **published once a year** and reflects on the previous year.
- The **figures are based on data reported by governments, non-governmental organizations and UNHCR.**

#### What are the Highlights of the Report?

- **Global Overview:**
  - Globally **100 million people were forced to flee their homes** last year due to violence, **human rights abuses, food insecurity, the climate crisis, war in Ukraine**, and other emergencies from Africa to Afghanistan.
  - There were 23.7 million new **internal displacements** globally due to disasters (these are in addition to those internally displaced due to conflict and violence). This represented a decrease of seven million, or 23%, compared to the previous year.
  - The **largest displacements** in the context of disasters in 2021 occurred in **China (6.0 million), the Philippines (5.7 million), and India (4.9 million).**
  - The **majority of the internally displaced persons returned to their home areas**, but 5.9 million people worldwide remained displaced at the end of the year due to disasters.
  - The **number of people forced to flee their homes has increased every year over the past decade** and stands **at the highest level since records began**, a trend that can be only reversed by a new, concerted push towards peacemaking.
- **India:**
  - **Nearly five million people in India were** internally displaced due to climate change and disasters in 2021.

#### What is Internal Displacement?

- **Internal Displacement (Meaning):**
  - Internal displacement describes the **situation of people who have been forced to leave their homes but have not left their country.**
- **Factors of Displacement:** Millions of people are uprooted from their homes or places of habitual residence each year **in the context of conflict, violence, development projects, disasters and climate change** and remain displaced within their countries' borders.
- **Components:** Internal displacement is based on **two components:**
  - The person's movement is **coerced or involuntary** (to distinguish them from economic and other voluntary migrants);
  - The person stays within **internationally recognised state borders** (to distinguish them from refugees).
- **Difference from Refugee:** According to the **1951 Refugee Convention**, a "refugee" is a person who has been persecuted and forced to leave his native country.
  - A precondition of being considered a refugee is that a **person crosses an international border.**
  - Unlike refugees, internally displaced people are **not the subject of any international convention.**
  - At the international level, **no single agency or organisation** has been designated as the global lead on protection and assistance of internally displaced persons.
  - However, there are **United Nations Guiding Principles on Internal Displacement.**
- **Challenges Faced by Internally Displacement Persons (IDPs):** IDPs can live under threat of **physical attack, sexual- or gender-based violence, and run the risk of being separated from family members.**
  - They are frequently deprived of adequate shelter, food and health services, and often lose their property, land or their access to livelihoods.

#### What are the Challenges associated with Internal Displacement?

- **Lack of Proper and Commonly Accepted Statistics:** In terms of the statistics relating to displacement in the context of climate change, simply put, **what is not defined cannot be quantified, and what cannot be quantified cannot be predicted.**

Note:



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- **Lack of Legal Status to Climate Refugees:** From a legal perspective, **UNHCR does not support the term “climate refugee”** which does not exist in international law. It is also very difficult to assess whether someone who has been displaced in the context of climate change would have been displaced anyway had there been no climate change.
- **Lack of historical precedent:** Secondly, the lack of historical precedent for many situations that will arise as human-related climate change progresses, whose impact on human mobility has never been observed before. This means that it **remains unclear how the changing climate will impact people’s decisions and behaviour in the future.**
- **Non-existent relationship between climate change and displacement:** Finally, the link between climate change and (forced) displacement remains **not fully measurable and there is no consensus** that it is a direct causal link, with, for example, only limited information available on the impact of climate change on mounting poverty, political instability and armed conflict.

### Way Forward

- **Return to Home country:** For most refugees, returning to their home country based on a free and informed choice would be a **preferred solution to bring their temporary status as refugees to an end.** To realize this, political stability and economic opportunities are essential to ensure that the environment refugees face upon their return allows them to reintegrate in safety and with dignity. To ensure that the returns are sustainable
- **Resettlement:** While several countries have signalled their commitment to resettlement, demonstrating their solidarity with host countries, it is an option for fewer and fewer refugees due to a significant reduction in the number of places offered by States. Resettlement is a crucial protection tool and solution, and is a core activity mandated by UNHCR’s Statute, helping to protect some of the most vulnerable refugees, who may face specific or urgent risks
- **Local Integration:** In the absence of the possibility to return safely or be resettled, pathways are available in some countries for refugees to remain long-term or permanently in their country of asylum. **Local integration helps ensure that refugees can build new lives in these countries.**

### What is UN Refugee Agency (UNHCR)?

- **About:**
  - The office of the United Nations High Commissioner for Refugees (UNHCR) was **created in 1950**, during the aftermath of the Second World War, to **help millions of Europeans who had fled or lost their homes.**
  - **In 1954, UNHCR won the Nobel Peace Prize** for its ground breaking work in Europe. But it was not long before we faced our next major emergency.
  - During the 1960s, the decolonization of Africa produced the first of that continent’s numerous refugee crises. It helped uprooted people in Asia and Latin America over the following two decades.
  - **In 1981, it received a second Nobel Peace Prize** for what had become worldwide assistance to refugees.
- **The 1951 Refugee Convention and its 1967 Protocol:**
  - They are the key legal documents that form the basis of its work. With 149 State parties to either or both, they define the term ‘refugee’ and outlines the rights of refugees, as well as the legal obligations of States to protect them.
  - The **core principle is non-refoulement**, which asserts that a **refugee should not be returned to a country where they face serious threats to their life or freedom.** This is now considered a rule of customary international law.
  - UNHCR serves as the ‘guardian’ of the 1951 Convention and its 1967 Protocol. According to the legislation, States are expected to cooperate with us in ensuring that the rights of refugees are respected and protected.

## One Nation One Ration Card

### Why in News?

Assam has become the 36<sup>th</sup> State/UT to implement **One Nation One Ration Card (ONORC).**

- With this, the ONORC programme has been successfully implemented in all states and Union Territories, **making food security portable throughout the country.**
- The government has also rolled out the ‘**MERA RATION**’ **mobile application** to take maximum advantage of the ONORC plan. The mobile app is **providing a host**

Note:



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of useful real-time information to the beneficiaries and is available in 13 languages.

- During the last two years of **Covid-19 pandemic**, **ONORC plan has significantly contributed in ensuring subsidized foodgrains to National Food Security Act (NFSA) beneficiaries**, especially migrant beneficiaries.

### **What is ONORC?**

- **About:**
  - The ONORC scheme is being implemented under **National Food Security Act (NFSA)**.
  - This system allows **all NFSA beneficiaries, particularly migrant beneficiaries**, to claim either full or part foodgrains from any **Fair Price Shop (FPS)** in the country through existing ration card with **biometric/Aadhaar authentication** in a seamless manner.
  - The system also **allows their family members back home**, if any, to claim the balance foodgrains on same the ration card.
  - The implementation of ONORC was **initiated in August 2019**.
- **Objectives:**
  - To **empower all NFSA beneficiaries to become AtmaNirbhar for their food security anywhere** in the country, through portability of their existing ration cards enabling them.
  - To seamlessly **lift their entitled subsidized foodgrains (in part or full) from any Fair Price Shop** of their choice.
  - To enable family members to lift balance/required amount of foodgrains on the same ration card at their native/ any place from the FPS of their choice.

### **What is the Significance of ONORC**

- **Enabling Right to Food:** Previously, ration cardholders can avail their entitlement of subsidised food grains under the National Food Security Act, **only from the designated Fair price shop (FPS) within the concerned state**.
  - However, **if a beneficiary were to shift to another state**, he/she would need to apply for a new ration card in the second state.
  - Thus, **ONORC envisages removing the geographical hindrance** to social justice and enabling the right to food.

- **Supporting One-Third of Population:** Nearly, **37% of the population is that of migrant labourers**. The scheme is therefore important for anyone who is going to move from one place to the other.
- **Reducing Leakages:** The ONORC can **reduce leakages, because the fundamental prerequisite of this scheme is deduplication**.
  - This will **ensure that the same person does not figure** as a beneficiary in two different locations of the country.
  - Further, the scheme is linked with Aadhaar and biometrics, this removes most possibilities of corruption.
- **Reducing Social Discrimination:** ONORC will be **particularly beneficial for women and other disadvantaged groups**, given how social identity (caste, class and gender) and other contextual factors (including power relations) provide a strong backdrop in accessing **PDS (Public Distribution System)**.

### **What are the Associated Challenges?**

- **Exclusion Error:** The digitisation of this PDS process, through Aadhaar-linked ration cards and smart cards, has been pushed in an effort to reduce leakages. However, **there has been a rise of exclusion errors** in post-Aadhaar seeding.
  - There are many sections of society who still don't have Aadhar Cards, thereby depriving them of food security.
- **Domicile-Based Social Sector Schemes:** Not only PDS, **most of the anti-poverty, rural employment, welfare and food security schemes were historically based on domicile-based access** and restricted people to access government social security, welfare and food entitlements at their place of origin.
- **Disrupting Supplies At FPS:** An FPS receives the monthly quota of products strictly in accordance with the number of people assigned to it.
  - The ONORC, when fully operational, **would disrupt this practice**, as some FPSs may have to cater to more numbers of cards even as others cater to less, owing to migration of people.

### **What has been the Performance of Scheme So Far?**

- This is one-of-its-kind Citizen Centric initiative in the country, **which is swiftly implemented in a short-span**

Note:



of time covering about 80 Crore beneficiaries, after being initiated in August 2019.

- Since 2019, about **71 crore portable transactions have taken place delivering foodgrains equivalent to about Rs 40,000 crore** in food subsidy through portability.
- At present, a **monthly average of about 3 crore portable transactions are being recorded**, delivering the subsidised NFSA and free **PMGKAY (Pradhan Mantri Garib Kalyan Anna Yojana)** foodgrains with anywhere flexibility to the beneficiaries.

### Way Forward

- If emergencies continue to hamper uptake at ration shops, **alternate delivery channels can be considered for delivering food grains** to vulnerable groups.
- Food security **should be seen from a broader framework of nutritional security**. Therefore, ONORC must allow the portability of **Integrated Child Development Services, Mid-Day Meals, immunization, health care and other facilities**.
- In the longer run, the **PDS system may be replaced by a fool-proof food coupon system** or direct benefit transfer.
  - Wherein, a Below Poverty Line family can buy rice, pulses, sugar and oil from any Kirana store at the market price, by either paying fully through the coupon or by cash.

## Polio

### Why in News?

Recently, **Vaccine-Derived Poliovirus (VDPV)** was detected in the environmental surveillance of sewage samples from Kolkata, Bengal.

- Most likely it has come from **someone's gut who is immune deficient and has since multiplied**. It is not a case of human-to-human polio transfer.
- A VDPV is a **strain of the weakened poliovirus** that was initially included in **OPV (Oral poliovirus vaccines)** and that has changed over time and **behaves more like the wild or naturally occurring virus**.

### What is Polio?

- **About:**
  - Polio is a **crippling and potentially deadly viral infectious disease** that affects the nervous system.

- There are **three individual and immunologically distinct** wild poliovirus strains:
  - Wild Poliovirus type 1 (WPV1)
  - Wild Poliovirus type 2 (WPV2)
  - Wild Poliovirus type 3 (WPV3)
- Symptomatically, **all three strains are identical**, in that they cause irreversible paralysis or even death. However, **there are genetic and virological differences, which make these three strains separate viruses** which must each be eradicated individually.

### ➤ Spread:

- The virus is transmitted by **person-to-person mainly through the faecal-oral route** or, less frequently, by a common vehicle (for example, through contaminated water or food).
- It largely **affects children under 5 years of age**. The virus **multiplies in the intestine**, from where it can invade the nervous system and can cause paralysis.

### ➤ Symptoms:

- Most people with **polio do not feel sick**. Some people have **only minor symptoms**, such as fever, tiredness, nausea, headache, pain in the arms and legs, etc.
- In rare cases, polio **infection causes permanent loss of muscle function** (paralysis).
- Polio can be **fatal if the muscles used for breathing are paralysed** or if there is an infection of the brain.

### ➤ Prevention and Cure:

- There is no cure, but it can be **prevented through Immunisation**.

### ➤ Vaccines:

- **Oral Polio Vaccine (OPV)**: It is given orally as a birth dose for institutional deliveries, then primary three doses at 6, 10 and 14 weeks and one booster dose at 16-24 months of age.
- **Injectable Polio Vaccine (IPV)**: It is introduced as an additional dose along with the 3<sup>rd</sup> dose of **DPT (Diphtheria, Pertussis and Tetanus)** under the **Universal Immunisation Programme (UIP)**.

### ➤ Recent Outbreaks:

- In 2019, polio outbreaks were recorded in the Philippines, Malaysia, Ghana, Myanmar, China, Cameroon, Indonesia and Iran, which were mostly

Note:

vaccine-derived in which a rare strain of the virus genetically mutated from the strain in the vaccine.

- According to the **WHO (World Health Organisation)**, if the oral vaccine-virus is excreted and allowed to circulate in an unimmunised or under-immunised population for at least 12 months, it can mutate to cause infections.

#### ➤ India & Polio:

- India received polio-free certification by the WHO in 2014, after three years of zero cases.
  - This achievement has been spurred by the successful **Pulse Polio Campaign** in which all children were administered polio drops.
  - The last case due to wild poliovirus in the country was detected on 13<sup>th</sup> January 2011.

#### What are the Polio Eradication Measures?

##### ➤ Global:

##### ○ Global Polio Eradication Initiative:

- It was launched in **1988 by the Global Polio Eradication Initiative (GPEI), by national governments and WHO. Presently, 80% of the world's** population is now living in certified polio-free regions.
  - An estimated 1.5 million childhood deaths have been prevented, through the systemic administration of vitamin A during polio immunization activities.

##### ○ World Polio Day:

- It is observed every year on **24<sup>th</sup> October** in order to call on countries to stay vigilant in their fight against the disease.

##### ➤ Indian:

##### ○ Pulse Polio Programme:

- It was started with an objective of achieving hundred percent coverage under Oral Polio Vaccine.

##### ○ Intensified Mission Indradhanush 2.0:

- It was a nationwide immunisation drive to mark the 25 years of **Pulse polio programme (2019-20)**.

##### ○ Universal Immunization Programme (UIP):

- It was launched in 1985 with the modification to 'Expanded Programme of Immunization (EPI). The objectives of the Programme include:

- Rapidly increasing immunization coverage, Improving the quality of services, Establishing a reliable cold chain system to the health facility level, Introducing a district-wise system for monitoring of performance, Achieving self-sufficiency in vaccine production.

## World Mental Health Report: WHO

### Why in News?

Recently the **World Health Organization (WHO)** released the **World Mental Health Report**.

### What are the highlights of the report?

- WHO has called for more action on addressing mental health issues worldwide, especially now that the 'Covid-19' pandemic has been cited as contributing to **worsening mental health**.
- Almost a billion people, 14% of whom were adolescents, were living with some form of mental health issues in 2019. For some, this resulted in dying by suicide which accounted for one in 100 deaths, with more than half of them happening before the age of 50.
- Depression and anxiety spiked 25 % in the first year of the pandemic (2020).
- All 194 WHO member states have adopted the **Comprehensive Mental Health Action Plan 2013–2030** but progress has been slow.
- Other **structural threats** to mental well-being besides the pandemic include social and economic inequalities, public health emergencies, war and the climate crisis.
- Those living with mental health issues **live some two decades less than the general population**.
- Access to mental health services remains poor. Globally, **71% of psychosis patients don't receive treatment**. High-income countries provide treatment to 70% psychosis patients and low-income countries manage the same for just 12%.
- The WHO's report lists **three keys 'paths to transformation'** to quicken progress on the Comprehensive Mental Health Action Plan 2013–2030.

Note:

- These include more focussed investment in **mental health, reshaping environments** such as homes, communities, schools, workplaces and health care services that influence mental health and **strengthening the quality of mental health care** by diversifying it.

### What is Mental health?

- According to the **World Health Organization (WHO)**, mental health is a **state of well-being** in which the individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community.'
- **Like Physical health, Mental health is also important** at every stage of life, from childhood and adolescence through adulthood.

### What are the Challenges related to Mental Health?

- **High Public Health Burden:** An estimated **150 million people across India** are in need of mental health care interventions, according to India's latest **National Mental Health Survey 2015-16**.
- **Lack of Resources:** **Low proportion of the mental health workforce** in India (per 100,000 population) include psychiatrists (0.3), nurses (0.12), psychologists (0.07) and social workers (0.07).
  - **Low financial resource allocation** of just over a percent of **Gross Domestic Product** on healthcare has created impediments in public access to affordable mental healthcare.
- **Other Challenges:** **Poor awareness about the symptoms of mental illness**, social stigma and abandonment of mentally ill, especially old and destitute, leads to social isolation and reluctance on part of family members to seek treatment for the patient.
  - This has resulted in a massive **treatment gap**, which further worsens the present mental illness of a person.
- **Post-Treatment gap:** There is **need for proper rehabilitation** of the mentally ill persons post his/her treatment which is currently not present.
- **Rise in Severity:** Mental health problems tend to **increase during economic downturns**, therefore special attention is needed during times of economic distress.

### What are the Steps Taken by the Government for Promoting Mental Health?

- **Constitutional Provision:** SC has held healthcare to be a fundamental right under **Article 21** of the Constitution.
- **National Mental Health Program (NMHP):** To address the huge burden of mental disorders and shortage of qualified professionals in the field of mental health, the government has been implementing the **National Mental Health Program (NMHP) since 1982**.
  - The Program was **re-strategized in 2003** to include two schemes, viz. Modernization of State Mental Hospitals and Up-gradation of Psychiatric Wings of Medical Colleges/General Hospitals.
- **Mental HealthCare Act 2017:** It guarantees **every affected person access to mental healthcare** and treatment from services run or funded by the government.
  - It has significantly reduced the scope for the use of Section 309 IPC and made the attempt to commit suicide punishable only as an exception.
- **Kiran Helpline:** In 2020, the Ministry of Social Justice and Empowerment launched a **24/7 toll-free helpline 'Kiran'** to provide support to people facing anxiety, stress, depression, suicidal thoughts and other mental health concerns.
- **Manodarpan:** The Ministry of Human Resources Development (MHRD) launched it under **Atmanirbhar Bharat Abhiyan**. It is aimed to provide **psychosocial support to students, family members and teachers** for their mental health and well-being during the times of **Covid-19**.

## Drug Resistant Typhoid

### Why in News?

- Bacteria that cause **typhoid fever** are becoming more and more resistant to some of the most widely used antibiotics, according to the study published in The Lancet Microbe journal.
- Typhoid fever causes 11 million infections and **more than 1,00,000 deaths per year**. South Asia accounts for **70% of the global disease burden**.

Note:



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### What is Typhoid?

#### ➤ About:

- Typhoid fever is a life-threatening **systemic infection caused by the bacterium *Salmonella enterica* serovar Typhi** (commonly known as *Salmonella* Typhi) **carried only by humans** – no other animal carrier has been found.

#### ➤ Transmission:

- Typhoid fever is **transmitted by the faecal-oral route**, through **ingestion of contaminated food or water**.
- Without treatment, about **one person in 20 who recovers from typhoid becomes a 'carrier'**. Despite having no symptoms of illness, they have bacteria in their faeces and urine, and can infect others for a period of about three months (sometimes up to one year).
- **Travellers are at high risk of developing typhoid fever** in many typhoid endemic countries. This includes parts of **Asia (especially India, Pakistan, and Bangladesh)**, **Africa**, the **Caribbean**, **Central and South America**, and the **Middle East**.

#### ➤ Symptoms:

- Symptoms and signs of typhoid range from mild to severe, can last for about one month without treatment, and may include: fever, fatigue or tiredness, malaise (general feeling of unwellness), sore throat, persistent cough, headache.

#### ➤ Prevention:

- **Vaccine:**
  - The typhoid vaccine is available as an oral medication or a one-off injection:
    - **Capsule:** For adults and children over the age of 6 years, this is a **live, attenuated vaccine**.
    - **Shot:** For adults and children over the age of 2 years, this is an inactivated vaccine a person needs to get 2 weeks before travel.
    - The **typhoid vaccine is only 50–80% effective**.

#### ➤ Treatment:

- Typhoid fever requires prompt treatment with **antibiotics**.

#### ➤ Drug Resistance:

- The effectiveness of **antibiotics** for typhoid fever is threatened by the emergence of **drug resistant strains**.

- The existence of **resistant strains of bacteria means antibiotics or drugs designed to kill them no longer work**, allowing them to spread rapidly, posing a risk to public health.
- Since 2000, **multi-drug-resistant (MDR)** typhoid has declined steadily in Bangladesh and India, remained low in Nepal, and increased slightly in Pakistan.
- However, these are **being replaced by strains resistant to other antibiotics**, according to the study conducted by researchers from **Stanford University, Christian Medical College Vellore** and other institutions.
- **Multi-drug resistance (MDR)** is defined as lack of susceptibility to at least one agent in three or more chemical classes of antibiotic.
- Strains were classified as **MDR** if they had **genes giving resistance to antibiotics ampicillin, chloramphenicol, and trimethoprim/sulfamethoxazole**.
- A new type of drug resistance is observed in strains termed **XDR typhoid**. **Strains resistant to the antibiotic (azithromycin) have been seen in India, Bangladesh, Nepal and Pakistan**.
- **Extensive Drug Resistance (XDR)** typhoid is caused by a strain that is **resistant to at least five antibiotic classes recommended for treating typhoid fever**.

## India State Support Programme for Road Safety

### Why in News?

The **World Bank** has approved a USD 250 million loan for **India State Support Program for Road Safety** for seven States under which a single accident reporting number will be set up to better manage post-crash events.

### What is World Bank?

#### ➤ About:

- It was created in 1944, as the **International Bank for Reconstruction and Development (IBRD)** along with the **International Monetary Fund (IMF)**. The IBRD later became the World Bank.

Note:



- The World Bank Group is a unique global partnership of five institutions working for sustainable solutions that reduce poverty and build shared prosperity in developing countries.

➤ **Members:**

- It has 189 member countries.
- India is also a member country.

➤ **Major Reports:**

- **Human Capital Index.**
- **World Development Report.**

➤ **Its Five Development Institutions:**

- International Bank for Reconstruction and Development (IBRD)
- International Development Association (IDA)
- International Finance Corporation (IFC).
- Multilateral Guarantee Agency (MIGA)
- International Centre for the Settlement of Investment Disputes (ICSID)
- India is not a member of this.

### **What are the Key Highlights of the Program?**

➤ **About:**

- The project will establish a **national harmonised crash database system** in order to analyse accidents and use that to construct better and safer roads.
- The USD 250 million variable spread loan from the **International Bank for Reconstruction and Development (IBRD)** has a maturity of 18 years including a grace period of 5.5 years.
- **It will be implemented in** Andhra Pradesh, Gujarat, Odisha, Tamil Nadu, Telangana, Uttar Pradesh and West Bengal.

➤ **Aim:**

- It aims to **fund network expansion of basic and advanced life support ambulances and training of first responder caregivers** to road crash victims on the spot.
- The project will also **provide incentives to the States to leverage private funding** through **Public Private Partnership (PPP)** concessions and pilot initiatives.
- Women face the indirect brunt of road accidents. Recognising this challenge, the project has a

special focus on gender and will promote women's representation in management roles in the road safety sector.

- The project will also provide employment opportunities for women especially, in post-crash care command and control centers.

### **What is the Scenario of Road Accidents in India?**

- Road crashes are estimated to cost the Indian economy between 5% to 7% of **GDP (Gross Domestic Product)** a year.
- Official government data show that **each year road accidents in India kill about 1,50,000 people and injure another 4,50,000.**
- More than **half of the victims are pedestrians, cyclists, or motorcyclists** and almost 84% of all fatalities are among road users between the **working ages of 18-60 years.**
- Poor households that account for over 70% of crash victims **bear a higher proportion of the socio-economic burden of road crashes** due to loss of income, high medical expenses and limited access to social safety nets.

### **What are the Initiatives for Road Safety?**

➤ **Third High Level Global Conference on Road Safety for Achieving Global Goals 2030':**

- MoRTH (Ministry of Road Transport and Highways) participated in a conference in Sweden in 2020 — the **Third High Level Global Conference on Road Safety for Achieving Global Goals 2030'** — where it was conceptualised to have zero road fatalities in India by 2030.

➤ **Brasilia declaration:**

- India signed the **Brasilia declaration** and committed to reduction in fatalities.
- The declaration was signed at the Second Global High-Level conference on Road Safety held in Brazil.

➤ **Motor Vehicles (MV) (Amendment) Act, 2019:**

- It **hiked the penalties for traffic violations**, defective vehicles, juvenile driving, etc.
- It provides for a Motor Vehicle Accident Fund, which would provide compulsory insurance cover to all road users in India for certain types of accidents.



Note:

# Science & Technology

## Highlights

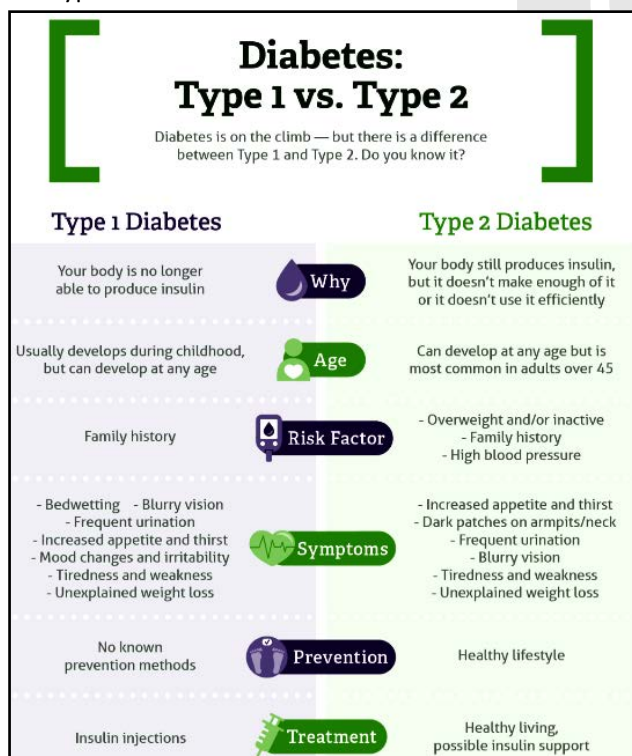
- Coping with Type-1 Diabetes
- Ultrathin Heteroprotein Film
- Cyber Safety and National Security
- Critical Information Infrastructure
- What is Critical Information Infrastructure?
- Black Death

## Coping with Type-1 Diabetes

### Why in News?

Recently, **Indian Council of Medical Research (ICMR)** issued guidelines regarding diagnosis, treatment, and management for type-1 diabetes.

- This is the **first time the ICMR has issued guidelines** specifically for type 1 diabetes, which is rarer than type 2.



### What do we Need to know about Diabetes?

- **About:** Diabetes is a **Non-Communicable Disease (NCD)** that occurs either when the pancreas does not

produce enough insulin (a hormone that regulates blood sugar, or glucose), or when the body cannot effectively use the insulin, it produces.

### ➤ Types of Diabetes:

#### ○ Type 1 Diabetes:

- It is also known as **juvenile diabetes** (as it mostly affects children of age 14-16 years), this type occurs when the body fails to produce sufficient insulin.
- It is **predominantly diagnosed in children and adolescents**. Although the prevalence is less, it is much more severe than type 2.

#### ○ Type 2 Diabetes:

- It affects the **way the body uses insulin**. While the body still makes insulin.
- Type 2 diabetes can **occur at any age, even during childhood**. However, this type of diabetes occurs most often in middle-aged and older people.

- **Gestational Diabetes:** This type occurs in women during pregnancy when the body sometimes becomes less sensitive to insulin. Gestational diabetes does not occur in all women and usually resolves after giving birth.

- **Impacts of Diabetes:** It affects the **five major organs** namely, Kidney, Heart, Blood vessels, Nervous System, and Eyes (retina).

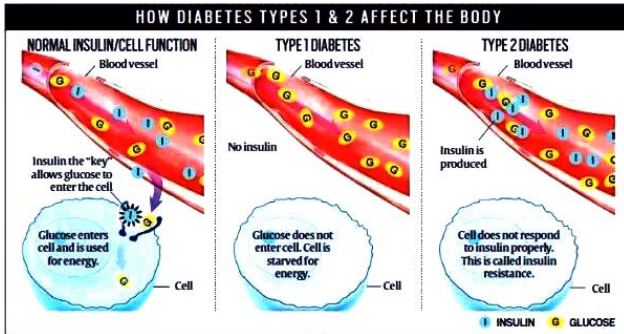
- **Factors Responsible:** Factors that lead to increase in diabetes are an unhealthy diet, lack of physical activity, harmful use of alcohol, overweight/obesity, tobacco use, etc.

### How Rare is Type-1 Diabetes?

- Out of **10 lakh children and adolescents living with type 1 diabetes** in the world, India holds the highest numbers.

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- **Out of 2.5 lakh people living with type 1 diabetes in India**, 90,000 to 1 lakh are under the age of 14 years.
- **Only 2% of all hospital cases of diabetes in the country are type 1** — but which is being diagnosed more frequently.



### What Factors Exacerbate the Condition?

- **Genetic Factors:** It plays a role in determining whether a person will get type-1 diabetes. The risk of disease in a child is:
  - 3% when the mother has it
  - 5% when the father has it
  - 8% when a sibling has it.
- **Presence of Certain Genes:** It is also strongly associated with the disease. For example, the prevalence of genes called DR3-DQ2 and DR4-DQ8 is 30-40% in patients with type 1 diabetes as compared to 2.4% in the general population.
  - DR3- DQ2 and DR4-DQ8 means the patient is permissive for **celiac disease** and is capable of developing or having the disease.

### What are the Treatments?

- **Glucose monitoring:** Continuous glucose monitoring devices can help monitor the blood glucose levels throughout 24 hours with the help of a sensor.
- **Artificial pancreas:** It can automatically deliver insulin when required.

### What are Related Initiatives?

- **National Programme for Prevention and Control of Cancer, Diabetes, Cardiovascular Diseases and Stroke (NPCDCS):**
  - In order to prevent and control major NCDs, this initiative was launched by India in 2010 with focus

on strengthening infrastructure, human resource development, health promotion, early diagnosis, management and referral.

### World Diabetes Day:

- It is observed on **14<sup>th</sup> November every year**. The 2022 campaign will focus on access to diabetes education. access to diabetes education.

### Global Diabetes Compact:

- **WHO launched a Global Diabetes Compact** to better fight the disease while marking the centenary of the discovery of insulin.

## Ultrathin Heteroprotein Film

### Why in News?

Scientists have developed **Ultra-Thin Hetero Protein films** with excellent **thermal, mechanical and pH stability** which can pave the way for **expanding applications of thin films in biomedical and food packaging industries**.

- It consists of two globular proteins: **Bovine Serum Albumin (BSA)** and **Lysozyme (Lys)**. They used the technique called using Langmuir-Blodgett (LB) technique which gives the **films thickness in the order of nanometer**.
- Globular proteins or spheroproteins are spherical proteins and are one of the common protein types. Globular proteins are **somewhat water-soluble, unlike the fibrous or membrane proteins**.

### What are the Benefits of Ultrathin Heteroprotein Film?

- Thinner as **compared to the other protein or plastic films**.
- They are **soft and thin and have the advantage of being more flexible** than the other films.
- In the recent past, several modifications of these protein films with the help of suitable heteroprotein complexes were reported by different research groups. These complexes **were usually developed from bulk solutions**.
- Films of BSA and Lys can be useful for **fabricating highly stable biodegradable thin films of different protein complexes** for expanding its applications in the area of thin-film technology.

Note:



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- Diverse physicochemical methods such as parameter alteration or incorporation of different fatty acids or polyol moieties (glycerol, starch, gelatin, etc.) into this protein complex **can make the film free standing for diverse applications.**

### What are the Proteins?

#### ➤ About:

- Proteins are **composed of amino acids**, arranged into different groups. These fundamental amino acid sequences are specific and its arrangements are controlled by the **DNA (Deoxyribonucleic acid).**
- There are two types of protein molecules, fibrous proteins and globular proteins.
  - Fibrous proteins are insoluble and elongated.
  - Globular proteins are soluble and compact.

#### ➤ Functions:

- **Enzymes:** Enzymes mostly carry out all numerous chemical reactions which take place within a cell. They also help in regenerating and creating DNA molecules and carry out complex processes.
- **Hormones:** Proteins are involved in the creation of various types of hormones which help in balancing the components of the body. For example hormones like insulin, which helps in regulating blood sugar and secretin. It is also involved in the digestion process and formation of digestive juices.
- **Antibody:** Antibody also known as an immunoglobulin. It is a type of protein which is majorly used by the immune system to repair and heal the body from foreign bacteria. They often work together with other immune cells to identify and separate the antigens from increasing until the white blood cells destroy them completely.
- **Energy:** Proteins are the major source of energy that helps in the movements of our body. It is important to have the right amount of protein in order to convert it into energy. Protein, when consumed in excess amounts, gets used to create fat and becomes part of the fat cells.

## Cyber Safety and National Security

### Why in News?

Recently, the **National Conference on Cyber Safety and National Security** concluded in New Delhi.

- The conference is **part of the efforts to create mass awareness** for the prevention of cybercrimes in the country.
- It is also part of the **Azadi Ka Amrit Mahotsav** to celebrate India's progress and achievements in the 75<sup>th</sup> year of India's Independence.

### What is Cyber Safety?

#### ➤ About:

- A set of activities and other measures intended to **protect cyberspace networks, related hardware and devices software, and the information they contain and communicate**, including software and data from all threats **including threats to national security.**

#### ➤ Relation with National Security:

- Since **Cyber-armies** have been formed to launch cyberattacks against India, **cyber security** is closely connected to national security.
  - A **cyber-army** is a **group of soldiers highly skilled in information technology** with cyber skills.

### What's upping India's Cyber Safety threat?

#### ➤ Digital India Vision:

- India is one of the fastest-growing markets for digital technologies fuelling the government's push towards actualising its **Digital India mission.**
  - Whether creating broadband highways or rolling out services such as **Digi Locker** and **e-governance** schemes like the **Jan Dhan Yojana**, the government has pushed for as much digital adoption as possible.
  - Under **Pradhan Mantri Jan Dhan Yojana** 45 crore new accounts have been opened and 32 crore RuPay Debit Cards have been distributed in the last 8 years.

Note:



- **BharatNet** is also developing very fast, 5.75 lakh km of fiber cable has been laid and work has been done to connect 1.80 lakh villages in the last 8 years which was less than 10,000 8 years ago.

➤ **Increasing footprint of Digital activities:**

- India now has over **1.15 billion phones and more than 700 million internet users** and makes it a large pool of digitally vulnerable targets.
- In January 2020, India had the **second largest Internet user base with over 550 million Internet users**.
- In 2021, **40% of the total global digital payments took place in India**.
- Digital Inclusion increases the potential of digital threats leading to cyber-attacks and crimes.

**What distinguishes Cybercrime from Traditional Criminal Activity?**

- **Cybercrime**, also called **computer crime**, the use of a computer as an instrument to further illegal ends, such as committing fraud, trafficking in child pornography and **intellectual property** stealing identities or violating privacy.
- Most **cybercrime is an attack on information about individuals, corporations, or governments**.
  - Although the attacks **do not take place on a physical body as traditional criminal activity, they do take place on the personal or corporate virtual body**, which is the set of informational attributes that define people and institutions on the Internet.

**What are the challenges behind Cyber Safety?**

➤ **Service Providers:**

- Rush towards digitisation in almost every sector has led to increased collaborations with application service providers. This is done **to provide customers with the best apps and services in the shortest possible time**.
- Hardware and software being of foreign origin or the terabytes of data that is parked on servers outside India serve a potential threat to National Cyber space.

➤ **Wide Coverage:**

- India has now more than 700 million internet users and makes it a large pool of digitally vulnerable

targets. Considering our nation's size and scale, it serves as a challenge to monitor and suspect digital threats.

**What are the Present Government Initiatives for Cyber Safety?**

➤ **Cybercrime portal:**

- It aims to enable citizens to report online content pertaining to **Child Pornography/ Child Sexual Abuse Material or sexually explicit content such as Rape/Gang Rape (CP/RGR)**.

➤ **Indian Cyber Crime Coordination Centre (I4C):**

- The prevention of cybercrimes is being handled through seven pillars under **I4C and CIS Division of Ministry of Home Affairs**
  - **National Cyber Crime Threat Analytics Unit**
  - **National Cyber Crime Reporting Portal**
  - **National Cyber Crime Training Centre**
  - **National Cyber Crime Research and Innovation Centre**
  - **Joint Cyber Crime Coordination**
  - **National Cyber Crime Ecosystem Management Unit**
  - **National Cyber Crime Forensic Laboratory**

➤ **CERT-In:**

- India's national agency for cybersecurity, **The Indian Computer Emergency Response Team (CERT-In)**, has led to a reduction in cyber-attacks on government networks due to its advancements in tackling the nation's cybersecurity.

➤ **Cyber Surakshit Bharat:**

- It is an initiative from the **Ministry of Electronics and Information Technology (MeitY)** that aims at creating a robust cybersecurity ecosystem in India. This aligns with the government's vision for a **'Digital India'**. The **National E-Government Division (NeGD)** sponsored this program.

➤ **Cyber Swachhta Kendra:**

- It is an installation under the **Ministry of Electronics and Information Technology (MeitY)** aims to create secure cyberspace for Indian users by detecting botnet infections and enabling end-users to clean their systems and secure their systems thereafter to prevent further infections.

Note:

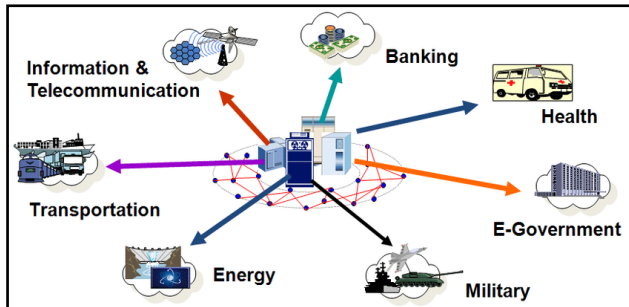
➤ **Personal Data Protection Bill:**

- Worldwide data breaches served a threat to personal security for Indian citizens, the PDP Bill was approved by the union government

## Critical Information Infrastructure

### Why in News?

Recently, the Union Ministry of Electronics and IT (MeitY) has declared IT (Information Technology) resources of **ICICI Bank, HDFC Bank and NPCI** (National Payments Corporation of India) as 'critical information infrastructure'.



## What is Critical Information Infrastructure?

- The **Information Technology Act of 2000** defines **Critical Information Infrastructure** as a **computer resource**, the incapacitation or **destruction** of which shall **have debilitating impact on national security, economy, public health or safety**.
- The **government**, under the **IT Act of 2000**, has the **power to declare** any data, **database, IT network or communications infrastructure** as CII to protect that digital asset.
- Any person who secures access or attempts to **secure access to a protected system in violation of the law** can be punished with a **jail term of up to 10 years**.

### Why is CII Classification and Protection Necessary?

- **Global Practice:** World over governments have been moving with alacrity to protect their critical information infrastructure.

- **Backbone of Countless Critical Operations:** IT resources form the backbone of countless critical operations in a country's infrastructure, and given their interconnectedness, disruptions can have a cascading effect across sectors.

- **IT Failure leads to Crippling other Sectors:** An information technology failure at a power grid can lead to prolonged outages crippling other sectors like **healthcare, banking services etc.**

- **Example: Wave of Denial-of-Service Attacks in Estonia:** In 2007, a wave of denial-of-service attacks, allegedly from Russian IP addresses, hit major Estonian banks, government bodies – ministries and parliament, and media outlets. It was cyber aggression of the kind that the world had not seen before. The attacks played havoc in one of the most networked countries in the world for almost three weeks.

- **A Denial-of-Service (DoS) attack** is an attack meant to shut down a machine or network, making it inaccessible to its intended users. DoS attacks accomplish this by flooding the target with traffic, or sending it information that triggers a crash.

- **Case of India:**

- In October, 2020 as India battled the **pandemic**, the **electric grid supply to Mumbai suddenly snapped** hitting the mega city's hospitals, trains and businesses.
- Later, a study by a US firm claimed that this power outage could have been a **cyber-attack**, **allegedly from a China-linked group**, aimed at **critical infrastructure**. The government, however, was quick to deny any **cyber-attack** in Mumbai.
- But the incident underlined the possibility of hostile state and non-state actors **probing internet-dependent critical systems** in other countries, and the necessity to **fortify such assets**.

### How are CIIs protected in India?

- **NCIIPC as Nodal Agency:**

- Created in January 2014, the **National Critical Information Infrastructure Protection Centre (NCIIPC)** is the **nodal agency** for taking all measures to protect the nation's critical information infrastructure.

Note:



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➤ **Mandate of NCIIPC:**

- It is mandated to **guard CII from unauthorized access**, modification, use, disclosure, disruption, incapacitation or distraction.
- It will **monitor and forecast national-level threats to CII** for policy guidance, expertise sharing and situational awareness for early warning or alerts.
- In the event of **any threat to critical information infrastructure** the **NCIIPC may call for information and give directions to the critical sectors** or persons serving or having a critical impact on Critical Information Infrastructure.

➤ **Basic Responsibility:**

- The basic responsibility for protecting the CII system **shall lie with the agency running that CII.**

## **Black Death**

### **Why in News?**

In a study published in the journal Science, researchers have claimed that the disease (black death) **originated** in

modern day **northern Kyrgyzstan around 1338-1339** – nearly 7-8 years before it ravaged large parts of the world.

### **What was the Black Death?**

- The term Black Death refers to the **bubonic plague** that spread across **Western Asia, Northern Africa, Middle East and Europe in 1346-53.**
- Most scholars agree that the Black Death, which killed millions, was **caused by bacterium Yersinia pestis** and was **spread by fleas** that were carried by rodent hosts.
- The microorganism *Y. pestis* spread to human populations, who at some point transmitted it to others either through the vector of a human flea or directly through the respiratory system.
- Contemporaries who wrote about the epidemic, often **described the buboes (hard, inflamed lymph nodes)** as the distinguishing clinical feature.
- In the 14<sup>th</sup> century, the epidemic was referred to as the '**great pestilence**' or '**great death**', due to the demographic havoc that it caused.
- Due to a lack of comprehensive historical data from that time, it is difficult to know the exact death toll.

Note:

# Environment & Ecology

## Highlights

- Commonwealth adopts 'Living Lands Charter'
- Green Hydrogen and Green Ammonia
- Wetlands Conservation
- Four Species of Azooxanthellate Corals
- *Burmagomphus Chaukulensis*
- Banning Single-Use Plastic
- Renewables 2022 Global Status Report (GSR 2022)
- Water Hyacinth
- Gaps in Post-2020 Global Biodiversity Framework
- Need for Climate Finance for MSME
- Keibul Lamjao National Park
- National Air Quality Resource Framework of India
- Rajasthan's Menar Bird Village to Become Wetland
- Nature-based Solutions
- Bamboo-Dwelling Bat

## Commonwealth adopts 'Living Lands Charter'

### Why in News?

Recently, the Commonwealth members have agreed to voluntarily dedicate 'living land' in their respective countries to future generations, in line with the strategy set for the **United Nations Decade on Ecosystem Restoration**.

- The 'Living land' charter was announced at the conclusion of the **2022 Commonwealth Heads of Government Meeting (CHOGM)** in Kigali (Rwanda).

### What is the United Nations Decade on Ecosystem Restoration?

- The United Nations Decade on Ecosystem Restoration runs from 2021 to 2030.
- Its purpose is **to promote the United Nation's environmental goals**.
- Specifically, to facilitate global cooperation for the restoration of degraded and destroyed ecosystems.
- It calls for **protection and revival of ecosystems** across the world.

### What is the Living Land Charter?

- The **non-binding 'Living Lands Charter'** mandates that **member countries will safeguard global land resources** and arrest land degradation while acting

against **climate change, biodiversity loss** and towards sustainable management.

- The Living Lands Charter helps to encapsulate the combined effort **to hold the global average temperature increase to 1.5 degrees Celsius**.
- The charter aims to **achieve climate goals through a mixture of policy influence**, financing, technical assistance, governance and sharing knowledge across nations.
  - Commonwealth governments have been asked to submit their emission reduction targets by 23<sup>rd</sup> September, 2022.
- It is aimed to **support member countries to effectively deliver their commitments under the three Rio conventions** — **UN Convention on Biological Diversity, UN Convention to Combat Desertification (UNCCD)** and **UN Framework Convention on Climate Change**.

### What are the Highlights of the CHOGM 2022?

- The Commonwealth Heads of Government Meeting is a **biennial summit** meeting of the heads of government from all Commonwealth nations.
- CHOGM2022 was **taken place in Rwanda, with theme: 'Delivering a Common Future: Connecting, Innovating, Transforming.'**
- It has raised **more than USD 4 billion in pledges for the battle against malaria and other tropical diseases**.
- A total of **24 meetings have been held since 1971**, with the most recent one taking place in the United Kingdom (UK) in 2018.

Note:



### What is the Commonwealth?

- It is an **international intergovernmental organization of countries** that were mostly former **territories of the British Empire** and dependencies.
- It was established by the **London Declaration in 1949**.
- **Queen Elizabeth II is the head** of the Commonwealth.
- Many countries from Africa, Asia, Americas, Europe and the Pacific have joined the commonwealth.
- The **current membership includes 56 Countries**. The membership is based on free and equal voluntary co-operation.
  - The two African countries, **Gabon and Togo, were admitted to the Commonwealth of Nations, as its 55<sup>th</sup> and 56<sup>th</sup> members**, respectively, at the CHOGM 2022.
- It is **Headquartered in London**.

## Green Hydrogen and Green Ammonia

### Why in News?

- Recently, a seminar on **Production & Use of Green Hydrogen and Green Ammonia in the Process Industry** was held
  - **Process Industries** are the companies that extract, transport and process raw materials to manufacture semi-finished or high-quality end products by means of physical, mechanical and/or chemical processes.

### What is Green Hydrogen?

- **About:**
  - The fuel can be a **game-changer for the energy security of India**, which imports 85% of its oil and 53% of gas requirements.
  - To promote clean fuels, India is considering making it mandatory for fertilizer plants and oil refineries to purchase green hydrogen.
- **Method of Production:**
  - It is produced by **splitting water into hydrogen and oxygen using an electrolyzer** powered by renewable energy sources such as wind and solar.
- **Uses:**

- **Chemical industry:** Manufacturing ammonia and fertilizers.
- **Petrochemical industry:** Production of petroleum products.
- Furthermore, it is **starting to be used in the steel industry**, a sector which is under considerable pressure in Europe because of its polluting effect.

### ➤ Significance:

- Green hydrogen energy is vital for India to meet its **Nationally Determined Contribution (NDC)** Targets and ensure regional and national energy security, access and availability.
- Green Hydrogen can act as an **energy storage option**, which would be essential to meet intermittencies (of renewable energy) in the future.
- In terms of mobility, for long distance mobilizations for either urban freight movement within cities and states or for passengers, Green Hydrogen can be used in railways, large ships, buses or trucks, etc.
- Hydrogen has the potential to be the key renewable target in supporting infrastructure as well.

### What is Green Ammonia?

#### ➤ About:

- Ammonia is a chemical which is **used mainly in the manufacture of nitrogenous fertilizers**, like urea and ammonium nitrate, but can be put to other uses too, such as to run engines.
- Green ammonia production is where the process of making **ammonia is 100% renewable and carbon-free**.

#### ➤ Method of Production:

- It is produced by using hydrogen from water electrolysis and nitrogen separated from the air. These are then fed into the **Haber process** (Also known as Haber-Bosch), all powered by sustainable electricity.
  - Green ammonia production **makes use of renewable energy sources** such as hydro-electric, solar power or wind turbines.
- In the Haber process, **hydrogen and nitrogen are reacted together at high temperatures and pressures to produce ammonia, NH<sub>3</sub>**.

Note:



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➤ **Uses:**

- **Energy storage** – Ammonia is easily stored in bulk as a liquid at modest pressures (10-15 bar) or refrigerated to -33°C. This makes it an ideal chemical store for renewable energy.
- **Zero-carbon fuel:** Ammonia can be burnt in an engine or used in a fuel cell to produce electricity. When used, ammonia's only by-products are water and nitrogen.
- The **maritime industry** is likely to be an early adopter, replacing the use of fuel oil in marine engines.

➤ **Significance:**

- Green ammonia is intended to be used in the production of **carbon-neutral fertilizer products**, decarbonizing the food value chain, and also has potential as a future climate-neutral shipping fuel.
- Green ammonia is crucial to **tackle the existential challenges of producing enough food** to feed a growing global population and generating CO<sub>2</sub>-free energy.

### ***What is Green Hydrogen/ Green Ammonia Policy?***

- Under the policy, the government is offering to set up manufacturing zones for production, **connectivity to the ISTS (Inter-State Transmission System)** on priority basis, and free transmission for 25 years if the production facility is commissioned before June 2025.
- This means that **a green hydrogen producer will be able to set up a solar power plant in Rajasthan to supply renewable energy to a green hydrogen plant in Assam** and would not be required to pay any inter-state transmission charges.
- Besides, producers will be allowed to set up bunkers near ports for storage of green ammonia for export by shipping.
- **The production target** has also been **raised five times from 1 million tonnes (m) to 5 mt by 2030**.
- In October, 2021 it was announced that **India is targeting initially around 1 million tonnes annual green hydrogen production by 2030**.
- Manufacturers of Green hydrogen and ammonia are allowed to purchase renewable power from the power exchange or set up **Renewable Energy (RE) capacity** themselves or through any other developer, anywhere.

- To ensure ease of doing business a **single portal for carrying out all the activities including statutory clearances in a time bound manner will be set up by MNRE** (Ministry of New and Renewable Energy).

## **Wetlands Conservation**

### ***Why in News?***

According to a new report, wetland conservation should feature **as an independent topic of discussion in the negotiations** at the **upcoming biodiversity and climate change** conferences for effective **carbon sequestration**.

- Carbon sequestration is the **long-term storage of carbon** in plants, soils, geologic formations, and the ocean.
- Experts from the **Wetlands International**, a **global non-profit**, in a new white paper **suggested five global, science-based conservation efforts** to protect and restore wetlands.
- The suggestions come in the run up to the 15th **Conference of Parties (CoP15)** to the **Convention on Biological Diversity** to be held in Montreal, Canada and the 27th **Conference of Parties (CoP27)** to the **United Nations Framework Convention on Climate Change** in Egypt later this year.

### ***What are the five suggested targets by Wetlands International to be achieved by 2030?***

- The **remaining, undrained peatland carbon stores should be kept intact** and 10 million hectares of drained **peatlands** need should be restored.
- The Global **mangrove** cover of 20 %.
- The **preservation of free-flowing rivers and floodplains**, along with enhancement of restoring the floodplain ecosystem and its function in the area.
- The 10% increase of the West African river Volta in the tidal flats area.
- **Identification of 50 % of the 7,000 critically important sites along the flyways** to be brought under favourable management.

### ***What are Wetlands?***

- Wetlands are **areas where water is the primary factor controlling the environment and the associated plant and animal life**. They occur where the water table is at or near the surface of the land, or where the land is covered by water.

Note:



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- Wetlands are defined as: “lands transitional between **terrestrial and aquatic eco-systems** where the water table is usually at or near the surface or the land is covered by shallow water”.

### **What is the Importance of Wetlands?**

- **Highly Productive Ecosystems:** Wetlands are highly productive ecosystems that provide the world with nearly **two-third of fish harvest**.
- **Integral Role in the Ecology of the Watershed:** The combination of shallow water, high levels of nutrients are ideal for the development of organisms that form the base of the food web and feed many species of fish, amphibians, shellfish and insects.
- **Carbon Sequestration:** Wetlands’ microbes, plants and wildlife are part of global cycles for water, nitrogen and sulphur. **Wetlands store carbon within their plant communities and soil instead of releasing it to the atmosphere** as carbon dioxide.
- **Lowering flood Heights and Reduces soil erosion:** Wetlands **function as natural barriers that trap and slowly release surface water**, rain, snowmelt, groundwater and flood waters. Wetland vegetation also slow the speed of flood waters lowering flood heights and reduces soil erosion.
- **Critical to Human and Planet Life:** **More than one billion people depend on them for a living** and 40% of the world’s species live and breed in wetlands.
- Wetlands are a **vital source for food, raw materials, genetic resources for medicines, and hydropower**.
- They play an important role in transport, tourism and the cultural and spiritual well-being of people.
- **Habitat for Animals and Plants:** They provide habitat for animals and plants and many **contain a wide diversity of life, supporting plants and animals that are found nowhere else**.
- **Areas of Natural Beauty:** Many wetlands are areas of natural beauty and **promote tourism and many are important to Aboriginal people**.
- **Important Benefits for Industry:** Wetlands also provide important benefits for industry. For example, they form nurseries for fish and other freshwater and marine life and are **critical to commercial and recreational fishing industries**.

### **What are the Threats to Wetlands?**

- **Urbanisation:** Wetlands near urban centres are **under increasing developmental pressure for residential, industrial and commercial facilities**. Urban wetlands are essential for preserving public water supplies.
- **Agriculture:** **Vast stretches of wetlands have been converted to paddy fields**. Construction of a large number of reservoirs, canals and dams to provide for irrigation significantly altered the hydrology of the associated wetlands.
- **Pollution:** Wetlands **act as natural water filters**. **However, they can only clean up the fertilisers and pesticides from agricultural runoff** but not mercury from industrial sources and other types of pollution.
  - There is growing concern about the effect of industrial pollution on drinking water supplies and the biological diversity of wetlands.
- **Climate Change:** **Increased air temperature; shifts in precipitation; increased frequency of storms, droughts, and floods;** increased atmospheric **carbon dioxide** concentration; and sea level rise could also affect wetlands.
- **Dredging:** The **removal of material from a wetland or river bed**. Dredging of streams lowers the surrounding water table and dries up adjacent wetlands.
- **Draining:** Water is drained from wetlands by cutting ditches into the ground which collect and transport water out of the wetland. This lowers the water table and dries out the wetland.
- **Introduced Species:** Indian wetlands are **threatened by exotic introduced plant species such as water hyacinth and salvinia**. They clog waterways and compete with native vegetation.
- **Salinization:** Over withdrawal of groundwater has led to salinisation.

### **What are the Efforts towards Wetlands Conservation?**

- **Initiatives at Global Level:**
  - **Ramsar Convention**
  - **Montreux Record**
  - **World Wetlands Day**
- **Initiatives at National Level:**
  - **Wetlands (Conservation and Management) Rules, 2017.**
  - **Action Plan of MoEFCC**


Note:

## Four Species of Azooxanthellate Corals

### Why in News?

Scientists have recorded **Four Species of Azooxanthellate Corals** under the *Genus Truncatoflabellum* (*Scleractinian: Flabellidae*) for the first time from Indian waters.

### What are the Findings?

- **Truncatoflabellum crassum**, **T. incrustatum**, **T. aculeatum**, and **T. irregulare** are the four species of corals found.
 
  - These groups of coral were previously found from Japan to the Philippines and Australian waters while only *T. crassum* was reported within the range of Indo-West Pacific distribution including the **Gulf of Aden** and the **Persian Gulf**.
- They are found from the **Waters of Andaman and Nicobar Islands**.
- They are Azooxanthellate corals, which are **a group of corals that do not contain zooxanthellae and derive nourishment not from the sun** but from capturing different forms of plankton.
  - Zooxanthellae are unicellular, golden-brown algae (dinoflagellates) that **live either in the water column as plankton or symbiotically inside the tissue of other organisms**.
  - Zooxanthellate corals, meanwhile, are restricted to shallow waters.
- They are **hard corals and are not only solitary but have a highly compressed** skeletal structure.
  - There are about **570 species of hard corals found in India** and almost 90% of them are found in the waters surrounding **Andaman and Nicobar Islands**. The pristine and oldest ecosystem of corals share less than 1% of the earth's surface but they provide a home to nearly 25% of marine life.
- They are **deep-sea representatives, with the majority of species reporting from between 200 m to 1000 m**.
- They also occur in **shallow coastal waters**.

### What is the Significance of the Study?

- It illustrates the **morphological features along with the global mapping of zoogeographic distributional ranges** of the above said four newly recorded species of flabelliids from Indian waters.
- The most studies of hard corals in India have been concentrated on reef-building corals while much is not known about non-reef-building corals. These new records enhance **knowledge about non-reef-building, solitary corals**.
- The presently reported four species of solitary stony corals enhance the **national database of biological resources of India** and also define the expansion of scope to explore these unexplored and non-reefs building corals.

### What are Corals?

- Corals are **made up of genetically identical organisms called polyps**. These polyps have **microscopic algae called zooxanthellae** living within their tissues.
  - The corals and algae have a **mutualistic relationship**.
  - The coral provides the **zooxanthellae with the compounds necessary for photosynthesis**. In return, the zooxanthellae supply the coral with organic products of photosynthesis, like carbohydrates, which are utilized by the coral polyps for the synthesis of their calcium carbonate skeletons.
  - In addition to providing corals with essential nutrients, **zooxanthellae are responsible for the unique and beautiful colors of corals**.
- They are also **called the "rainforests of the seas"**.
- There are **two types of corals**:
  - **Hard, shallow-water corals**—the kind that builds reefs.
  - **Soft corals and deepwater corals** that live in dark cold waters.

## Burmagomphus Chaukulensis

### Why in News?

Recently, a rare dragonfly, *Burmagomphus chaukulensis* was spotted in Kerala.

Note:




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- Earlier, a new species of dragonfly '*Platygomphus benritarum*' was discovered in Assam.

### What are the Findings?

- This is a dragonfly of genus *Burmagomphus*, which is represented by **three species** – *B. Cauvericus*, *B. Pyramidalis* and *B. Laidlawi*.
 
  - While *B. laidlawi* is found throughout the Western Ghats,
  - *B. cauvericus* is **more restricted in its distribution**.
  - *B. pyramidalis* is found in the Western Ghats as well as in Peninsular India.
  - All **other species of the genus are found in the Western and Eastern Himalayas**.
- The new species **can be separated from its congeners by the markings on the lateral thorax and peculiar shape of anal appendages**.
- This species is known to be **endemic to the Western Ghats**.

### What are Dragonflies?

- **About:**
  - It is an **aerial predator insect most commonly found near freshwater habitats** throughout most of the world.
  - Their distinctive **colors make them look beautiful**. This makes them valuable subjects for research on insect behavior, both for ecology and art.
- **Habitat:**
  - Most species of dragonflies live in the **tropics and particularly in the rainforests**.
- **Significance:**
  - Dragonflies act as **important bio-indicators of the ecological health of an area**. As they feed on mosquitoes and other insects that are vectors to life-threatening diseases like Malaria and Dengue.
- **Threats:**
  - The rapid destruction of their habitat poses a direct threat to their survival making their conservation urgent.

## Banning Single-Use Plastic

### Why in News?

Recently, the Centre has defined a list of single-use plastic items that will be banned from 1<sup>st</sup> July 2022.

- The manufacture, import, stocking, distribution, sale and use of notified single-use plastic, including polystyrene and expanded polystyrene, commodities shall be prohibited with effect from the 1<sup>st</sup> July, 2022.

### Cleaning up

#### Plastic items completely banned from July 1, 2022

Ear buds with plastic sticks, plastic sticks for balloons, plastic flags, polystyrene (thermocool) for decoration, plates, cups, glasses, cutlery such as forks, spoons, knives, straw, trays, wrapping or packing films, cigarette packets

#### Plastic bags to be thicker

From September 30 this year, thickness of plastic carry bags has been increased from 50 microns to 75. From December 31, 2022, the thickness will increase to 120 microns

### What is single-use plastic?

- **About:**
  - It refers to plastic items that are used once and discarded.
- **Highest Shares of Plastic Manufactured and Used:**
  - **Single-use plastic** has among the **highest shares of plastic manufactured and used** — from packaging of items, to bottles (shampoo, detergents, cosmetics), polythene bags, face masks, coffee cups, cling film, trash bags, food packaging etc.
- **Accounts for a Third of all Plastic Produced Globally:**
  - According to a 2021 report of the Minderoo Foundation, an Australian philanthropic organization, single-use plastics account for **a third of all plastic produced globally**, with **98% manufactured from fossil fuels**.
- **The Majority of Plastic Discarded:**
  - Single-use plastic also accounts for the majority of plastic discarded — **130 million metric tonnes globally in 2019** — all of which is **burned, buried** in landfills or **discarded** directly into the environment.

Note:



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➤ **Contribution to Greenhouse Gas Emissions:**

- On the current trajectory of production, it has been projected that single-use plastic could account for **5-10% of greenhouse gas emissions by 2050**.

➤ **Data for India:**

- The report found that **India features in the top 100 countries** of single-use plastic waste generation – at **rank 94** (the top three being **Singapore, Australia and Oman**.)
- With domestic production of 11.8 million metric tonnes annually, and import of 2.9 MMT, **India's net generation of single-use plastic waste is 5.6 MMT**, and **per capita generation is 4 kg**.

**Why these items?**

- The choice for the first set of single-use plastic items for the ban was based on **the difficulty of collection, and therefore recycling**.
- **When plastic remains** in the environment for **long periods of time** and **does not decay**, it **turns into microplastics** – first entering our food sources and then the human body, and this is extremely harmful.
- The largest share of single-use plastic is that of packaging – with as much as **95% of single use belonging to this category** – from toothpaste to shaving cream to frozen foods.
- The items chosen are of low value and of low turnover and are unlikely to have a big economic impact, which could be a contributing reason.

**How will the ban be enforced?**

➤ **Monitored by:**

- The ban will be **monitored** by the **CPCB from the Centre**, and by the **State Pollution Control Boards (SPCBs)** that **will report to the Centre regularly**.

➤ **Directions Issued:**

- Directions have been **issued at national, state and local levels** — for example, to all petrochemical industries — to **not supply raw materials to industries engaged in the banned items**.
- Directions have also been issued to **SPCBs and Pollution Control Committees** to **modify or revoke consent to operate issued under the Air/Water Act** to industries engaged in single-use plastic items.

- **Local authorities** have been directed to issue **fresh commercial licenses** with the condition that **SUP items will not be sold on their premises, and existing commercial licences** will be cancelled if they are found to be selling these items.

➤ **Promoting Compostable and Biodegradable Plastics :**

- The **CPCB issued one-time certificates to 200 manufacturers of compostable plastic** and the **BIS passed standards for biodegradable plastic**.

➤ **Penalty:**

- Those found violating the ban can be penalised under the **Environment Protection Act 1986** – which allows for **imprisonment up to 5 years, or a penalty up to Rs 1 lakh, or both**.
- Violators can also be asked to pay Environmental Damage Compensation by the SPCB.
- There are municipal laws on plastic waste, with their own penal codes.

**How are other countries dealing with single-use plastic?**

➤ **Sign Resolution:**

- In 2022, **124 countries**, parties to the **United Nations Environment Assembly**, including **India**, **signed a resolution** to draw up an agreement which will in the future make it **legally binding for the signatories to address the full life of plastics** from production to disposal, to end plastic pollution.
- As of July 2019, 68 countries have plastic bag bans with varying degrees of enforcement.

➤ **Countries which Ban Plastic:**

- **Bangladesh:**
  - Bangladesh became the **first country to ban thin plastic bags** in 2002.
- **New Zealand:**
  - New Zealand became the latest country to ban plastic bags in July 2019.
- **China:**
  - China issued a ban on plastic bags in 2020 with phased implementation.
- **US:**
  - Eight states in the US have banned single-use plastic bags, beginning with California in 2014. Seattle became the first major US city to ban plastic straws in 2018.

Note:

### ○ **European Union:**

- In July, 2021, the Directive on **Single-Use Plastics** took effect in the European Union (EU).
- The directive bans certain **single-use plastics for which alternatives are available**; single-use plastic plates, cutlery, straws, balloon sticks and cotton buds cannot be placed on the markets of the EU member states.
- The same measure applies to cups, food and beverage containers made of expanded polystyrene, and all products made of oxo-degradable plastic.

## **Renewables 2022 Global Status Report (GSR 2022)**

### **Why in News?**

Recently the Renewables 2022 Global Status Report (GSR 2022) was released by **REN21 (Renewable Energy Policy Network for the 21st Century)**.

- REN21 is a **global collective of renewable energy actors**.
- It includes **scientists, governments such as India's, non-governmental organisations** and members of the industry who collated data on renewable energy installations, markets, investments and policies in countries across the world.

### **What is Renewables 2022 Global Status Report (GSR 2022)?**

- The Renewables 2022 Global Status Report **documents the progress made in the renewable energy sector**.
- It highlights the **opportunities afforded by a renewable-based economy and society**, including the ability to achieve more diversified and inclusive energy governance through localised energy generation and value chains.
- Countries with higher shares of renewables in their total energy consumption enjoy a greater level of energy independence and security.

### **What are the key Highlights of the Report?**

- **Global Overview:**
  - This Report sends a **clear warning** that the **global clean energy transition is not happening**, making it

unlikely that the world will be able to meet critical climate goals this decade.

- Although many more governments committed to **net zero greenhouse gas** emissions in 2021, the reality is that, in response to the energy crisis, **most countries have gone back to seeking out new sources of fossil fuels and to burning even more coal, oil and natural gas**.
- **For the first time, GSR 2022 provides a world map of renewable energy shares by country** and highlights progress in some of the leading countries.
- In the lead-up to the **United Nations Climate Change Conference (COP26)** in November 2021, a record **135 countries pledged to achieve net zero greenhouse gas emissions by 2050**.
  - However, **only 84 of these countries had economy-wide targets** for renewable energy, and only 36 had targets for 100 % renewables.

### ➤ **India's Performance:**

- **Renewable Energy:** India ranked **third** in renewable energy installations in 2021, **after China and Russia**.
- **Hydropower Capacity:** India added **843 MW of hydropower capacity in 2021**, raising the total capacity to 45.3 GW.
- **New Solar PV Capacity:** India was the **second largest market in Asia for new solar PV capacity and third globally** (13 GW of additions in 2021).
- **Total Installations:** It ranked **fourth** for total installations (60.4 GW), **overtaking Germany** (59.2 GW) for the first time.
- **Wind Power:** India ranked **third globally** for the total installed capacity of wind power (40.1 GW), behind China, the US and Germany.

### **What are the Initiatives taken by India to Promote Renewable Energy?**

- **National Solar Mission (NSM):** The 100 GW solar ambition at the heart of the world's largest renewable energy expansion programme.
- **The Wind Energy Revolution:** Leveraging India's **robust wind energy sector to boost clean energy manufacturing** and the rural economy
- **National Biofuels Policy and SATAT:** Building value chains to reduce fuel imports, increase clean energy, manage waste, and create jobs.

Note:



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- **International Solar Alliance (ISA):** Harnessing the **infinite power for the Sun** for sustainable human development.
- **Small Hydro Power (SHP):** Harnessing the **power of water to integrate remote communities** into the economic mainstream.
- **National Hydrogen Energy Mission (NHEM):** Exploring the **commercial viability** of a versatile clean fuel.
- **Production-Linked Incentive (PLI) Scheme:** Integrating India into the global clean energy value chains

### **What are Hurdles in India's Transitions towards Renewable Energy?**

- **Poor Financial Condition of Discoms:**
  - The most important challenge for further scaling up renewables in India is the poor financial condition of power distribution companies (discoms), most of which are owned by state governments. Almost all **renewable energy is purchased by such discoms, resulting in very long and unsustainable payment cycles.**
- **Variability in its Generation:**
  - The variability in its generation **due to weather conditions makes operating the transmission grid a technically demanding task.** Until recently, RE power capacity was small, but now RE projects are producing so much power that they are sometimes required to reduce or switch off generation to ensure that the grid is operating smoothly.
- **Weak Transmission Grid:**
  - The **weak transmission grid in the country has also been a challenge**, especially in the case of RE projects, which are often set up in remote areas, and away from large cities and consumption centres.
    - For example, **ambitious plans to build large solar projects in Leh were recently cancelled** citing weak transmission infrastructure.
- **Nascent Technology:**
  - India **does not possess the required technology** which is **needed in this area**, for example India is dependent on foreign players for import of Photovoltaic solar cells.
- **Impact on Environment:**
  - While RE generation is zero-carbon (barring some biofuels), there are **emissions at other points of its lifecycle**, such as during **raw material extraction**

and equipment manufacturing. There are also RE's detrimental impacts on biodiversity and ecology.

- **Shortage of Skilled Personnel:**
  - India's power sector has always faced shortage of skilled personnel, **not only in the private sector but also within DISCOMs**, grid management companies, regulators and policymakers and this problem is being compounded further in the current scenario.
- **Installation Cost Issue:**
  - The **high initial cost of installation** is one of the major hurdles in the development of renewable energy. Although the development of a coal plant requires high investment, it is known that **wind and solar power plants also require huge investment.**
  - In addition to this, **storage systems of the generated energy are expensive** and represent a real challenge in terms of megawatt production.

## **Water Hyacinth**

### **Why in News?**

Recently, West Bengal has made an outstanding example by utilising Water Hyacinth, an obnoxious aquatic weed plant to develop small-scale cottage industry that is both financially rewarding as well as environmentally friendly in approach.



### **What are the Key Facts about Water Hyacinth?**

- **About:**
  - **Water hyacinth**, scientifically known as ***Eichhornia crassipes Mart. (Pontederiaceae)***, is an **aquatic weed common in waterbodies across South Asia, including India.**
  - This is **not an indigenous species** but was **introduced to India during the British colonial rule** as an **ornamental aquatic plant from South America.**
  - The plant **produces beautiful purple flowers** that have **high aesthetic value.**
- **Issues:**
  - This simple, floating aquatic plant, unfortunately, is also an **obnoxious weed** that has been **suffocating surface freshwater sources** like rivers, rivulets,

Note:



streams, ponds, dams, lakes and bogs, **making the waterbodies unsuitable for commercial fishery, transportation and recreation.**

- The plant is a **prolific vegetable matter-producer** and has the ability to choke out any closed waterbody at an astonishing rate.
  - A plant that is **prolific produces a large number of young plants, or fruit.**
  - This **cuts off sunlight** as well as **reduces oxygen level in the water**, making it unfit for commercial use.
  - It is an **expensive and labour-intensive process to remove this weed from time to time.**
- This water hyacinth has **become a serious problem plant for the ecosystem.**

➤ **Significance:**

- The plant has been **used as a bio-fertiliser in some organic agriculture practises.**
- This plant is a **good phytoremediation species, suggesting it has the ability to trap and remove toxic metabolites and harmful heavy metals from water.**

## Gaps in Post-2020 Global Biodiversity Framework

### Why in News?

A group of environmental scientists, ecologists and policy experts have posited that the draft of the **Post-2020 Global Biodiversity Framework** fails to account for the totality of **chemical pollutants** that threaten ecosystems globally.

### What are the Gaps in the Framework?

- **Chemical Pollutants:** The draft agreement falls **short by limiting itself to nutrients, pesticides and plastics**, while many **chemicals of high concern and importance are left out** of the equation — including substances that are persistent and toxic, such as mercury and PFAS (per- and polyfluoroalkyl substances), as well as pharmaceuticals.
- **LNPP Inside Protected Areas:** Currently, LNPP (land where natural processes predominate) covers around 56% of terrestrial land, excluding permanent ice and rock. However, only 20% of this land is formally

protected. This means that, excluding permanent ice and rock, only 11% of the world's land is covered by LNPP inside protected areas. The group feels that this is **a problem since the post-2020 framework proposes at least 30% of land be protected by 2030.**

- LNPP refers to land where there is a low human disturbance and / or ecologically relatively intact vegetation, providing space and habitat for biodiversity to thrive.

### What is Post 2020 Global Biodiversity Framework?

➤ **About:**

- It is a new framework that will guide **actions worldwide through 2030**, to preserve and protect nature and its essential services to people.
- It aims to **spur urgent and transformative action by Governments and all of society to contribute to the objectives of the Convention on Biological Diversity**, its Protocols, and other biodiversity related multilateral agreements, processes and instruments.
- The framework is built around **a theory of change which recognizes that urgent policy action globally, regionally and nationally** is required to transform economic, social and financial models.

➤ **Goals and Targets:**

- **Four goals to achieve by 2050:**
  - To **halt the extinction and decline** of biodiversity.
  - To **enhance and retain nature's services** to humans by conserving.
  - To ensure **fair and equitable benefits** to all from use of genetic resources.
  - To **close the gap between available financial and other means of implementation** and those necessary to achieve the 2050 Vision.
- **2030 Action Targets:** The framework has **21 action-oriented targets for urgent action over the decade to 2030**, which includes:
  - To bring at **least 30% of land and sea under the world's protected areas.**
  - A **50% greater reduction in the rate of introduction of invasive alien species**, and controls or eradication of such species to eliminate or reduce their impacts.

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- **Reducing nutrients lost** to the environment by at least half, and pesticides by at least two thirds, and eliminating the discharge of plastic waste.
- Nature-based contributions to global climate change mitigation efforts of **at least 10 GtCO<sub>2</sub>e (gigatonnes of equivalent carbon dioxide) per year**, and that all mitigation and adaptation efforts avoid negative impacts on biodiversity.
- Redirecting, repurposing, reforming or eliminating incentives harmful for biodiversity, **in a just and equitable way, reducing them by at least USD 500 billion per year.**

### What are the Recommendations?

- There is need to target **a wider scope of chemical pollutants for strategies and action** to be implemented in the post-2020 global biodiversity framework.
  - Countries around the world recently **agreed to create an intergovernmental science-policy panel on chemicals and waste** to consolidate existing knowledge and inform policymakers.
- The irrefutable evidence of chemical pollutants found in every ecosystem of the world, including **remote Arctic, Antarctic and Himalayan ecosystems**, should compel negotiators of the new biodiversity framework to include these as threats to global biodiversity.
- Protecting biodiversity is crucial for availability of food, there should be **a net gain in the area, connectivity, and integrity of natural systems of at least 5% by 2030 and 15% by 2050 to support healthy and resilient populations** of all species.
- Shifting diets, increasing crop and livestock productivity, and limiting agricultural land expansion would help achieve global biodiversity, food security and **climate mitigation goals** by 2050.

### What is the Convention on Biological Diversity?

- The **Convention on Biological Diversity (CBD)**, a **legally binding treaty** to conserve biodiversity has been in force since 1993. It has **3 main objectives**:
  - The conservation of biological diversity.
  - The sustainable use of the components of biological diversity.
  - The fair and equitable sharing of the benefits arising out of the utilization of genetic resources.

- Nearly all countries have ratified it (notably, the **US has signed but not ratified**).
- The **CBD Secretariat is based in Montreal, Canada** and it **operates under the United Nations Environment Programme**.
- The Parties (Countries) under Convention of Biodiversity (CBD), meet at regular intervals and these meetings are called **Conference of Parties (COP)**.
- In 2000, a supplementary agreement to the Convention known as the **Cartagena Protocol on Biosafety** was adopted. It came into force on 11<sup>th</sup> September 2003.
  - The Protocol seeks to protect biological diversity from the potential risks posed by living modified organisms resulting from modern biotechnology.
- The **Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization (ABS)** was adopted in 2010 in Nagoya, Japan at COP10. It entered into force on 12<sup>th</sup> October 2014.
  - It not only applies to genetic resources that are covered by the CBD, and to the benefits arising from their utilization but also covers traditional knowledge (TK) associated with genetic resources that are covered by the CBD and the benefits arising from its utilization.
- Along with the Nagoya Protocol on Genetic Resources, the COP-10 also adopted a ten-year framework for action by all countries to save biodiversity.
- Officially known as **"Strategic Plan for Biodiversity 2011-2020"**, it provided a set of 20 ambitious yet achievable targets collectively known as the **Aichi Targets for biodiversity**.
- India **enacted Biological Diversity Act in 2002** for giving effect to the provisions of the CBD.

## Need for Climate Finance for MSME

### Why in News?

According to a report by the **Centre for Study of Science, Technology & Policy (CSTEP)** published in 2018, **Micro, Small and Medium Scale (MSME)** generates around **110 million tonnes of CO<sub>2</sub> equivalent**. India's MSMEs must pare emissions and **climate finance** maybe the nudge they need.

Note:



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- The **MSME sector** contributes around **30% to India's gross domestic product** and employs around **120 million people**.

### Why are MSMEs needed to curb emissions?

- **India's Commitment to CoP 26:**
  - India committed to attain **net zero carbon emissions by 2070** during the **26<sup>th</sup> Conference of Parties (CoP26)** to the **United Nations Framework Convention on Climate Change** at Glasgow, Scotland in 2021.
  - India would supply **50% of its energy needs through renewable sources by 2030**.
  - **Solution:** The only way to do this is to **gradually phase out the use of coal, increase investment in renewable energy sources, stop deforestation and speed up the transition to electric vehicles**.
- **To Minimise its Carbon Footprints:**
  - The CSTEP report highlighted that the **MSME sector used 13% of the total coal / lignite, 7% of petroleum products and 8% of the natural gas** supplied in India in 2015-16.
  - The MSME sector needs a push to **adopt new technologies** that quickly minimise its carbon footprints and **make it less vulnerable to climate change and risk**.
  - The sector can achieve this transformation with **the aid of climate finance**.
  - **Traditional funds alone cannot help** the sector to become **decarbonised**.

### What is Climate Finance?

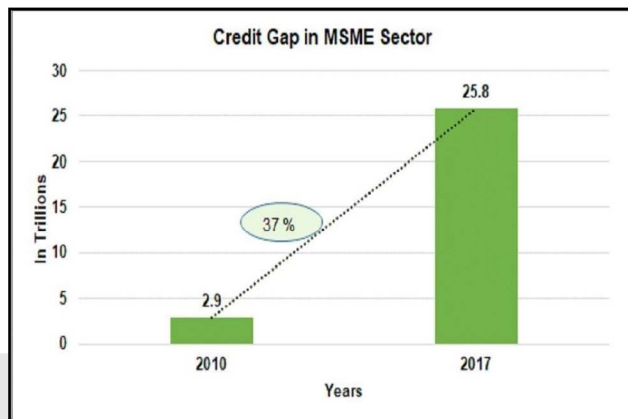
- **Climate finance** is **money paid by developed countries** (which are responsible for most of the historic emissions) **to developing countries to help them pay for emissions reduction measures and adaptation**.
- Climate finance will open doors and enable **the transfer of technology and expertise from developed to developing nations**, which require these resources and capacity to combat climate change at the rate that the world currently demands.

### Why do MSMEs need Climate Finance?

- **Huge Credit Gap:**
  - The **MSME sector in India** faces a **huge credit gap**, which means the **difference between the**

**total supply of credit** from formal channels in the country and **the addressable demand**.

- According to the **International Finance Corporation**, the credit gap was around \$37 billion in 2010 and reached \$330 billion in 2017.
- In 10 years, **the gap** compounded annually at a **rate of 37%**.



### Status of Flow of Finance:

- The overall debt demand of the MSME sector is **USD 882.42 billion**.
- But the irony is only **16%** is catered to by the **formal sector** and the remaining are catered to by the **informal sector**.

### What are the Challenges Faced by MSMEs?

- **Lack of awareness:**
  - **Climate finance** is still a **fantasy for MSMEs**, as many still **struggle to obtain traditional financing**.
  - The **MSME sector does not have awareness regarding climate finance structures and policies**.
  - Their knowledge of how their businesses may **earn profit from climate finance** is **constrained by a lack of awareness on the subject and a lack of financial literacy**.
- **Formal Financing structure:**
  - Only about **16% of MSMEs** in India have been found to be **financed through the country's formal banking system**.
  - Most **climate finance in India** is routed through **formal financial frameworks** with strict guidelines, this also **imposes a major barrier on the sector to avail the benefit**.

Note:

- **Comprehensive Procedural needs:**
  - **Comprehensive procedures are needed to avail international climate funds** procedures.
  - These include the creation of a detailed project, energy and emission audit reports, etc.
  - Many **small and micro-businesses cannot implement these because they lack the means or the ability to do so.**

## Keibul Lamjao National Park

### Why in News?

Manipur's Keibul Lamjao National Park (KLNP) residents oppose the site's relocation.

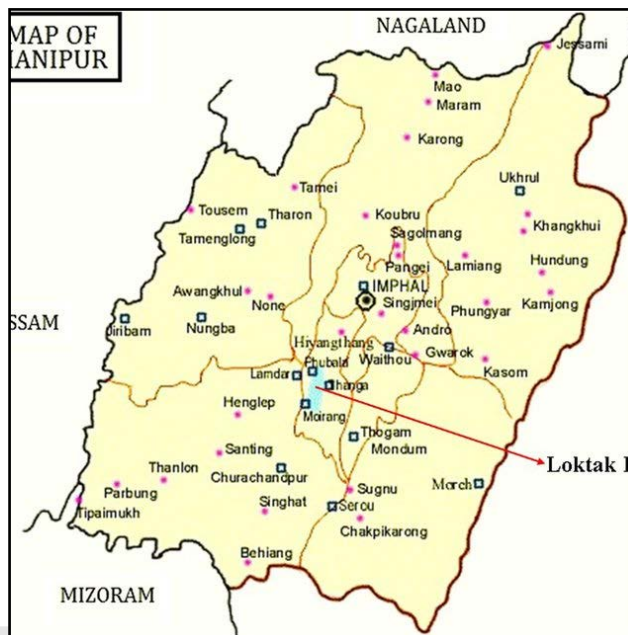
- People argue that the proposed site has **no connection with efforts to save the endangered deer**. On the other hand, the people in surrounding villages have been doing everything possible to protect the deer.

### What are the Important Facts about Keibul Lamjao National Park?

- It is the only **floating National Park in the world**, the Keibul Lamjao National Park located on the **Loktak Lake** is the last natural habitat of the 'Sangai' (*Rucervus eldii eldii*), the dancing deer of Manipur.
- This is the **last natural habitat of the brow-antlered deer (Sangai)** the dancing deer of Manipur.
  - In the 1950s, it was believed that the brow-antlered deer (*Rucervus eldii eldii*) had become extinct in the country. However, it was subsequently re-discovered in Manipur.
- Hog Deer, Otter, a host of water fowls and **migratory birds** are found here.

### What are the Key Points of Loktak Lake?

- Loktak Lake is the **largest freshwater lake in Northeast India** and is famous for the phumdis floating over it.
  - Phumdis are the **heterogeneous mass of vegetation, soil and organic matter** at various stages of decomposition.
- This ancient lake plays an important role in the economy of Manipur. It serves as a **source of water for irrigation, drinking water supply** and hydropower generation.



- Considering the ecological status and its biodiversity values, **Loktak lake was initially designated as a wetland of international importance under the Ramsar Convention in 1990.**
  - Later it was also listed under the **Montreux Record** in 1993.
- Human activity has led to severe pressure on the lake ecosystem.

### What is Brow Antlered Deer?

- **Common Name:** Sangai, Brow antlered deer, Dancing Deer
- **Scientific Name:** *Rucervus eldii*
- **About:**
  - The brow-antlered deer, or sangai, is the state animal of Manipur.
  - The animal's **coat is a dark reddish brown during winter** months and it becomes a much lighter shade in summer.
  - Native to Cambodia, China, India, Laos and Myanmar, these animals were earlier spread widely across habitats in south and south-east Asia.
- **Habitat:**
  - The deer's habitat has **varied from shrubland and grassland to dry forests and marshland**, depending on the country they're found in.
  - In India, these animals are **found only in Manipur's famed Loktak lake.**
  - The brow-antlered deer **usually consumes grass.**

Note:



➤ **Threat:**

- While globally habitat loss has been a grave concern in the conservation of this deer, **hunting is an additional threat in Manipur.**
- While the habitats have been encroached for **grazing, cultivation, and fish farming**, the animals are highly threatened by a hydro-electric project in the lake.

➤ **Protection Status:**

- **IUCN Red List:** Endangered
- **CITES:** Appendix I
- **WPA 1972:** Schedule-I

## National Air Quality Resource Framework of India

### Why in News?

**Principal Scientific Adviser** to the Government inaugurated the **National Mission on "National Air Quality Resource Framework of India (NARFI)"**.

- NARFI has been **developed by the National Institute of Advanced Studies (NIAS), Bengaluru.**

### What is NARFI?

➤ **About:**

- The NARFI is an **information mechanism to help decision-makers in government, municipalities, start-ups and in the private sectors** to address **air pollution** issues in different **climatic zones of India.**
- Research-based audited Information and industry-oriented solutions will be shared in an easy-to-understand format.
- The short-term basic training modules tailored for different groups such as active ground level staff in government establishments, implementers, media and policymakers, **would be an integral part of the framework.**

➤ **Objectives:**

- To help enrich communication and enhance general awareness, leading to self-mitigation.

- **Modules:** The NARFI will evolve around the following five modules:

- **THEME-1:** Emission Inventory, Air Shed, and Mitigation
- **THEME-2:** Impacts on Human Health and Agriculture
- **THEME-3:** Integrated Monitoring, Forecasting and Advisory Framework
- **THEME-4:** Outreach, Social Dimension, Transition Strategy and Policy
- **THEME-5:** Solutions, Public-Industry Partnership, Stubble Burning & New Technologies.

➤ **Significance:**

- It will enable knowledge creation, developing infrastructure and industrial structures and studying its effects on human health in the country.
- It will provide an **all-inclusive guide to collecting air quality data**, studying its impact and implementing science-based solutions.

### What is Air Pollution?

➤ **About:**

- Air pollution is **contamination of the indoor or outdoor environment by any chemical, physical or biological agent** that modifies the natural characteristics of the atmosphere.
- Household combustion devices, motor vehicles, industrial facilities and forest fires are common sources of air pollution.

➤ **Pollutants:**

- Pollutants with the strongest evidence for public health concern include **particulate matter (PM), Ozone (O<sub>3</sub>), Nitrogen dioxide (NO<sub>2</sub>) and Sulphur dioxide (SO<sub>2</sub>).**
- These pollutants are capable of penetrating deep into lung passageways and entering the bloodstream causing **cardiovascular, cerebrovascular and respiratory impacts.**

➤ **Sources of Air Pollution:**

- **Burning of Fossil Fuels:** Most of the pollutants are produced by burning fossil fuels or wood, for driving, heating, power plants and industry.
  - Several man-made factors, vehicular emissions, construction dust, garbage burning causes severe pollution.
  - The particles can be made of black carbon, nitrates, sulphates, ammonia or mineral dust.

Note:

- **Agriculture & Allied Sources:** Farming is one such source of pollution, with ammonia from livestock manure and fertilisers blowing into cities and forming particles, particularly in spring time when crops are sown and muck is spread.

- Further, stubble burning is also one of the major sources of air pollution in northern India, especially in winters.

- **Natural Sources:** Apart from it, there are some natural sources of outdoor air pollution such as dust storms.

➤ **Related Initiatives:**

- **Graded Response Action Plan**
- **SAFAR (System of Air Quality and Weather Forecasting and Research)**
- **The Commission for Air Quality Management in National Capital Region (NCR) and Adjoining Areas.**
- **Bharat Stage (BS) VI norms.**
- **Dashboard for Monitoring Air Quality.**
- **National Clean Air Programme.**
- **National Air Quality Index (AQI).**
- **Air (Prevention and Control of Pollution) Act, 1981.**
- **Pradhan Mantri Ujjwala Yojana (PMUY).**

➤ **Significance:**

- Wetlands are **a critical part of our natural environment**. They mitigate floods, protect coastlines and build **community resilience to disasters, reduce the impacts of floods, absorb pollutants** and improve water quality.
- Wetlands are **critical to human and planet life**. More than 1 billion people depend on them for a living and 40% of the world's species live and breed in wetlands.
- They are **a vital source for food, raw materials, genetic resources** for medicines, and hydropower.
- **30% of land-based carbon** is stored in peatland.
- They play **an important role in transport, tourism and the cultural and spiritual well-being** of people.
- Many wetlands are **areas of natural beauty**, and many are **important to Aboriginal people**.

**What are the Key Highlights of Menar Wetland?**

➤ **About:**

- The two lakes in the Menar village – **the Brahma and Dhandh** play host to a large number of **migratory birds** every year.
  - The Forest Department has initiated the process for notification of Menar as a wetland, which will recognise its role in the storage of sediment and nutrients and **enable the local authorities to maintain the respective lakes**.
- With the status of wetlands, the two lakes will be strengthened for **increasing the vegetation of aquatic plants and protecting biodiversity**.

➤ **Observed Species:**

- More than **150 species of local and migratory birds** inhabit the two lakes in the winter season.
  - They include **Greater Flamingo, White-tailed Lapwing, Pelican, Marsh Harrier, Bar-headed Goose, Common Teal, Greenshank, Pintail, Wagtail, Green Sandpiper and Red-wattled Lapwing**.
    - Bird lovers and tourists flock to the village after the arrival of migratory birds from as far as **Central Asia, Europe and Mongolia**.

➤ **Other Ramsar Sites:**

- At present, Rajasthan has **two wetlands recognised as Ramsar sites** –

## Rajasthan's Menar Bird Village to Become Wetland

### Why in News?

Recognised as the “bird village” following community-driven conservation efforts, Menar in Udaipur district is set to be notified as **Rajasthan's new wetland**.

- This will pave the way for getting the **Ramsar site status** for this rural heartland of the Mewar region.

### What is a Wetland and its Significance?

➤ **Wetlands:**

- **Wetlands** are ecosystems saturated with water, either seasonally or permanently. They include **mangroves, marshes, rivers, lakes, deltas, floodplains and flooded forests, rice-fields, coral reefs, marine areas** no deeper than 6 meters at low tide, as well as human-made wetlands such as waste-water treatment ponds and reservoirs.

Note:

- **Keoladeo Ghana** in Bharatpur district
- **Sambhar Salt Lake** in Jaipur district.

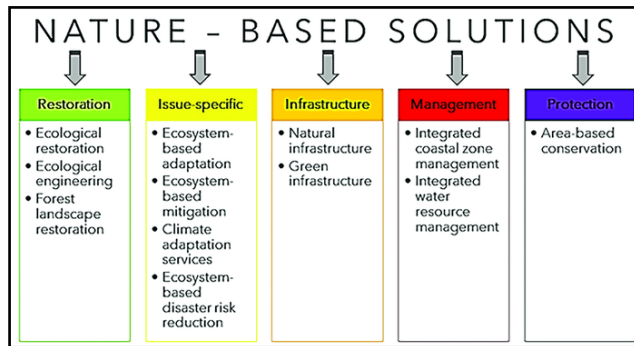
### What is the Significance of Ramsar Listing?

- It is like an **International Organization for Standardization (ISO) certification**. They can take it off the list as well if it doesn't meet their standards continuously. It's a **feather in the cap** but there is a cost to it and that cost can be paid only if there is brand value.
- **Ramsar tag makes it incumbent upon authority to strengthen the protection regime** there and creates defenses against encroachment.
- A number of species of birds prefer to **avoid the Himalaya and instead choose the route passing through Afghanistan and Pakistan** to enter the Indian sub-continent via Gujarat and Rajasthan. Thus, **Gujarat becomes the first landing point of many international migratory species** of ducks, waders, plovers, terns, gulls etc and shorebirds as well as birds of prey.
- Wetlands in India **act as foraging and resting grounds for the migratory birds** during winter.
  - According to **Convention on the Conservation of Migratory Species of Wild Animals (CMS)**, CAF (Central Asian Flyway), which includes 30 countries, covers at least 279 populations of 182 migratory waterbird species, including 29 globally threatened and near-threatened species, which breed, migrate and winter within the region.

## Nature-based Solutions

### Why in News?

- Recently, the **National Institute of Urban Affairs (NIUA) Climate Centre for Cities (NIUA C-Cube)**, **World Resources Institute India (WRI India)** and their partners launched **India's first National Coalition platform for Urban nature-based solutions (NbS)** at the **11<sup>th</sup> World Urban Forum** in Poland.
  - **NIUA** focuses on **research, knowledge management, policy, advocacy, and capacity building** on urban development and management to address and develop **sustainable, inclusive, and productive urban ecosystems** in the country.



### What is the World Urban Forum?

- The World Urban Forum (WUF) is the **premier global conference on sustainable urbanization**.
- The WUF was established in 2001 by the **United Nations** to examine rapid urbanization and its impact on communities, cities, economies, climate change and policies.
- WUF11 is **co-organized by UN-Habitat, Poland's Ministry of Development Funds and Regional Policy and the Municipal Office of Katowice, Poland**.

### What are the Key Highlights of National Coalition platform for NbS?

- The **India Forum for Nature-based Solutions** aims to create a collective of NbS entrepreneurs, government entities and like-minded organizations, **to help scale urban nature-based solutions through**:
  - **Defining a shared language and communicating benefits** that inform actions at the local level including scaling up of existing NbS interventions.
  - **Driving investment** and strengthening delivery mechanisms through multi-stakeholder coordination.
  - **Mainstreaming urban ecosystem-based services** and nature-based solutions in India **through informing policy, plans and project interventions**.

### What is the Significance of Nature Based Solutions?

- **About:**
  - **Nature-based Solutions (NbS)** are defined by **IUCN** as "actions to protect, sustainably manage, and restore natural or modified ecosystems, that address societal challenges effectively and adaptively, simultaneously providing human well-being and biodiversity benefits."

Note:

- Ecosystem-based services and Nature-Based Solutions are fast emerging as **cost-effective and sustainable ways** to address **climate change** induced challenges such as **heat, urban flooding, air and water pollution and storm surges**.
- Along with **mitigating the impact of climate change**, NbS also helps in providing multiple ecosystem benefits along with addressing various societal challenges including **building resilience of the underserved and vulnerable urban communities** who are **most affected by climate change induced catastrophes**.
  - To overcome or minimize the impacts of climate change, the idea of **local-led adaptation** has been widely discussed, which is directed to NbS.

#### What is Local-led Adaptation?

- Local-led adaptation refers to **local communities, local governments acting strongly in taking effective decisions to tackle climate change**.
- Local-led adaptation is often characterised by **indigenous solutions, which are often associated with nature**.
- Given that the most vulnerable populations are the ones that are more dependent on natural resources, it is, therefore, to be expected that coping solutions also often germinate from the same source.

#### ➤ Potentials:

- **Restoring wetlands** to **buffer local communities** from flood waters, or conserving mangrove forests that provide nurseries for fish and protect nearby homes against storm damage.
- From **protecting salt marshes to restoring forest habitats**, nature-based solutions are already in operation across the world.
- **Green roofs or walls** are Nature-based solutions that **can be implemented in cities** to moderate the impact of high temperatures, capture stormwater, abate pollution, and act as carbon sinks, while simultaneously enhancing biodiversity.

#### ➤ Types:

- **Minimal Intervention in Ecosystems:**

- It consists of **no or minimal intervention in ecosystems**,
- Examples include the **protection of mangroves in coastal areas** to limit risks associated with extreme weather conditions and provide benefits and opportunities to local populations.
- **Some Interventions in Ecosystems and Landscapes:**
  - It corresponds to **management approaches that develop sustainable and multifunctional ecosystems and landscapes (extensively or intensively managed)**.
  - This type of NBS is strongly connected to concepts like natural systems **agriculture, agro-ecology, and evolutionary-orientated forestry**.
- **Managing Ecosystems in Extensive Ways:**
  - It consists of managing ecosystems in very extensive ways or **even creating new ecosystems (e.g., artificial ecosystems with new assemblages of organisms for green roofs and walls to mitigate city warming and clean polluted air)**.
  - It is linked to concepts like **green and blue infrastructures** and objectives like restoration of heavily degraded or polluted areas and greening cities.
- **Recognition:**
  - **United Nations:**
    - The UN promoted NBS as the **theme for World Water Day 2018** as “Nature for Water”.
      - The UN World Water Development Report was titled “Nature-based Solutions for Water”.
      - The **2019 UN Climate Action Summit** highlighted **Nature-based solutions** as an effective method to combat climate change.
      - A **Nature Based Solution Coalition** was created, including dozens of countries, **led by China and New Zealand**.
  - **European Union:**
    - Since 2016, the EU has supported a **multi-stakeholder dialogue platform (ThinkNature)** to promote the co-design, testing, and deployment of **improved and innovative NBS** in an integrated way.

Note:



○ India:

- India launched its first **National Coalition platform for Urban nature-based solutions** (NbS) under the **Cities4Forests** initiative.
- **Cities4Forests**: It works closely with cities around the world to connect with forests, emphasises the importance of wetlands and their multiple benefits to help combat climate change and protect biodiversity in cities.

## Bamboo-Dwelling Bat

### Why in News?

Recently, Scientists have discovered a new species of bamboo-dwelling bat near the Nongkhylllem Wildlife Sanctuary.



### What do we Need to Know about Newly Discovered Species?

- The new species of **bamboo-dwelling bat** has been named ***Glischropus meghalayanus***.
  - **Bamboo-dwelling bats** are a particular kind of bat living in the internodes of bamboo with specialised morphological characters that help them to adapt to the life inside a bamboo plant.
- It is **small in size and has a dark brown colour** with sulphur yellow belly.
- The present discovery is the **first report of a thick-thumbed bat** not only from India but also from South Asia.

### What are Thick-Thumbed Bats?

- This bat has typical **fleshy pads on the thumb and soles of feet** which aid them to crawl over smooth surfaces of bamboo internodes.
- Thick-thumbed bats of the **genus *Glischropus*** are currently composed of four recognized species from Southeast Asia.
  - ***G. aquilus*** is endemic to Sumatra, ***G. javanus*** is restricted to western Java, whereas ***G. bucephalus*** is widely distributed north to the Isthmus of Kra and ***G. tylopus*** is widespread south to this zoogeographic boundary.
- Earlier, a new species of thick-thumbed bat (Chiroptera: Vespertilionidae: *Glischropus*) from Meghalaya, north-eastern India was discovered.

### What are the Recent Discoveries of Bats from Meghalaya?

- From the same forested patches outside **Nongkhylllem Wildlife Sanctuary**, another species of **disk-footed bat *Eudiscopus denticulus*** was found which was a new record in India.
- In the past few years, **three bamboo-dwelling bats** have been reported from the area which highlights the ecological significance of the region.
  - Since the bamboo forest around the wildlife sanctuary has a rich bio-diversity there should be attempts to conserve it.

### What is the Number of Bat Species in India?

- **Total Number:**
  - With this new discovery, the total number of bat species known from India stands at **131**.
- **Highest Bat Diversity:**
  - **Meghalaya** harbors **the highest bat diversity** in the country with **67 species**, which is about 51% of total bat species in the country.
  - Meghalaya, because of its **unique terrain, vegetation and climate condition**, was a haven for both flora and fauna.
  - The unique caves in the northeastern State provided roosting opportunities for a large number of bats.
  - There were a number of **cave-dwelling bats species from Meghalaya**, the most common being **Horseshoe bat and Leaf-nosed bats**.

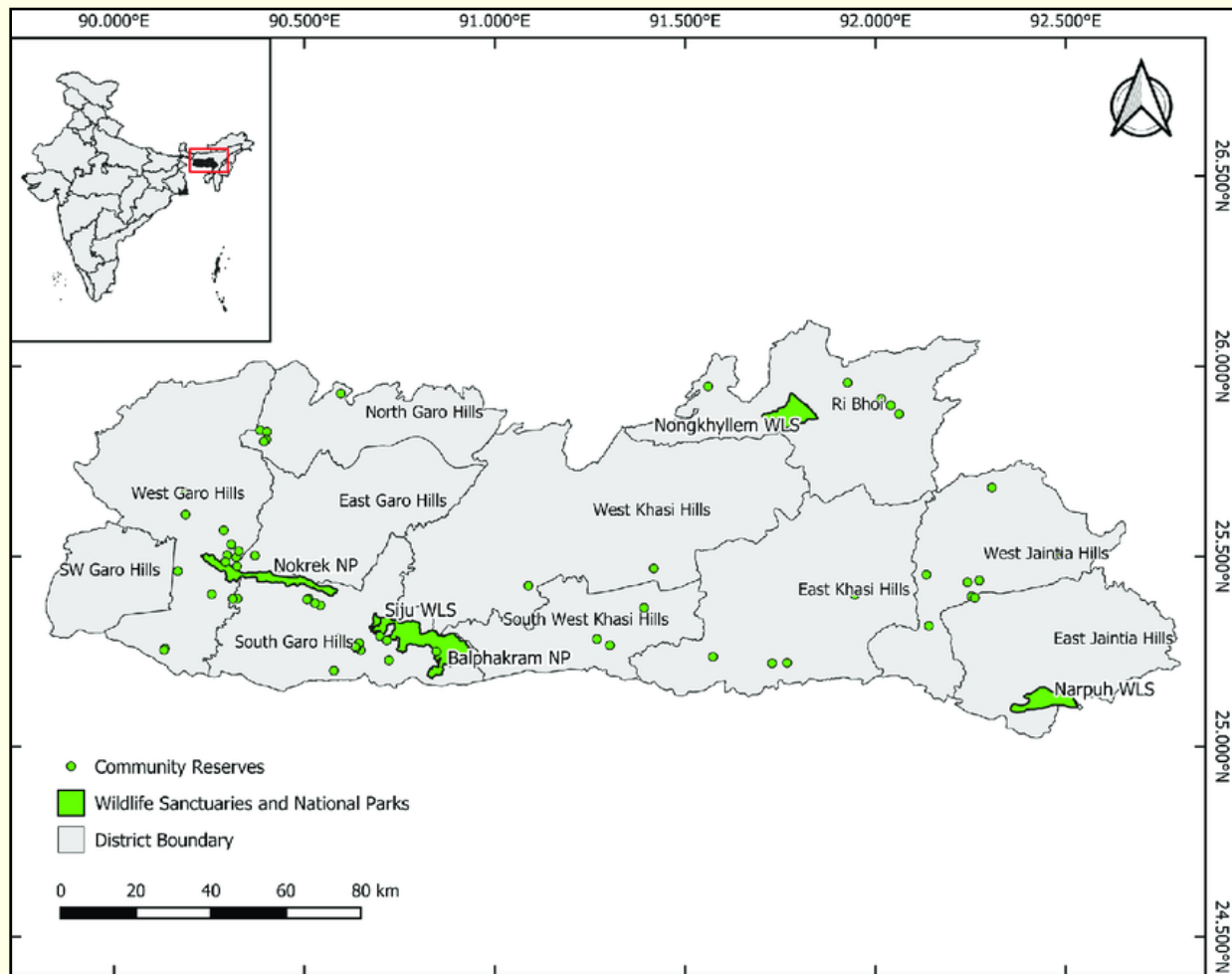
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### Nongkhyllem Wildlife Sanctuary

- Situated in the Ri-Bhoi district near Lailad village and spread over an area of 29 sq. kms, Nongkhyllem Wildlife Sanctuary is one of the famous attractions of Meghalaya.
- The Sanctuary falls in the **Eastern Himalayan Global biodiversity hotspot**.
- The sanctuary supports different species of fauna such as Royal Bengal Tiger, **Clouded Leopard, Indian Bison**, and Himalayan Black Bear etc.
- Among the birds, the rare species which can be spotted here are Manipur Bush Quail, Rufous Necked Hornbill and Brown Hornbill.
- **Other Wildlife Sanctuary in Meghalaya:**
  - Siju Wildlife Sanctuary
  - Narpuh Wildlife Sanctuary
  - Baghmara Pitcher Plant Sanctuary
  - **Nokrek National Park**



Note:



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# Geography

## Highlights

- Residual Flood Damage under Intensive Adaptation
- Snake Island
- Bedti-Varada River Interlinking Project
- Summer Solstice: 21<sup>st</sup> June
- Theri Desert
- National Chambal Sanctuary
- High-grade lithium discovered in Nigeria

## Residual Flood Damage under Intensive Adaptation

### Why in News?

According to a new Study published, **Residual Flood Damage under Intensive Adaptation**, the risk of river flooding is expected to increase with **climate change** and socioeconomic development.

- Residual flood damage under intensive adaptation tries to **estimate the global cost of employing adaptive flood measures** depending on local economic scenarios and cost adaptation measures by trying to quantify the cost of **Residual Flood Damage (RFD)**.

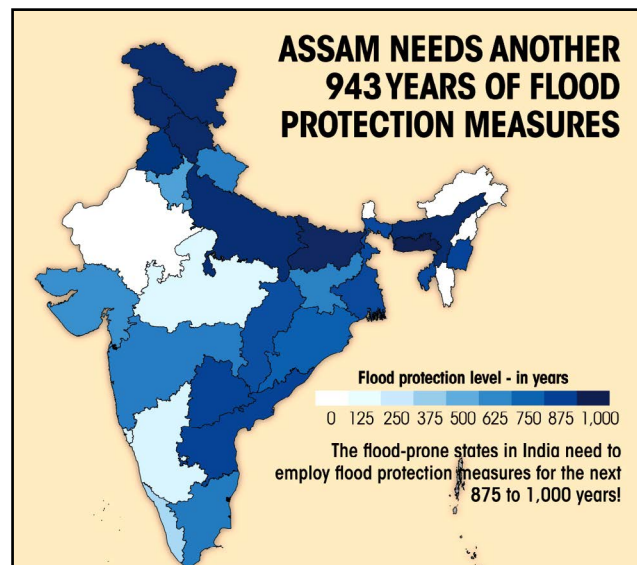
### What is RFD?

- RFD refers to the unavoidable increases in flood damage even under an adaptation strategy based on feasible adaptation costs.
  - Adaptation strategy in the context of floods includes infrastructural measures employed to mitigate flood risks.
- RFD is the part of total **Expected Annual Damage (EAD)**.
  - The expected annual damage is the average of flood damages calculated over a number of events.
- It is calculated by subtracted past EAD (1970-2000) and future EAD estimates (set to 1000 years).

### What are the Findings?

- **Assam will need 943 years of flood protection measures to prevent a crisis like the one it is witnessing** if its pace of preparedness and climate adaptation doesn't increase.

- In 2022, the flooding started as early as May, with 62% above average rainfall from March-May — a 10-year high.
- Currently, 33 of Assam's 35 districts have been affected due to flooding along the Brahmaputra basin. Over 4.2 million people have been affected by floods this year, while over 100,000 hectares of cropland have been damaged as of June 20.
- Other **flood-prone states like Bihar, Uttar Pradesh and Meghalaya** will need 966, 935 & 996 years respectively.
- In India, **riverine floods — considered one of the major natural disasters — have become synonymous with economic losses**. The total flood-related losses in the country were estimated to be over Rs 37 lakh crores from 1953-2017, according to the **Central Water Commission**.



- RFD in South Asia is estimated to be around USD 4 million and adaptive costs around USD 3 million.

Note:



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- RFD (as a part of the **gross domestic product**) remained **high in eastern China, northern parts of India and the central regions of the African continent**.
- RFD can be reduced with shorter construction periods or lower adaptation costs, implying the **need for immediate and appropriate adaptation actions, including enhanced financial support for high-risk regions**.

### What is Flood?

- **About:**
  - It is an **overflow of water onto land that is normally dry**. Floods can happen during **heavy rains, when ocean waves come on shore**, when snow melts quickly, or when dams or levees break.
  - Damaging flooding may happen with only a few inches of water, or it may cover a house to the rooftop. **Floods can occur within minutes or over a long period**, and may last days, weeks, or longer. Floods are the most common and widespread of all weather-related natural disasters.
  - **Flash floods are the most dangerous kind of floods**, because they combine the destructive power of a flood with incredible speed.
  - Flash floods occur when **heavy rainfall exceeds the ability of the ground to absorb it**.
  - They also occur when water fills normally dry creeks or streams or enough water accumulates for streams to overtop their banks, causing rapid rises of water in a short amount of time.
  - They can happen **within minutes of the causative rainfall**, limiting the time available to warn and protect the public.
- **Measures:**
  - **National Disaster Management Authority (NDMA)**
  - **Sendai Framework for Disaster Risk Reduction**
  - **National Flood Commission**
  - **Disaster Management Act, 2005**
  - **Flood Plain Zoning**

## Snake Island

### Why in News?

**Ukraine** has caused significant losses to the Russian military in airstrikes on Zmiinyi Island, also known as **Snake Island**, in the **Black Sea**.

- The hit on the island is believed to be the second major military success using missiles given to Ukraine by the West.



### Where is Snake Island?

- **Features:**
  - **Zmiinyi Island**, also known as **Snake or Serpent Island**, is a small piece of rock less than 700 metres from end to end, that has been described as being **X-shaped**.
- **Location:**
  - It is located 35 km from the coast in the **Black Sea**, to the east of the mouth of the **Danube** and roughly southwest of the **port city of Odesa**.
    - The Danube is the **second longest river in Europe after the Volga**. It rises in the Black Forest mountains of western Germany and flows for some 2,850 km to its mouth on the Black Sea.
  - The island is marked on the map by the tiny village of Bile that is located on it, belongs to **Ukraine**.

### Where is the Black Sea?



Note:



- **Surrounded by:**
  - Black Sea is bound by **Ukraine to the north and northwest, Russia and Georgia to the east, Turkey to the south, and Bulgaria and Romania to the west.**
- **Straits:**
  - **Black Sea** links to the **Sea of Marmara** through the **Bosphorus** and then to the **Aegean Sea** through the **Dardanelles**, has traditionally been Russia's warm water gateway to Europe.
  - The Black Sea is also connected to the **Sea of Azov** by the **Strait of Kerch**.
- **Significance for Russia:**
  - **Strategic Buffer:**
    - **Black Sea** is both a stepping stones to the **Mediterranean** as well as a **strategic buffer** between **NATO** Countries and Russia.
  - **Geostrategic Significance:**
    - Domination of the Black Sea region is a **geostrategic imperative for Moscow, both to project Russian power in the Mediterranean and to secure the economic gateway** to key markets in **southern Europe**.
    - **Russia** has been making efforts to **gain complete control over the Black Sea since the Crimean crisis of 2014**.
    - The domination of the Black Sea has been a major Russian objective of the ongoing war, along with the land bridge to connect Russia and Crimea.
    - **Cutting Ukrainian access to the Black Sea** will reduce it to a **landlocked country** and deal a crippling blow to its trade logistics.

## Bedti-Varada River Interlinking Project

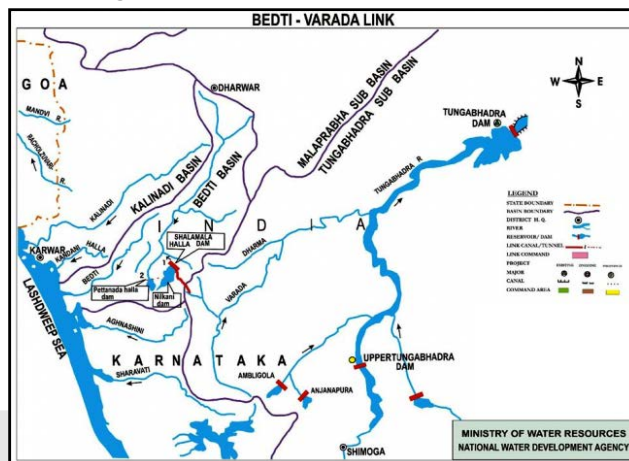
### Why in News?

Environmental groups in Karnataka have criticised the project to link the **Bedti and Varada rivers** in **Karnataka**, calling it unscientific and a waste of public money.

### What is the Bedti-Varada Project?

- The **Bedti-Varada project** was envisaged in **1992** to supply drinking water.

- The plan aims to link the **Bedti**, a river flowing west into the **Arabian Sea**, with the **Varada**, a tributary of the **Tungabhadra River**, which flows into the **Krishna**, which in turn flows into the **Bay of Bengal**.
- A massive dam will be erected at **Hirevadatti** in **Gadag district**.



- A second dam will be built on the **Pattanahalla river** at **Menasagoda** in **Sirsi, Uttara Kannada district**.
- Both dams will take water to the **Varada** via tunnels.
- The water will reach **Kengre** and will then go down a 6.88 km tunnel to **Hakkalumane**, where it will join the **Varada**.
- The project thus envisages taking water from the water surplus **Sirsi-Yellapura region of Uttara Kannada district** to the arid **Raichur, Gadag and Koppal districts**.
- A total of 302 million cubic metres of water from **Pattanahalla and Shalmalahalla tributaries of the Bedti and Varada rivers**, while 222 million cubic metres of water will be drawn from the barrage at **Suremane** built against the **Bedti river**.
- The Project would need 61 megawatts of power to pull the water all the way to **Gadag**. Even after this, it is unknown whether the water would reach **Gadag**.

### What are the Issues associated with this Project?

- **Difficult to Redirect:**
  - It is difficult to redirect a westward-flowing river to flow eastward.
- **Rain-fed Rivers:**
  - In early summer, the **Bedti and Varada rivers** begin to dry up.
  - It is a **sad irony that government scientists plan to interconnect these rivers** under the pretext

Note:

of providing drinking water despite knowing well that **they do not flow all year**.

➤ **Project Report not Accurate:**

- The **Detailed Project Report (DPR)** drawn up by the irrigation department is **not accurate** as it **was drawn without assessing the availability of water** and quoting the observation of the **National Water Development Agency (NWDA)** report on the interconnection of the Bedti-Aghanashini and Varada rivers.

➤ **Environmental Impact:**

- Over **500 acres of forests will be lost**. The end result will be that **there will still be no water**.
- Flora and fauna will also suffer due to this project.
- The **Bedti valley** has been designated as an **active biodiversity zone** by the **International Union for Conservation of Nature**.
- The area is home to **1,741 types of flowering plants as well as 420 species of birds and animals**.
- The nutrients that the river carries with it are responsible for sustaining fish **stocks, especially in the Bedti's estuary in Dedi**.
- The river valley serves as a corridor for around 35 different animal species. The **Bedti is known as Gangavali** in the estuary region.

➤ **Affect Lifelines for Thousands:**

- The **Bedti and Varada rivers are also lifelines for thousands of farmers** in the Malenadu region, the foothills of the Western Ghats, in addition to fishing communities along the coast.

## Summer Solstice: 21<sup>st</sup> June

### Why in News?

21<sup>st</sup> June is the day of the **Summer Solstice** in the northern hemisphere.

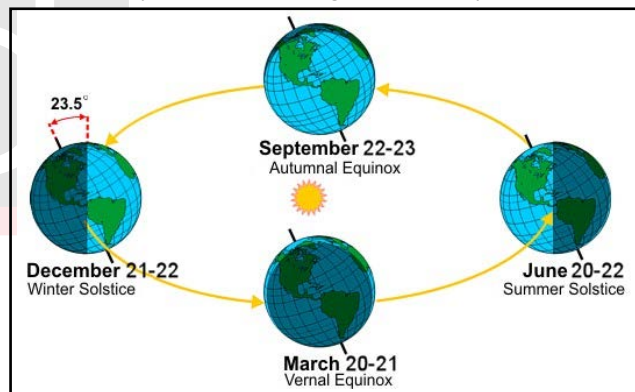
- The day is observed as the **International Day of Yoga**.

### What is the Summer Solstice?

➤ **About:**

- **Solstice** is a **Latin word that means 'stalled sun'**. It is a natural **phenomenon that occurs twice every year**, once in the summer and again during winter, in each hemisphere of the earth - Summer and **Winter Solstice**.

- It is the **longest day and shortest night of the year in the Northern Hemisphere**.
- During this, **countries in the Northern Hemisphere are nearest to the Sun** and the Sun shines overhead on the Tropic of Cancer (23.5° North).
  - At latitudes of 23.5° are the Tropics of Cancer and Capricorn, north and south of the Equator.
  - At 66.5° are the Arctic and Antarctic Circles, to the north and south.
  - Latitudes are a measure of a location's distance from the Equator.
- During the solstice, the **Earth's axis — around which the planet spins, completing one turn each day — is tilted** in a way that the North Pole is tipped towards the sun and the South Pole is away from it.
- Typically, this imaginary axis passes right through the middle of the Earth from top to bottom and is always tilted at 23.5 degrees with respect to the sun.



➤ **Greater Amount of Energy:**

- This day is characterised by a greater amount of energy received from the sun. According to **NASA (National Aeronautics and Space Administration)**, the amount of incoming energy the Earth received from the sun on this day is 30% higher at the North Pole than at the Equator.
- The **maximum amount of sunlight received by the Northern Hemisphere during this time is usually on June 20, 21 or 22**. In contrast, the Southern Hemisphere receives most sunlight on December 21, 22 or 23 when the northern hemisphere has its longest nights— or the winter solstice.

### What is the Geography Behind the Solstice?

- The reason behind it is the **changing lengths of the days is the Earth's tilt**.

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- The Earth's **axis of rotation is tilted at an angle of 23.5°** to its orbital plane. This tilt, combined with factors such as Earth's spin and orbit, leads to variations in the duration of sunlight, due to which any location on the planet receives different lengths of days.
  - The Northern **Hemisphere spends half the year tilted in the direction of the Sun**, getting direct sunlight during long summer days. During the other half of the year, it tilts away from the Sun, and the days are shorter.
- The tilt is **also responsible for the different seasons on Earth**. This phenomenon causes the movement of the Sun from the northern to the southern hemisphere and vice versa bringing in seasonal changes in the year.

#### What is the Equinox?

- Twice each year, **during the equinoxes ("equal nights")**, Earth's axis is not pointed toward our Sun, but is perpendicular to the incoming rays.
- It results in a **"nearly" equal amount of daylight and darkness** at all latitudes.
- The vernal or spring equinox occurs in the northern hemisphere on March 20 or 21. September 22 or 23 marks the northern hemisphere **autumnal or fall equinox**.

## Theri Desert

### Why in News?

There are couple of theories that are being debated regarding the formation of Theri desert, the most plausible being the role of **south west monsoonal winds**.

### What is the Theri Desert?

- It is a **small desert** situated in the state of **Tamil Nadu**. It **consists of red sand dunes** and is confined to **Thoothukudi district**.
- The red dunes are called **theri in Tamil**. They consist of sediments dating back to the **Quaternary Period** (began 2.6 million years ago) and are made of marine deposits.
- They **have very low water and nutrient retention capacity**. The dunes are susceptible to aerodynamic lift. This is the push that lets something move up. It is the force that is the opposite of weight.

### What is the Mineral Composition of Theri?

- The petrographical study (petrography is the study of composition and properties of rocks) and X-ray diffraction analysis (a method used to determine a material's crystallographic structure) of the red sand dunes reveal the presence of heavy and light minerals.
- These include: Ilmenite, Magnetite, Rutile, Garnet, Zircon, Diopside, Tourmaline, Hematite, Goethite, Kyanite, Quartz, Feldspar and Biotite.
- The iron-rich heavy minerals like **ilmenite, magnetite, garnet, hypersthene and rutile present in the soil had undergone leaching by surface water** and were then oxidised because of the favourable semi-arid climatic conditions.
- It was **due to these processes** that the **dunes** near Tiruchendur, a coastal town of Thoothukudi district are **red-coloured**.

### How Theri Dunes Were formed?

- Theri appears as gentle, undulating terrain. The **lithology** (the study of general physical characteristics of rocks) **that the area might have been a paleo (ancient) coast in the past**. The presence of limestone in many places indicates marine transgression.
- The present-day theris might have been formed by the confinement of beach sand locally, after regression of the sea. When high velocity winds from the Western Ghats blew east, they induced migration of sand grains and accumulation of dunes.
- **Another view is that these are geological formations** that appeared in a period of a few hundred years.
- There is a lot of red sand spread over these *theris*. The **red sand is brought from the surface of a broad belt of red loam in the plains** of the Nanguneri region (about 57 kilometres from this area in Tirunelveli district) **by south west monsoon winds** during May-September.
- Deforestation and absence of vegetative cover are considered to be the major causes of wind erosion.
- When the dry monsoon wind blows with high velocity, the red loam is churned and driven east in huge columns of red sand, till they are met by sea breeze near the coastal tract of Tiruchendur and get deposited there.
- These **processes of erosion, transport and deposit of sediments** that are **caused by wind** at or near the surface of the earth, are called **Aeolian processes**. They lead to continual sand redistribution.

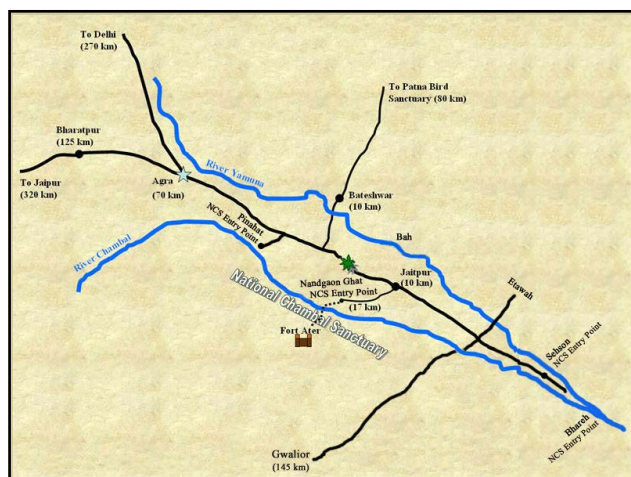
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## National Chambal Sanctuary

### Why in News?

Recently, the Madhya Pradesh government has proposed to open 292 hectares for mining in five stretches on **Chambal** and its tributary **Parvati** rivers.

- The step is taken to free its forest department from devoting too much time, resources, and efforts in fighting illegal mining in the **National Chambal Sanctuary**.
- Sand mining has been banned in the sanctuary since 2006.



### Where is National Chambal Sanctuary?

- **About:**
  - It was set up in 1979 as a riverine sanctuary along an approximately 425 km length of the Chambal River.
  - Its ravines stretches over 2-6 km wide along the **Chambal River** near the tri-point of Rajasthan, Madhya Pradesh and Uttar Pradesh.
  - The National Chambal Sanctuary is listed as an **Important Bird Area (IBA)** and is a proposed **Ramsar site**.

### What are Important Bird Areas (IBAs)?

- **Birds are excellent indicators of ecosystem health.**
- The **IBA programme of Birdlife International** aims to identify, monitor and protect a global network of IBAs for **conservation of the world's birds and associated biodiversity**.

- The **Bombay Natural History Society** and **Birdlife International** have identified **554 IBAs in India**.
- 40% of these IBAs fall outside the Protected Area network and thus form an important tool for landscape-level conservation planning.
- According to Birdlife International, designation of IBAs is based on standardized criteria, namely:
  - **A: Global**
    - **A1. Species of Global Conservation Concern:**
      - The site regularly holds significant numbers of a **globally threatened species**, or other species of global conservation concern.
    - **A3. Biome-Restricted Species:**
      - The site is known or thought to hold a significant assemblage of the species whose breeding distributions are largely or wholly **confined to one biome**.
    - **A4. Congregations**
      - i. The site is known or thought to hold, on a regular basis, **≥ 1% of the biogeographic population of a congregatory waterbird species**.
      - ii. The site is known or thought to hold, on a regular basis, **≥ 1% of the global population of a congregatory seabird or terrestrial species**.
      - iii. The site is known or thought to hold, on a regular basis, **≥ 20,000 waterbirds or ≥ 10,000 pairs of seabird of one or more species**.

### ➤ Ecological Significance:

- The National Chambal Sanctuary is **home to critically endangered Gharial (small crocodiles), the red-crowned roof turtle** and the endangered **Ganges River dolphin**.
- Chambal supports the largest population of Gharials in the wild.
- Only known place where nesting of **Indian Skimmers** is recorded in large numbers.
- Chambal supports **8 rare turtle species** out of the 26 found in the country.
- Chambal is one of the **cleanest rivers in the country**.

Note:



- Chambal supports more than **320 resident and migrant birds**.
- **Economic Support:**
  - Locals directly depended on various resources of the Sanctuary. They **farm along the river**, extract river water for **irrigation**, practice **sustenance and commercial fishing**, and **quarry sand**.

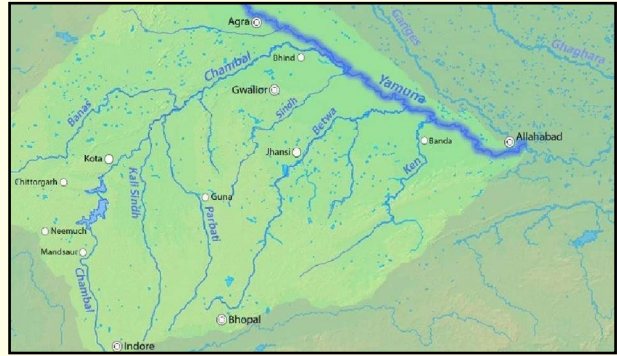
### **What are the Other Sanctuaries and National Parks of Madhya Pradesh?**

- Madhya Pradesh has **9 National Parks and 25 Sanctuaries** spread over an area of 10,862 square km constituting 11.40% of the total forest area and 3.52% of the geographical area of the state.
- At present, the state has **5 Project Tiger** areas in the state namely –
  - **Kanha National Park**
  - **Panna National Park**
  - **Bandhavgarh National Park**
  - **Pench National Park**
  - **Satpura National Park**
- It is also known as the '**Tiger State**' as it occupies around 19% of India's Tiger Population and 10% of the world's tiger population.

#### **Chambal River**

- It is one of the most **pollution-free rivers** of India.
- It's a 960 km. long river that originates at the **Singar Chouri peak** in the northern slopes of the **Vindhya** mountains (Indore, Madhya Pradesh). From there, it flows in **North direction** in Madhya Pradesh for a length of about 346 km and then follows a **north-easterly direction** for a length of 225 km through Rajasthan.
- It enters U.P. and flows for about 32 km before joining the **Yamuna River** in Etawah District.
- It is a **rainfed river** and its basin is bounded by the **Vindhyan** mountain ranges and the **Aravallis**. The Chambal and its tributaries drain the **Malwa region** of northwestern Madhya Pradesh.
- **Tributaries:** Banas, Kali Sindh, Parbati.
- **Main Power Projects/ Dam:** Gandhi Sagar Dam, Rana Pratap Sagar Dam, Jawahar Sagar Dam, and Kota Barrage.

- The **National Chambal Sanctuary** is located along river Chambal on the tri-junction of Rajasthan, Madhya Pradesh and Uttar Pradesh. It is known for **critically endangered gharial, the red-crowned roof turtle, and the endangered Ganges river dolphin**.



## **High-grade lithium discovered in Nigeria**

### **Why in News?**

Recently, **High-grade Lithium** has been discovered in Nigeria.

- **Greenbushes mine** in **Western Australia** is the **largest hard-rock Lithium mine** in the world.
- The largest importers of lithium are **South Korea, China, Japan, US and Belgium**.

### **What are the Key Highlights of Lithium?**

- **About:**
  - Lithium is an element and in nature tends to concentrate sufficiently in the two minerals, **spodumene and lepidolite**.
  - They are usually **found in specialised rocks called rare and greisens**.
  - The **Geological Agency** described lithium as **high grade** because it is found with 1-13% oxide content. Normally exploration begins at levels as low as 0.4%.
    - **Grade (in %)** is a measure of the concentration of lithium in the minerals and or rocks that contain it.
    - Therefore, the **higher the grade the more the economic viability**. Higher grades are very rare for metals like lithium.

Note:



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➤ **Applications:**○ **Special Glasses and Ceramics:**

- **Lithium disilicate ( $\text{Li}_2\text{Si}_2\text{O}_5$ )** is a chemical compound that is a glass ceramic.
- It is widely used as a dental ceramic due to its **strength, machinability and translucency**.

○ **Alloy Making:**

- Lithium metal is used to make useful alloys.
  - For example, with lead to make '**white metal**' bearings for motor engines, with aluminium to make aircraft parts, and with magnesium to make Armour plates.

○ **Rechargeable batteries:**

- **Lithium is used in rechargeable batteries for mobile phones, laptops, digital cameras and electric vehicles.** Lithium is also used in some non-rechargeable batteries for things like heart pacemakers, toys and clocks. The different types of batteries are:
  - **Lithium-cobalt oxide battery:** It is used in consumer electronics and is being applied in electric vehicles. It is relatively cheap.
  - **Lithium-nickel-manganese-cobalt:** It is a newer, higher performing range of battery chemistry. It is mainly developed for the electronic vehicle market but is finding a wider use because of its increasing cost effectiveness.
  - **Lithium iron phosphate:** It is the safest technology with relatively high performance but relatively expensive. It is very popular in China.
  - **Lithium-nickel-cobalt-aluminium oxide:** It is developed to reduce cobalt consumption

and is known as a **solid performer** and of reasonable cost. It is also **becoming popular outside China**.

➤ **High Demand:**

- Due to the growing interest in **clean energy**, the demand for lithium has **skyrocketed** as most countries draw plans to phase out **fossil fuel** and switch to zero emission **electric vehicles**.
- Lithium production globally grew from 28,100 metric tonnes in 2010 to 86,000 in 2019. The challenge will be in supplying the market with enough lithium.

➤ **Lithium in India:**

- Researchers at the **Atomic Minerals Directorate (under India's Atomic Energy Commission)** have estimated **lithium reserves of 14,100 tonnes** in a small patch of land surveyed in **Southern Karnataka's Mandya district**.
- Also, to be **India's first ever Lithium deposit site**.

### ***What are the Steps taken by India to reduce import of Lithium?***

- India has adopted a **multi-modal strategy to reduce its dependence on imported lithium** and give fresh impetus to the growth of the **local electric vehicles (EV) industry**.
- State-run **Khanij Bidesh India Ltd (KABIL)** is working with the authorities in **Argentina, Chile, Australia and Bolivia** for acquiring lithium and cobalt mines overseas.
  - These nations are rich in lithium reserves.
- The country is also working on **urban mining** where recycled materials remain in circulation and this reduces the dependency on fresh lithium inputs. This will further bring down the requirement for imports.



Note:

# Art and Culture

## Highlights

- 8<sup>th</sup> International Day of Yoga
- Prithvi-II Missile
- Vertical Launch Short Range Surface to Air Missile
- Pay Roll Automation for Disbursement of Monthly Allowances (PADMA)
- ABHYAS: High-speed Expendable Aerial Target
- Operation Sankalp

## 8<sup>th</sup> International Day of Yoga

### Why in News?

Eighth **International Day of Yoga (21<sup>st</sup> June 2022)** is being celebrated across the world.

- Theme 2022: 'Yoga for Humanity'.

### What is Historical Background and Significance?

- **Background:**
  - The idea of **International Day of Yoga (IDY)** was **proposed by India** during the opening of the 69<sup>th</sup> session of the **United Nations General Assembly (UNGA)**, held in 2014.
  - The UN proclaimed **21<sup>st</sup> June as IDY** by passing a **resolution** in December, 2014.
  - The first Yoga Day celebrations in **2015 at Rajpath in New Delhi** created two Guinness World Records.
    - It was the **world's largest yoga session** with 35,985 people.
    - 84 nationalities participated in it.
- **Yoga and its Significance:**
  - Yoga is an ancient physical, mental and spiritual practice that originated in India.
  - The word '**yoga**' is **derived from Sanskrit and means to join or to unite**, symbolizing the union of body and consciousness.
  - Today it is practiced in various forms around the world and continues to grow in popularity.
  - Yoga plays an **important role in the psycho-social care** and rehabilitation of **Covid-19 patients** in quarantine and isolation.
  - The **World Health Organisation (WHO)** has also asked its member states to practice Yoga and has

included it in its Global Action Plan for physical activity 2018-30.

### What is the Significance of the Day?

- The International Yoga Day is **observed to spread awareness about the practice of yoga and its holistic approach to physical and mental well-being.**
- The International Day of Yoga aims to **inculcate a habit of meditation for the peace of mind and the self-awareness** which is necessary to survive in a stress-free environment.

### What are the Related Initiatives?

- **M-Yoga App:**
  - The Prime Minister announced the **M-Yoga App** which will help in achieving '**One World One Health**'.
  - The app is a work of collaboration between the **World Health Organisation (WHO)** and the Ministry of Ayurveda, Yoga & Naturopathy, Unani, Siddha and Homoeopathy (**Ministry of AYUSH**), Government of India.
- **New website for International Day of Yoga (IDY):**
  - This web portal provides all the updated and relevant information relating to International Day of Yoga.
  - It has a **social wall where all the social media interactive platforms are available for the visitors to keep track on the discussions and participate in them.**
  - The portal is also linked to important web pages such as **Swachh Bharat, Make in India**, etc.
- **Yoga recognised as a Sports Discipline:**

Note:

- The Ministry of Youth Affairs and Sports, after reviewing categorization of various Sports disciplines, **recognised Yoga as a sports discipline and placed it in the 'Priority' category** in September 2015.

➤ **Common Yoga Protocol:**

- The Ministry of **AYUSH** in its '**Common Yoga Protocol**' has listed Yama, Niyama, Asana, etc. among popular yoga 'sadhanas'.

➤ **Vocational Education Courses in Yoga:**

- The Beauty & Wellness Sector Skill Council (B&WSSC) has **vocational education courses in Yoga for CBSE schools**.
- B&WSSC is established as a non-profit organization under the aegis of National Skill Development Corporation, Ministry of Skill Development and Entrepreneurship.

➤ **Various Skilling initiatives:**

- Thousands of candidates have been trained as yoga instructors and trainers through various skilling initiatives like the **Pradhan Mantri Kaushal Vikas Yojana (PMKVY)**.
- PMKVY is the flagship scheme of the Ministry of Skill Development and Entrepreneurship.

➤ **Fit India Movement:**

- Yoga is also a part of the **Fit India Movement**.
- Fit India Movement is a nation-wide campaign that aims at encouraging people to include physical activities and sports in their everyday lives.

## Prithvi-II Missile

### Why in News?

Recently, India successfully conducted the night trial of **surface-to-surface nuclear-capable short-range ballistic missile Prithvi-II**.

- Earlier, Intermediate Range Ballistic Missile **Agni-IV** was tested which can travel as far as 4,000 km.

### What are the Key Highlights about Prithvi-II Missile?

➤ **About:**

- Prithvi-II is an **indigenously developed Surface-to-Surface Missile Short-Range Ballistic Missile**

(**SRBM**), which has a range of around 250 km-350km and can carry a one tonne payload.

- Prithvi II class is a **single-stage liquid-fueled missile** that has warhead mounting capability of 500 kg-1000kg.
- The missile is a **proven system and is capable of striking targets** with a very high degree of precision.
- The state-of-the-art missile uses an **advanced inertial guidance system** with manoeuvring trajectory to hit its target.



- It was initially **developed for the Indian Air Force** as its primary user and was **later inducted into the Indian Army** as well.
- While the missile was inducted into India's Strategic Forces Command for the first time in 2003, it was the first missile developed under the IGMDP.

➤ **Developed by:**

- **Defence Research and Development Organisation (DRDO)** of India under its **Integrated Guided Missile Development Programme (IGMDP)**.

### What are the Prithvi Missiles?

- The **Prithvi missile system** comprises various tactical **Surface-to-Surface Short-Range Ballistic Missiles (SRBM)**.
- Its development began in 1983, and it was **India's first indigenous ballistic missile**.

Note:



- It was first test-fired in 1988, from Sriharikota, SHAR Centre.
  - It has a range of from 150 to 300 km.
- The **naval variant of Prithvi I and Prithvi III class missiles** have the code-name **Dhanush**.
- The propulsion technology was likely based on the **Soviet SA-2 surface-to-air missile**.
  - **Soviet SA-2 Surface-to-Air Missile:**
    - Developed in the mid-1950s, the **Soviet SA-2 surface-to-air** missile was the first effective Soviet Union surface-to-air missile.
    - Developed as a missile for the battlefield, it could carry a nuclear warhead in its role as a tactical nuclear weapon.
- The Prithvi I missiles have been in service with the Indian Army since 1994.
  - Reportedly, **Prahar missiles** are replacing with Prithvi I missiles.
- Prithvi II missiles have been in service since 1996.
- Prithvi III having a more extended range of 350 km, was successfully test-fired in 2004.

### ***What is Integrated Guided Missile Development Programme (IGMDP)?***

- **About:**
  - IGMDP was an Indian Ministry of Defence programme to **research and develop a comprehensive range of missiles**.
  - The project started in 1982–1983 under the leadership of **Dr APJ Abdul Kalam**.
  - This Programme made **Dr APJ Abdul Kalam the missile man of India**.
  - The integrated guided missile programme was complete in 2008.

### ***Five Missiles Developed under the IGMDP:***

- **PRITHVI** (Short range surface-to-surface ballistic missile)
- **AGNI** (Medium to intercontinental surface-to-surface missile)
- **TRISHUL** (Short range low-level surface-to-air missile)
- **AKASH** (Surface-to-air missile having a range of up to 25 Km and multi-target handling system)
- **NAG** (Third generation “fire & forget”, “top attack” anti-tank missile)

## **Vertical Launch Short Range Surface to Air Missile**

### ***Why in News?***

Recently, **Vertical Launch Short Range Surface to Air Missile (VL-SRSAM)** was successfully flight-tested by **Defence Research & Development Organisation (DRDO)** and the **Indian Navy** from an Indian Naval Ship at **Integrated Test Range (ITR), Chandipur** off the coast of Odisha.



### ***Key Points***

- **About:**
  - **VL-SRSAM** has been designed and developed jointly by three facilities of the **Defence Research and Development Organisation** for **deployment of Indian Naval warships**.
  - The missile has the **capability of neutralizing various aerial threats** at close ranges including sea-skimming targets.
    - **Sea skimming** is a technique many anti-ship missiles and some fighter or strike aircraft use to **avoid radar and infrared detection**.
- **Design:**
  - The missile has been designed to strike high-speed airborne targets **at the range of 40 to 50 km and at an altitude of around 15 km**.
  - Its design is based on **Astra missile** which is a **Beyond Visual Range Air to Air missile**.
    - **Astra (“weapon”)** is India’s first air-to-air **all weather beyond-visual-range active radar homing air-to-air missile**, developed by the **Defence Research and Development Organization**.

Note:

- A **Beyond-Visual-Range missile (BVR)** is an air-to-air missile that is **capable of engaging at ranges of 20 nautical miles** or beyond.

➤ **Features:**

- **Cruciform wings:** They are four small wings arranged like a **cross on four sides** and give the **projective a stable aerodynamic posture**.
- **Thrust Vectoring:** It is the **ability to change the direction of the thrust** from its engine, control the angular velocity and the attitude of the missile.
  - **Thrust** is the **force which moves an aircraft through the air**.
- **Canisterised system:** The **inside environment is controlled**, thus making its transport and storage easier and improving the shelf life of weapons.

#### Naval Warfare

- It is a **combat in and on the sea, the ocean**, or any other battlespace involving a major body of water such as a large lake or wide river.
- **Defence Mechanism:**
  - **Chaffs:**
    - It is a **countermeasure technology** used worldwide to protect naval ships from enemy's radar and **Radio Frequency (RF) missile seekers**.
  - **Missiles to counter Anti-Ship missiles:**
    - These systems have to have a swift detection mechanism and quick response to warships.

## Pay Roll Automation for Disbursement of Monthly Allowances (PADMA)

### Why in News?

Recently, the Ministry of Defense inaugurated **PayRoll Automation for Disbursement of Monthly Allowances (PADMA)**, an automated Pay & Allowances module for the **Indian Coast Guard**.

### What are the Key Highlights about PADMA?

➤ **About:**

- **PADMA** is an **automated platform leveraging latest technology** which will provide seamless and timely disbursement of Pay & Allowances to around **15,000 Indian Coast Guard personnel**.

- This module has been developed under the aegis of the Defense Accounts Department and will be operated by **Pay Accounts Office Coast Guard, Noida**.

➤ **Significance:**

- The launch marked the beginning of the **Centralized Pay System (CPS)**, the foundation of which is being laid down by the **Defense Accounts Department Headquarters** to provide one stop pay accounting solutions for all organizations under the Ministry.
- Launch of PADMA will strengthen the **Digital India** Vision. Also, it is an **'Atmanirbhar Bharat'** initiative as the **entire module has been designed and developed by Indian entrepreneurs assisted by domain experts**.

#### What is a Centralised & Decentralized Payment System?

- **Centralized Payment Systems** in India are **Real Time Gross Settlement (RTGS)** and **National Electronic Funds Transfer (NEFT)** systems, **both owned and operated by the Reserve Bank**.
  - **RTGS:** It enables real-time transfer of funds to a beneficiary's account and is primarily meant for large-value transactions.
    - Real time means the processing of instructions at the time they are received and gross settlement implies that settlement of funds transfer instructions occurs individually.
  - **NEFT:** It is an electronic fund transfer system in which the transactions received up to a particular time are processed in batches.
    - It is generally used for fund transfers of up to Rs. 2 lakh.
- The **decentralised payment systems** will include clearing houses managed by RBI (**Cheque Truncation System (CTS)** centres as well as other banks (**Express Cheque Clearing System (ECCS)** centres and any other system as decided by RBI from time to time.
  - **Cheque Truncation:** It is the **process of stopping the flow of the physical cheque issued by a drawer at some point by the presenting bank en-route to the paying bank branch**.
  - **Express Cheque Clearing System:** **Funds move from one account to another to settle a check payment**. The amount is usually credited to the bank account of deposit and an equivalent amount debited at the bank from which it is drawn.

Note:

## What is Indian Coast Guard?

### ➤ About:

- It is a **maritime law enforcement and search and rescue agency** of India with **jurisdiction over its territorial waters** including its **contiguous zone and exclusive economic zone**.
  - **Contiguous zone:** It is a band of water extending farther from the outer edge of the territorial sea to up to 24 nautical miles from the baseline.
  - **Special Economic Zone (SEZ):** It is an area in a country that is subject to different economic regulations than other regions within the same country.
- It comes under the **Ministry of Defense**.
- The concept of forming ICG came into being after the **1971 war**.
- The blueprint for a multidimensional Coast Guard was conceived by the visionary **Rustamji Committee**.

### ➤ Functions:

- **Preventing Smuggling:** One of the primary duties of the ICG is prevention of smuggling through maritime routes.
  - It has jurisdiction over the territorial waters of India including contiguous zone and **Exclusive Economic Zone (EEZ)**.
- **Aid to Civil Authority:** It has also **rescued approximately 13,000 personnel to date during various 'Aid to Civil Authority' operations** viz. assistance provided to civil authorities during floods, cyclones and other natural calamities,
- **Maritime Security:** It is also collaborating with littoral countries to combat transnational maritime crimes and enhance maritime safety in its area of responsibility and in the **Indian Ocean Region**.
  - Under **SAGAR' - Security and Growth for all in the Region & 'Neighbourhood First' policy**, the ICG has nurtured professional relationships across oceans and established ties with countries in the Indian Ocean Region for Ocean Peacekeeping.
- **Role in Disaster Management:** The ICG has successfully averted major ecological disasters and emerged as the **'First Responder'** in the region.
  - For example, by undertaking a major fire-fighting and pollution response operation off the Sri

Lanka coast, the most recent being **'Sagar Aarakshan-II'** onboard Chemical carrier MV X-Press Pearl.

## ABHYAS: High-speed Expendable Aerial Target

### Why in News?

Recently, India successfully tested the indigenously-designed **Abhyas - a High-speed Expendable Aerial Target (HEAT) - in Odisha**.

- The trial was carried out by the **Defence Research and Development Organisation (DRDO)** from the Integrated Test Range (ITR) in Odisha's Chandipur.



### What are the Key Points of ABHYAS?

#### ➤ Designed and developed by:

- Aeronautical Development Establishment (ADE), of DRDO.
  - ADE is a key Aeronautical Systems Design Laboratory under DRDO.
  - It is involved in the design and development of the state-of-the-art **Unmanned Aerial Vehicles (UAV)** and Aeronautical Systems and technologies to meet the requirements of the **Indian Armed forces**.

#### ➤ Features:

- It is powered by a **gas turbine engine** to sustain a **long endurance** flight at subsonic speed.
- It is equipped with a **MEMS (Micro-Electro-Mechanical Systems)-based Inertial Navigation System (INS)** for navigation along with the Flight Control Computer (FCC) for guidance and control.
- The vehicle is **programmed for fully autonomous flight** and their check-out is done using a laptop-based Ground Control Station (GCS).

Note:



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- Abhyas system is equipped with **Radar Cross-Section (RCS) and infrared signatures** which can be used to simulate a variety of aircraft for the practice of anti-aircraft warfare and also for the testing designed to target aerial targets.

➤ **Utility:**

- It will be used as a **target for the evaluation of various missile systems**.
  - It offers a realistic threat scenario for practice of weapon systems.

**What are the Other Recent Developments?**

- In September 2021, the DRDO tested a new version of the **Akash Missile – 'Akash Prime'** – from the Integrated Test Range (ITR), Chandipur, Odisha.
- In July 2021, DRDO launched the **Akash-NG (New Generation)** and the Man Portable Anti Tank Guided Missile (MPATGM).
- In June 2021 a new generation nuclear capable ballistic missile **Agni-P (Prime)** was successfully test-fired by the DRDO.
- In February 2021 India also successfully test-fired indigenously-developed anti-tank guided missile systems '**Helina**' and '**Dhruvastra**'.
- In October 2020, the DRDO conducted a successful flight test of the **Supersonic Missile Assisted Release of Torpedo (SMART)** from Wheeler Island off the coast of Odisha.

## Operation Sankalp

### Why in News?

Indian Navy's stealth Frigate, **INS Talwar** is presently deployed for Op-Sankalp commemorating the 3rd continuous year of Indian Navy's presence in the Gulf.

### What is Operation-Sankalp?

➤ **About:**

- The **Indian Navy** has launched '**Operation Sankalp**' in the **Persian Gulf** and the **Gulf of Oman** as a measure to **assure the safety and security of the Indian vessels**.

➤ **Background:**

- After the attacks on merchant ships in the **Gulf of Oman** in June 2019, Indian Navy had commenced **Maritime Security Operations**, code named **Op-**

**Sankalp**, in the Gulf Region to ensure safe passage of Indian Flag Vessels transiting through the **Strait of Hormuz**.



➤ **Deployment:**

- Twenty-three warships have been deployed till date for this operation and on an average 16 Indian-flagged merchant vessels are being provided safe passage each day in the Gulf region
- Indian Navy's stealth Frigate, **INS Talwar** is presently deployed in the Gulf region.

➤ **Significance:**

- India is dependent for about 85% of its demand for oil on imports. In 2019-2020, around 62% of India's oil imports valued at approximately 66 billion USD came from the Gulf region.
- Due to the prevailing security situation in the Persian Gulf, it is required to provide security to Indian-flagged merchant vessels transiting through the region.

### INS Talwar

- **INS Talwar (F40)** is the lead ship of the Talwar-class frigates of the Indian Navy. Its name means "**Sword**" in Hindi.
- Built in Russia, commissioned into the Indian Navy in June 2003.
- **Features:**
  - Anti-air operations
  - Anti-ship/Land-attack missiles
  - Anti-submarine warfare

### The Persian Gulf

- Also called the **Arabian Gulf**, it is a shallow marginal sea of the Indian Ocean that lies between the Arabian Peninsula and the southwestern Iran.

Note:



- Its length is around 990 km and its width varies from a maximum of around 340 km to a minimum of 55 km in the **Strait of Hormuz**.
- The area has approximately two-thirds of the world's estimated proven oil reserves and one-third of the world's estimated proven natural gas reserves.
- A considerable amount of sea trade passes through the gulf, leading to heavy traffic of large tankers that carry oil from the large marine terminals situated in Iran, Kuwait, Saudi Arabia, Bahrain, United Arab Emirates and other locations to all parts of the world.

#### The Gulf of Oman

- The Gulf of Oman, northwest arm of the Arabian Sea, **lies between the eastern portion of the Arabian Peninsula (Oman) and Iran**.
- It is 560 km long and **connects with the Persian Gulf** through the **Strait of Hormuz**.
- It is a shipping route for the oil-producing area around the Persian Gulf.
- It offers the **only entrance from the Arabian Sea and the Indian Ocean** into the Persian Gulf. Thus, the world's major oil exporters and importers have a joint interest in its security.



Note:

# Miscellaneous

## Highlights

- 44<sup>th</sup> Chess Olympiad
- Rim of the Pacific (RIMPAC) Exercise 2022
- Halving Pesticide Use Across Europe by 2030
- UNESCO recognizes ICT usage in Indian schools
- What is UNESCO's King Hamad Bin Isa Al-Khalifa Prize?
- Vanija Bhawan and Niryat Portal

## 44<sup>th</sup> Chess Olympiad

### Why in News?

The 44<sup>th</sup> Chess Olympiad will be held in Chennai in 2022.

- The prestigious competition, which has been organized since 1927, is being hosted in India for the first time and in Asia after 30 years.
- With 189 countries participating, this will be the largest participation in any Chess Olympiad.

### What is FIDE?

- The International Chess Federation (FIDE) is the governing body of the sport of chess, and it regulates all international chess competitions.
  - It's constituted as a non-governmental institution.
- It was recognized by the International Olympic Committee as a Global Sporting Organization in 1999.
- FIDE currently has its headquarters in Lausanne (Switzerland), but it was initially founded in 1924 in Paris under the motto "Gens Una Sumus" (Latin for "We are one Family").
- It was one of the very first International Sports Federations, alongside the governing bodies of the sports of Football, Cricket, Swimming, and Auto Racing. It is now one of the largest, encompassing 199 countries as affiliate members, in the form of National Chess Federations.

## Rim of the Pacific (RIMPAC) Exercise 2022

### Why in News?

The RIMPAC-22 exercise will be held in and close to the Hawaiian Islands and Southern California from 29<sup>th</sup> June to 4<sup>th</sup> August.

- 27 countries are participating in the current edition of the multi-dimensional exercise.

### What is RIMPAC-22?

#### About:

- It's one of the largest biennial multilateral Naval Exercises, which is led by US.
- The RIMPAC started in 1971 as an annual exercise by the US, Australia, and Canada. But from 1974, maritime exercise became a biennial event.
- It is aimed at enhancing interoperability and building trust among Navies of friendly foreign countries.

#### Theme for 2022:

- The theme of RIMPAC 2022 is 'capable, adaptive, partners.'

#### India's Participation:

- India first participated in RIMPAC in 2014 when the indigenously built Shivalik class stealth frigate INS Sahyadri took part in the exercise.
- INS Sahyadri again represented the country in the 2018 edition of the event.
- In between, in 2016, INS Satpura joined the maritime exercise. Before 2014, the Indian Navy's presence in the wargames was only as an observer for the 2006, 2010 and 2012 editions.
- In the current edition, Indian Navy's INS Satpura and one P8I maritime patrol aircraft are participating in the exercise.

### What are the Features of P81

#### Maritime Patrol Aircraft?

- P-8I is a long-range, multi-mission maritime patrol aircraft being manufactured by Boeing for the Indian Navy.

Note:

- It was designed to protect the coastline and territorial waters of India. It can conduct anti-submarine warfare (ASW), anti-surface warfare (AsuW), intelligence, maritime patrol, and surveillance and reconnaissance missions.

### What is INS SATPURA?

- INS Satpura is an **indigenously designed** and built 6000-tonne guided missile stealth frigate equipped to seek and destroy adversaries in air, surface and underwater.
- A frontline unit of Eastern Fleet based at Visakhapatnam, INS Satpura is currently on an extended operational deployment in the 75<sup>th</sup> year of India's Independence.

## Halving Pesticide Use Across Europe by 2030

### Why in the News?

The European Commission (EC), the European Union's executive arm, proposed a draft law for **halving pesticide use across Europe by 2030**.

- The **Intergovernmental Panel on Climate Change (IPCC) in its sixth assessment** has called for **urgent restoration of degraded ecosystems to mitigate climate change**.
- The **Glasgow climate pact** too had **underlined the significance of natural ecosystems for climate mitigation and adaptation**.
- The **European Union** has not been successful in **halting the loss of biodiversity between 2011 and 2020 according to the EU biodiversity strategy**, which had voluntary target to restore at least 15 % of degraded ecosystems by 2020.

### What is the Draft law?

- The proposal sets **multiple binding restoration targets and obligations across a broad range of ecosystems**. It includes the overarching objective for area-based restoration measures on 20 % of the EU land and sea area by 2030.
- Natural and semi-natural biodiversity ecosystems — **wetlands, forests, grasslands, river and lakes** and even dunes — will be improved and re-established on a large scale.

- It seeks to dismantle big dams to make rivers free-flowing, among other things.
- The use and risk of **chemical pesticides will be reduced 50 % by 2030** to reverse the decline of bees, butterflies, bumblebees, hoverflies and other pollinator populations by 2030.
- The proposal aims **to reduce loss of green urban spaces**, so that there is no net loss of green urban spaces by 2030. In fact, the target is to ensure 5 % increase in these spaces by 2050.
- There must be an increase in at least 10 % of **tree canopy** cover in all cities and towns, the proposal says.
- The proposal has set **a target of restoring 25,000 km of rivers to a free-flowing state by 2030**. For this, the barriers that prevent or obstruct the connectivity of surface waters will be identified and removed.

### What is Pesticide, its Usage and Issues?

#### About:

- Chemical compounds that are **employed to eliminate pest organisms are called pesticides**.
  - These are used to **kill or repel pests like rodents (rodenticides), insects (insecticides), weeds (herbicides) and fungi (fungicides)**.
- They are **used in public health management to eliminate disease carrying vectors** like mosquitoes.
- They are used in **agriculture to eliminate pests that damage crop plants**.

#### Issues:

- **Harmful Effects on Farmers:** Experts believe that chronic low-level pesticide exposure is associated with a broad range of nervous system symptoms such as headache, fatigue, dizziness, tension, anger, depression, and impaired memory, **Parkinson's disease, and Alzheimer's disease**, among others.
- **Harmful Effect on Consumers:** Pesticides go up the food chain by working their way through the environment and into the soil or the water systems after which they are eaten by aquatic animals or plants and ultimately humans. This process is called **Biomagnification**.
- **Harmful Effect on Agriculture:** Continued use of pesticides for decades has contributed significantly to the current ecological, economic and existential crisis of the Indian agriculture sector.

Note:

- **Regulatory Issues:** Although agriculture is a state subject producing, education and research are governed under the Insecticides Act, 1968 which is a central Act, and hence state governments have no direct role in amending it.

- It is due to this that an estimated 104 pesticides that are still produced/ used in India, that have been banned in two or more countries in the world.

➤ **Regulation for Pesticides in India:**

- The Insecticides Act of 1968 covers the registration, manufacture and sale of pesticides in India.
- The experience s in administering this Act over the last five decades has exposed certain gaps. In this context, the union cabinet has recently approved the **Pesticides Management Bill, 2020**.
- The Bill regulates the business of pesticides and compensate farmers in case of **losses from the use of agrochemicals**.

## UNESCO recognizes ICT usage in Indian schools

### Why in News?

**Central Institute of Educational Technology (CIET)** wins **UNESCO's King Hamad Bin Isa Al-Khalifa Prize** for the year 2021.

- CIET is a constituent unit of **National Council of Educational Research and Training (NCERT)** under Department of School Education & Literacy.
- CIET has been awarded by **United Nations Educational, Scientific and Cultural Organization (UNESCO)** for use of ICT in Education under a comprehensive initiative called **PM eVIDYA**.

### What is PM eVIDYA?

- The **PM eVIDYA** has been initiated as part of **Atma Nirbhar Bharat Abhiyaan** by the Ministry of Education on 17<sup>th</sup> May, 2020.
- It **unifies all efforts related to digital/online/on-air education** to enable multi-mode access for imparting education by using technology to minimise learning losses.

## What is UNESCO's King Hamad Bin Isa Al-Khalifa Prize?

### ➤ About:

- It is **established in 2005** with the support of the **Kingdom of Bahrain**.
- This award **"recognizes innovative approaches** in leveraging new technologies to **expand educational and lifelong learning opportunities for all**, in line with the 2030 Agenda for **Sustainable Development** and its **Goal 4 on Education**.
- The Prize rewards individuals and organizations that are implementing outstanding projects and promoting the creative use of technologies to enhance learning, teaching and overall educational performance in the digital age.

### ➤ Awards:

- An international Jury selects two best projects annually.
- Each prizewinner receives **USD 25,000, a medal and a diploma** during the ceremony at UNESCO Headquarters in Paris.

### What are the Efforts done by Ministry of Education through CIET, NCERT?

- Keeping in view the recommendations of **NEP-2020**, Ministry of Education through CIET, NCERT has been working tirelessly and meticulously in designing, developing and disseminating
  - A large number of **eBooks, eContent** - audios, videos, interactives, augmented reality contents, Indian Sign Language (ISL) videos, audiobooks, talking books, etc.;
  - A variety of **eCourses for school and teacher education**;
  - Organizing digital events like online quizzes primarily for students and teachers through leveraging Online/Offline, On-Air technology One Class-One Channel, **DIKSHA, ePathshala, NISHTHA, school MOOCs on SWAYAM**, etc.
- **Launch of PM eVidya:**
  - To further the objectives of NEP & **Samagra Shiksha** and address the aforementioned pillars, **PM eVidya** was launched in May 2020.

Note:



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### ➤ Learning to Doorsteps:

- The CIET was proactive in taking learning to the doorsteps of the children through the **extensive, resilient, ethical, and coherent use of 12 PM eVidya DTH TV channels and nearly 397 radio stations**, including community radio stations under PM eVidya program.
- These efforts were especially helpful in pandemic situations, when schools were closed, in reaching out to students.
- These efforts helped in arresting the learning hiatus to a large extent.

### ***What are the other Initiatives related to Education?***

- **National Programme on Technology Enhanced Learning.**
- **Rashtriya Uchatar Shiksha Abhiyan (RUSA).**
- **Prime Minister's Research Fellowship (PMRF).**
- **Scheme for Promotion of Academic and Research Collaboration (SPARC).**
- **Sarva Shiksha Abhiyan.**
- **NEAT.**
- **PRAGYATA.**
- **Mid Day Meal Scheme.**
- **Right To Education (RTE) Act, 2009.**

### ➤ **Beti Bachao Beti Padhao.**

## **Vanijya Bhawan and Niryat Portal**

### ***Why in News?***

Prime Minister has launched **Vanijya Bhawan and NIRYAT (National Import-Export Record for Yearly Analysis of Trade) Portal**.

### ***What is Vanijya Bhawan?***

- Vanijya Bhawan is the **new premises of the Ministry of Commerce and Industry.**
- Vanijya Bhawan, which is constructed near the India Gate (New Delhi) **will be used by the two departments** under the Ministry i.e. **Department of Commerce** and the **Department for Promotion of Industry and Internal Trade (DPIIT).**

### ***What is NIRYAT Portal?***

- NIRYAT (National Import-Export Record for Yearly Analysis of Trade) is developed as a **one-stop platform for the stakeholders to get all the necessary information that is related to India's foreign trade.**
- India exported a total of USD 670 billion- Rs. 50 lakh crores in 2021. Exports are vital to a country's progress.



Note:



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**Key Points**

**Details**


**Summary**

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## Key Points

## Details

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## Summary