

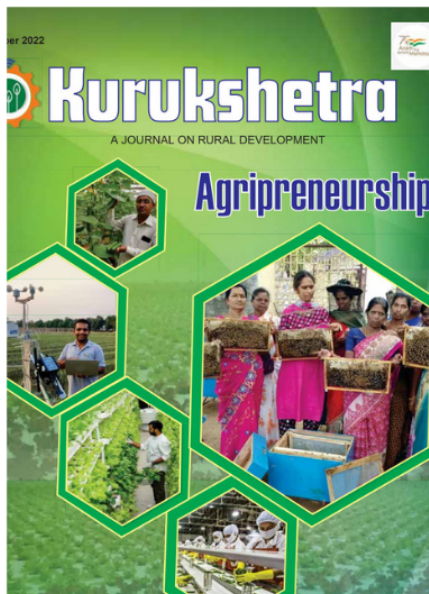
# OFFICERS' Pulse

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# Schemes

## 1) Beti Bachao Beti Padhao

### About the Scheme

- Beti Bachao Beti Padhao (BBBP) scheme is a **tri-ministerial initiative** of Ministries of Women and Child Development, Health & Family Welfare and Education which focuses on awareness and advocacy campaign for changing mind-sets, multi-sectoral action, enabling girls' education and effective enforcement of Pre-Conception & Pre Natal Diagnostic Techniques (PC & PNDT) Act.
- Launched in 2015, BBBP **addresses the declining Child Sex Ratio (CSR) and related issues of women empowerment over a life-cycle continuum.**
- The objectives of the Scheme are as under:
  - To prevent gender biased sex selective elimination
  - To ensure survival and protection of the girl child
  - To ensure education and participation of the girl child

### Why in News?

- Expanding the mandate of the 'Beti Bachao Beti Padao' scheme, the Central government has announced the **inclusion of skilling of girls in non-traditional livelihood (NTL) options** in its flagship programme. Through this initiative, girls will be given skill training in non-traditional vocations.
- The scheme will now also focus on **increasing the enrolment of girls in secondary education, particularly in STEM (Science, Technology, Engineering, Mathematics) subjects.** Women have been historically under-represented areas such as technology.

- A Memorandum of Understanding was signed between the Ministries of Women and Child Development, Skill Development and Entrepreneurship, and Minority Affairs. It emphasises convergence between Ministries and Departments to **ensure adolescents complete their education, build skills, and enter the workforce in a diverse range of professions, including in STEM fields.**

## 2) Sagarmala Programme

### About the Programme

- The Sagarmala project seeks to **develop a string of ports around India's coast.** The objective of this initiative is to promote **"Port-led development"** along India's 7500 km long coastline.
- It aims to develop access to new development regions and enhance connectivity with main economic centres and beyond through expansion of rail, inland water, coastal and road services.
- The **Union Ministry of Shipping** has been appointed as the nodal ministry for this initiative.
- To assist in implementation of the Sagarmala Programme, the **Sagarmala Development Company Limited** was incorporated in 2016 under the Companies Act, 2013 by the Ministry of Shipping.

### Significance

- India is located along key international trade routes in the Indian Ocean and has a long coastline of around 7,500 km. **Approximately 95% of India's merchandise trade (by volume) passes through sea ports.**

- Yet, **capacity constraints and lack of modern facilities** at Indian ports tremendously elongates the time taken to ship goods in and out of the country and has **held back India's share in world trade**. For example, Turnaround time (TAT) at major ports was approximately 2.5 days in 2018-19, whereas the global average benchmark is 1-2 days.
- In addition to this, **last mile connectivity to the ports** is one of the major constraints in smooth movement of cargo to/from the hinterland. Around 87% of Indian freight uses either road or rail for transportation of goods. A significant share of this cargo experiences "**idle time**" during its transit to the ports due to capacity constraints on highways and railway lines connecting ports to production and consumption centers.
- Although **water-borne transport** is much safer, cheaper and cleaner, compared to other modes of transportation, it **accounts for less than 6%** of India's modal split. By comparison, coastal and inland water transportation contribute to 47% of China's freight modal mix, while in Japan and the US, this share is 34% and 12.4% respectively. Significant savings can be achieved by shifting movement of industrial commodities like coal, iron ore, cement and steel to coastal and inland waterways.

#### Vision of the Sagarmala Programme

- The vision of the programme is to reduce logistics cost for EXIM and domestic trade with minimal infrastructure investment. This includes:
  - Reducing cost of transporting domestic cargo

through optimizing modal mix

- Lowering logistics cost of bulk commodities by locating future industrial capacities near the coast
- Improving export competitiveness by developing port proximate discrete manufacturing clusters
- Optimizing time/cost of EXIM container movement.

#### Components

- Components of Sagarmala Programme are:
  - **Port Modernization & New Port Development:** De-bottlenecking and capacity expansion of existing ports and development of new greenfield ports;
  - **Port Connectivity Enhancement:** Enhancing the connectivity of the ports to the hinterland, optimizing cost and time of cargo movement through multi-modal logistics solutions including domestic waterways (inland water transport and coastal shipping);
  - **Port-linked Industrialization:** Developing port-proximate industrial clusters and Coastal Economic Zones to reduce logistics cost and time of EXIM and domestic cargo;
  - **Coastal Community Development:** Promoting sustainable development of coastal communities through skill development & livelihood generation activities, fisheries



- development, coastal tourism etc.
- **Coastal Shipping & Inland Waterways Transport:** Impetus to move cargo through the sustainable and environment-friendly coastal and inland waterways mode.

#### Why in News?

- India has completed 209 port-related projects under its flagship Sagarmala programme.

### 3) Sukanya Samriddhi Yojana

#### About the Scheme

- Sukanya Samriddhi Yojana (SSY) is a **government-backed small savings scheme that helps parents secure the future of their girl child.** It was launched as a part of the 'Beti Bachao Beti Padhao' campaign.
- Accounts under SSY can be easily opened at post offices and designated private or public banks in the form of a savings account in the name of the baby girl. The **interest rates** for Sukanya Samriddhi Yojana are **declared quarterly.**

#### Eligibility criteria for opening a Sukanya Samriddhi Yojana account

- Only parents or legal guardians of the girl child can open a Sukanya Samriddhi account in the name of the girl.
- The **girl child should be less than 10 years** at the time of account opening. The account can be operational till the girl reaches the **age of 21 years.**
- To meet the requirement of the child's higher education expenses, **partial withdrawal of 50 per cent of the balance is allowed after she turns 18.**

- The **investment can start at Rs. 250 and go up to Rs. 1,50,000 annually.**
- A single girl child cannot have multiple Sukanya Samriddhi accounts.
- **Only two Sukanya Samriddhi Yojana accounts are allowed per family, i.e., one for each girl child.**

#### Why in News?

- The Government of India said that about 2.5 crore accounts have been opened under the Sukanya Samriddhi Yojana.

### 4) USOF's Telecom Technology Development Fund Scheme

#### About USOF

- In 2003, the Universal Service Obligation Fund (USOF) was set up by **The Indian Telegraph (Amendment) Act, 2003** which gave its **statutory status.** It is a **body under the Department of Telecommunications.**
- The main aim of USOF is to **provide access to telecom services in a non-discriminatory manner to people in the rural and remote areas** at affordable and reasonable prices, thereby **bridging the rural-urban digital divide.**
- It also aims at equitable distribution of the fruits of the telecom/digital revolution and fair allocation of national resources via targeted subsidies.

#### UAL

- USOF inflow comes from the collection of **Universal Access Levy (UAL)** through the license fee charged on licensees of the Department of Telecommunications **@ 5% of the adjusted gross revenue (AGR).**
- For commercially non-viable rural and remote areas, USOF provides subsidy support in the form of **Viability Gap Funding (VGF)** to

incentivize telecom service providers.

- USOF is a **non-lapsable fund**, i.e., the unspent amount under a targeted financial year does not lapse and is accrued for next years' spending.

#### Project funded by USOF

##### BharatNet

- BharatNet is a project of national importance which aims to **connect all 2.5 lakh gram panchayats through optical fibre**. It was launched in 2011.
- The project is implemented by **Bharat Broadband Network Ltd (BBNL)**, a special purpose vehicle set up under the Department of Telecommunications (DoT).
- The entire project is being funded by **Universal Service Obligation Fund (USOF)**.
- The objective is to facilitate the delivery of e-governance, e-health, e-education, e-banking, Internet and other services to rural India.
- Last year, the Union Cabinet has accorded in principle approval for **extending BharatNet to cover all inhabited villages** in the States and UTs.
  - *It should be noted that a gram panchayat may consist of one or more villages, depending on their population.*

#### Other Projects funded by USOF include

- Comprehensive Telecom Development plan (CTDP) for North East Region
- Comprehensive Telecom Development plan (CTDP) for Islands
- Providing Mobile services in Left Wing Extremism (LWE) affected areas
- Providing Mobile services in Aspirational & Uncovered villages

#### Why in News?

- Universal Service Obligation Fund has launched the **Telecom Technology Development Fund (TTDF) Scheme to fund R&D in rural-specific communication technology applications**.
- The scheme also aims to **form synergies** among academia, start-ups, research institutes, and the industry to **build and develop the telecom ecosystem**.
- Additionally, the Scheme aims to promote technology ownership and indigenous manufacturing, create a culture of technology co-innovation, reduce imports, boost export opportunities and creation of Intellectual Property.
- Under the scheme, USOF is also targeting to develop standards to meet countrywide requirements and create the ecosystem for research, design, prototyping, use cases, pilots, and proof of concept testing, among others.
- The scheme entails **grants to Indian entities** to encourage and induct indigenous technologies tailor-made to meet domestic needs.

## 5) Pradhan Mantri Bhartiya Janaushadhi Pariyojana

### About PMBJP

- With an objective of **making quality generic medicines available at affordable prices to all**, Pradhan Mantri Bhartiya Janaushadhi Pariyojana (PMBJP) was launched by the **Department of Pharmaceuticals, Ministry of Chemicals & Fertilizers** in 2008.
- Under the scheme, dedicated outlets known as **Janaushadhi Kendras** are opened to provide generic medicines at affordable prices.
- The Scheme is implemented by a society registered under the

Societies Registration Act, viz., **Pharma & Medical Bureau of India (PMBI)**.

- The Scheme is operated by **government agencies as well as by private entrepreneurs**.

### Objectives

- **Ensure access to quality medicines** for all sections of the population especially the poor and the deprived ones. Prices of the Jan Aushadhi medicines are 50%-90% less than that of branded medicines prices in the open market.
- **Create awareness** about generic medicines through education and publicity to counter the perception that quality is synonymous with high price only.
- **Generate employment** by engaging individual entrepreneurs in opening of PMBJP Kendra.

### Why in News?

- Pradhan Mantri Bhartiya Janaushadhi Pariyojana has significantly reduced patients' out-of-pocket expenditure. It has helped in **savings of 18 thousand crore rupees for the citizens in the last 8 years**.
- More than 8700 Jan Aushadhi stores have been opened across the country, covering almost every district.
- The government has set a target to increase the number of Pradhan Mantri Bhartiya Janaushadhi Kendras to ten thousand five hundred by the end of March 2025.

### Related Information

#### What are generic drugs?

- When a company develops a new drug — often after years of research — it applies for a patent,

which **prohibits anyone else from making the drug for a fixed period**.

- To recover the cost of research and development, companies usually price their brand- name drugs on the higher side.
- Once the patent expires, other manufacturers duplicate and market their own versions of the drug.

### Cost-effectiveness of generic medicines

- Since the manufacture of these generic drugs do not involve a repeat of the extensive clinical trials to prove their safety and efficacy, it **costs less to develop them**. Generic drugs are, therefore, **cheaper**.
- However, because the compounds in the generic versions have the same molecular structure as the brand-name version, they provide the **same clinical benefits** as its brand-name version. The generic drug has the **same “active ingredient”** as the brand-name drug. This ingredient is the one that cures the patient; and other, “inert ingredients”, which give the drug its colour, shape or taste, vary from the brand-name drug to the generics.
- In addition, multiple applications for generic drugs are often approved to market a single product; this creates competition in the marketplace, typically resulting in lower prices. **Typically results in prices about 85% less than the brand-name.**

## Initiatives

### 1) Udyam Portal

#### About the Portal

- Udyam is an online system for **registering micro, small and medium enterprises**. It was launched by the **Ministry of Micro, Small & Medium Enterprises** in 2020.
- Any person can avail a **free Udyam registration** for their enterprise through a fully digital and paperless process based on self-declaration.
- Udyam registration is a **prerequisite for availing the benefits of several schemes or programmes** of the Ministry of Micro, Small & Medium Enterprises.
- An e-certificate called the **“Udyam Registration Certificate”** is issued online on completion of the registration process. This certificate has a dynamic QR Code through which the web page of the registration portal and details about the enterprise can be accessed.
- **Aadhaar, PAN and GST numbers** are required for registration. Udyam Registration Number is a **permanent identification number**, and there will be no need for renewal of Registration.

#### Why in News?

- In a span of 25 months, as many as 1 crore MSMEs have registered on the Udyam portal on a voluntary basis.

### 2) Quality Council of India

#### About QCI

- Established in **1997** through a Cabinet decision of the Government of India – Quality Council of India (QCI) is an **autonomous organization under the**

**Department for Promotion of Industry and Internal Trade (DPIIT), Ministry of Commerce and Industry.**

- It is a **non-profit organization** registered under the Societies Registration Act XXI of 1860.
- QCI is governed by a Council comprising of **38 members** including the Chairman and Secretary General. The Council has an **equal representation of Government, Industry and other Stakeholders**.
- The **Chairman of QCI is appointed by the Prime Minister of India** on the recommendations of the industry to the Government.

#### Mandate

- QCI has been established to **create a mechanism for independent third party assessment of products, services and processes**.
- It plays a pivotal role at the national level in **propagating, adoption and adherence to quality standards** in all important spheres of activities including education, healthcare, environment protection, governance, social sectors, infrastructure sector and such other areas of organized activities that have significant bearing in improving the quality of life and wellbeing of the citizens of India.

#### Why in News?

- The Quality Council of India is completing 25 years of its existence this year.
- To mark the occasion, QCI has launched the **‘Gunvatta Se Atmanirbharta: India’s Quality Movement’** campaign, to celebrate India’s quality hubs, create awareness about India’s



landmark achievements and inform people about initiatives to enhance the quality of life of all citizens.

### 3) CPGRAMS

#### About CPGRAMS

- Centralised Public Grievance Redress and Monitoring System (CPGRAMS) is an online platform available to the citizens 24x7 to **lodge their grievances to the public authorities on any subject related to service delivery**. It is a single portal connected to all the Ministries/Departments of Government of India and States.
- The online web-enabled system was developed by the **National Informatics Centre** in association with the **Department of Administrative Reforms and Public Grievances (DARPG)**.
- It has been developed with an objective of **speedy redress and effective monitoring of grievances** by Ministries/Departments/Organizations of Government of India.
- It enables the citizen to track online the grievance with the unique registration ID provided at the time of registration of the complainant and also enables DARPG to monitor the grievance.
- CPGRAMS also provides an **appeal facility** to the citizens if they are not satisfied with the resolution by the Grievance Officer.

#### Why in News?

- Several departments of Government of India undertook special campaigns to resolve public grievances filed under CPGRAMS.

### 4) Labour Codes

#### Context

- The Union Ministry of Labour said that almost all states have prepared draft rules on the four labour codes

and the new rules will be implemented soon.

- The central government has already pre-published the draft rules for all four codes. Now, states are required to frame regulations on their part as labour is a **concurrent subject**.

#### About Labour Codes

- In 2020, the Parliament passed three labour law codes that complete the government's consolidation of 29 labour laws into four codes. The three Acts were the Industrial Relations Code, 2020, the Occupational Safety, Health and Working Conditions Code, 2020 and the Social Security Code, 2020.
- The first of the four codes- Code on Wages Act was passed in 2019.
- It should be noted that as **labour falls under the concurrent list** of the Constitution, both Parliament and state legislatures can make laws regulating labour.

#### Code on Wages

- The Code replaces the following four laws:
  - the Payment of Wages Act, 1936
  - the Minimum Wages Act, 1948
  - the Payment of Bonus Act, 1965
  - the Equal Remuneration Act, 1976
- **Coverage:** The Code will apply to all employees to enforce minimum wage among **both formal and informal sector workers**.
- **Floor wage:** According to the Code, the **central government will fix a floor wage**, taking into account the living standards of workers. Further, it may set different floor wages for different geographical areas.

- The minimum wages decided by the central or state governments **must be higher than the floor wage**. In case the existing minimum wages fixed by the central or state governments are higher than the floor wage, they cannot reduce the minimum wages.
- **Fixing the minimum wage:** The Code prohibits employers from paying wages less than the minimum wages. Minimum wages will be notified by the central or state governments. The minimum wages will be revised and reviewed by the central or state governments at an interval of **not more than five years**.
- **Overtime:** The central or state government may fix the number of hours that constitute a normal working day. In case employees work in excess of a normal working day, they will be entitled to overtime wage, which must be **at least twice the normal rate of wages**.
- **Deductions:** Under the Code, an employee's wages may be deducted on certain grounds including: (i) fines, (ii) absence from duty, (iii) accommodation given by the employer, or (iv) recovery of advances given to the employee, among others. **These deductions should not exceed 50% of the employee's total wage.**
- **Gender discrimination:** The Code prohibits gender discrimination in matters related to wages and recruitment of employees for the same work or work of similar nature. Work of similar nature is defined as work for which the skill, effort, experience, and responsibility required are the same.
- **Advisory boards:** The central and state governments will constitute

advisory boards to advise the respective governments on various issues including: (i) fixation of minimum wages, and (ii) increasing employment opportunities for women.

### **The Code on Social Security, 2020**

- It replaces nine laws related to social security, including the Employees' Provident Fund Act, 1952, the Maternity Benefit Act, 1961, and the Unorganised Workers' Social Security Act, 2008. Social security refers to **measures to ensure access to health care and provision of income security to workers**.
- **Changes in definitions:** The Code changes the definitions of certain terms. These include: (i) expanding the definition of **'employees'** to include workers employed through contractors, (ii) expanding the definition of **"inter-state migrant workers"** to include self-employed workers from another state, (iii) expanding the definition of **"platform worker"** to additional categories of services or activities as may be notified by the government, (iv) expanding the definition of **audio-visual productions** to include films, web-based serials, talk shows, reality shows and sports shows, and (v) **exempting construction works** from the ambit of "building or other construction work" if the total cost of construction work exceeds Rs 50 lakhs (and if they employ more than a certain notified number of workers).
- The central government will set up a **social security fund for unorganised workers, gig workers and platform workers**. Further, state governments will also set up and administer

separate social security funds for unorganised workers.

- **Gig workers** refer to workers outside of the traditional employer-employee relationship (e.g., freelancers). **Platform workers** are workers who access other organisations or individuals using online platforms and earn money by providing them with specific services. **Unorganised workers** include home-based and self-employed workers.
- The Code makes provisions for **registration of all three categories of workers** - unorganised workers, gig workers and platform workers.
- **National Social Security for gig workers and platform workers:** The Code provides for the establishment of the **National Social Security Board** and various state-level boards for welfare of unorganised sector workers, gig workers and platform workers and can recommend and monitor schemes for them.
- **Term of eligibility for gratuity:** Gratuity is payable on the termination of employment, if the employee has been in the organisation for **at least five years**. The Code extends gratuity entitlement to **fixed term employees** as well. Such employees would be paid gratuity based on the term of their employment contracts on a pro-rata basis, even if the contract period is less than 5 years.

#### **The Occupational Safety, Health and Working Conditions Code, 2020**

- The Code seeks to regulate health and safety conditions of workers

in establishments with **20 workers** for premises where the manufacturing process is carried out using power, and **40 workers** for premises where it is carried out without using power.

- **Contract workers:** The Code will apply to establishments or contractors employing **50 or more workers** (on any day in the last one year).
- Establishments covered by the Code are required to register with registering officers, appointed by the central or state governments.
- Welfare facilities, working conditions and work hours for different types of establishments and workers will be prescribed by the central or state governments through rules.
- It subsumes and replaces 13 labour laws relating to safety, health and working conditions. These laws include: Factories Act, 1948; Mines Act, 1952; Dock Workers Act, 1986; Contract Labour Act, 1970; and Inter-State Migrant Workers Act, 1979.
- The Code sets up **occupational safety boards at the national and state level** to advise the central and state governments on the standards, rules, and regulations to be framed under the Code.
- The Code **bars civil courts from hearing matters under the Code**. Therefore, the only judicial recourse for a person aggrieved under the Code is to file a writ petition before the relevant High Court.
- **Daily work hour limit:** The Code fixes the maximum daily work hours for workers at **eight hours per day**.
- **Benefits for inter-state migrant workers:** The Code provides for

certain benefits for inter-state migrant workers. These include: (i) option to avail the benefits of the public distribution system either in the native state or the state of employment, (ii) availability of benefits available under the building and other construction cess fund in the state of employment, and (iii) insurance and provident fund benefits available to other workers in the same establishment.

- **Database for inter-state migrant workers:** The Code requires the central and state governments to maintain or record the details of inter-state migrant workers in a portal.
- **Social Security Fund:** The Code provides for the establishment of a Social Security Fund for the welfare of unorganised workers. The amount collected from certain penalties under the Code will be credited to the Fund.
- The Code **empowers the state government** to exempt any new factory from the provisions of the Code in order to create more economic activity and employment.

#### The Industrial Relations Code, 2020

- It seeks to replace three labour laws: (i) the Industrial Disputes Act, 1947, (ii) the Trade Unions Act, 1926, and (iii) the Industrial Employment (Standing Orders) Act, 1946.
- It **defines 'workers'** to include, besides all persons employed in a skilled or unskilled, manual, technical, operational and clerical capacity, supervisory staff drawing up to ₹18,000 a month as salary.
- It introduces **'fixed term employment'**, giving employers the flexibility to hire workers based on requirement through a

written contract. Fixed term employees should be treated on a par with permanent workers in terms of hours of work, wages, allowances and other benefits, including statutory benefits such as gratuity.

- **Applicability of standing orders:** All industrial establishments with **300 workers or more** must prepare standing orders on the matters listed in a Schedule to the Code. These matters relate to: (i) classification of workers, (ii) manner of informing workers about work hours, holidays, paydays, and wage rates, (iii) termination of employment, and (iv) grievance redressal mechanisms for workers.
- **Closure, lay-off and retrenchment:** An establishment having at least 300 workers was required to seek prior permission of the government before closure, lay-off, or retrenchment.
  - *Lay-off refers to an employer's inability to continue giving employment to a worker in the face of adverse business conditions. Retrenchment refers to the termination of service of a worker for any reason other than disciplinary action.*
- **Negotiating Union and Council:** If there were more than one registered trade union of workers functioning in an establishment, the trade union having **more than 51% of the workers as members** would be recognised as the sole negotiating union.
- In case no trade union is eligible as sole negotiating union, a negotiating council will be formed consisting of representatives of

unions that have at least 20% of the workers as members.

- **Prior notice:** The code has expanded to cover **all industrial establishments** for the required notice period and other conditions for a legal strike. It proposes that no person employed in an industrial establishment shall go on strike without a **60-day notice** and during the pendency of proceedings before a Tribunal or a National Industrial Tribunal and sixty days after the conclusion of such proceedings. The Industrial Disputes Act, 1947, had placed such restrictions on announcing strikes only in respect of public utility services. However, the present Code extends it to all establishments.
- **Disputes relating to termination of individual workers:** Any dispute in relation to discharge, dismissal, retrenchment, or otherwise termination of the services of an individual worker to be an industrial dispute. The worker may apply to the **Industrial Tribunal** for adjudication of the dispute.
- It confers on the '**appropriate Government**', that is the Centre or the State governments, the power to exempt, with or without conditions, any industrial establishment or class of industrial establishments from all or any of the provisions of the Code, if it is satisfied that adequate provisions exist to fulfil its objectives.

## 5) SVAMITVA

### About the scheme

- SVAMITVA (Survey of villages and mapping with improvised technology in village areas) scheme is a collaborative effort of the **Ministry of Panchayati Raj, State**

**Panchayati Raj Departments, State Revenue Departments and Survey of India.**

- It is a **central sector scheme** that aims to provide rural people with the **right to document their residential properties** so that they can use their property for economic purposes. The scheme is for surveying the land parcels in rural inhabited areas using **Drone technology**.

### Objectives

- The outcome from the scheme would include updating the record of rights in the revenue/property registers and issuance of property cards to the property owners. This would facilitate **monetisation of rural residential assets** for credit and other financial services.
- It will also lead to creation of **accurate land records** for rural planning and determination of **property tax**.
- Through the SVAMITVA scheme, the government hopes that **property disputes and legal cases will be reduced**.
- Other gram panchayats and community assets like village roads, ponds, canals, open spaces, school, anganwadi, health sub-centres etc will also be surveyed and GIS maps will be created. These maps can be used to prepare better quality gram panchayat development plans.

### Coverage

- There are about 6.62 lakh villages in the country which will be eventually covered in this scheme. The entire work is likely to be spread over a period of four years (2020 -2024).
- The **Ministry of Panchayati Raj (MoPR)** is the Nodal Ministry for implementation of the scheme. **Survey of India** shall work as the



technology partner for implementation.

implementation of the SVAMITVA Scheme recently.

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

- The Ministry of Panchayati Raj reviewed the state-wise

# Environment

## 1) National Adaptation Fund for Climate Change

### About NAFCC

- The National Adaptation Fund for Climate Change (NAFCC) was established in 2015 to **meet the cost of adaptation to climate change for the State and Union Territories of India that are particularly vulnerable to the adverse effects of climate change.**
- NABARD has been designated as **National Implementing Entity (NIE) for implementation of adaptation projects under NAFCC** by Government of India.
- Under this arrangement, NABARD would perform roles in facilitating identification of project ideas/concepts from State Action Plan for Climate Change (SAPCC), project formulation, appraisal, sanction, disbursement of funds, monitoring & evaluation and capacity building of stakeholders including State Governments.

### Why in News?

- NABARD has sanctioned funds under the National Adaptation Fund for Climate Change to promote integrated farming systems in coastal wetlands of Kerala.

## 2) Nutrient Based Subsidy Scheme

### Background

- Crops require the right mix of three nutrients viz. **nitrogen, phosphorus, and potassium or NPK** (N helps in plant growth and development, P not only accelerates blooming and the growth of roots but also helps plants to withstand stress and K

helps the process of photosynthesis and is essential to plant growth).

- Imbalanced use of N, P and K leads to the loss of fertility of the soil over a period of time, which affects efficiency of fertilizer use and crop productivity.
- In India, **urea** (a nitrogen based fertiliser) is the most commonly used fertiliser because it is highly subsidised. The excessive use of nitrogenous fertilisers has led to an imbalanced use of fertilisers in India.
- It is evident from the fact that the **current ratio of nitrogen, phosphorus and potassium (N:P:K)** in agricultural soil in several states is **skewed towards nitrogen**. For instance, while the desirable ratio of N-P-K application is **4:2:1**, it is 31.4:8:1 in Punjab.
- This imbalance causes problems, right from **stagnating or declining productivity to soil sickness, widespread deficiency of secondary nutrients and micronutrients, and soil alkalinity and salinity**. Eventually, it results in reduced efficiency of fertilisers, low yields and low profitability for farmers.

### About NBS Scheme

- In order to promote balanced fertilization of soil, Nutrient Based Subsidy (NBS) programme for fertilizer was initiated in **2010**.
- Under the scheme, a **fixed amount of subsidy decided on an annual basis** is provided on **each grade of subsidized Phosphatic and Potassic (P&K) fertilizers based on its nutrient content**.
- The scheme aims at **ensuring balanced nutrient application to the soil**.

- It also aims at improving agricultural productivity and promoting the growth of the indigenous fertilizers industry.
- The scheme is being implemented by the **Department of Fertilizers** under the **Ministry of Chemicals and Fertilizers**.

#### Why in the News?

- The Cabinet Committee on Economic Affairs has approved ₹51,875 crore subsidy for phosphatic & potassic fertilisers under the Nutrient Based Subsidy (NBS) programme.

#### Related Information

##### Fertiliser subsidy in India

- In India, the fertiliser subsidy accounts for the **second largest subsidy** after food.
- Currently, **Urea** is the only controlled fertilizer and the maximum retail price (MRP) of urea is **statutorily fixed by the Government**. The difference between the production cost and the MRP is reimbursed to manufacturers.
- Retail prices of **non-urea fertilisers** such as Di-ammonium Phosphate (most widely used one after urea), Muriate of Potash (MoP) are **decontrolled** and are **determined by manufacturers**, while the Centre gives a fixed subsidy each year.

### 3) Action plan to remove Invasive species from Nilgiris

#### What are invasive species?

- An invasive species can be any kind of living organism—an amphibian, plant, insect, fish, fungus, or bacteria—that is **not native to an ecosystem and causes harm**.
- The **Convention on Biological Diversity (CBD)** defines invasive species as “an alien species whose introduction and spread threaten

ecosystems, habitats, or species with socio-cultural, economic and environmental harm and harm to human health”.

- **Not all non-native species are invasive.** For example, most of the food crops grown in India, including onion, potato and tomatoes are not native to the region.
- To be invasive,
  - a species must adapt to the new area easily
  - it must reproduce quickly
  - it must harm the economy, or the native plants and animals of the region.
- Some of the most serious invasive species in India are **Alternanthera philoxeroides, Cassia uniflora, Chromolaena odorata, Eichhornia crassipes, Lantana camara, Parthenium hysterophorus and Prosopis juliflora, Senna Sepctabilis**, etc.

#### Invasive Alien Species - a cause of concern

- Forest-invasive species can supplant **native plants, eliminate food and cover for wildlife** and threaten rare plant and animal species.
- The **impact of globalisation** leading to the increased movement of people, trade and deforestation has led to the introduction of invasive species in the **indigenous environment** in massive quantities.
- The spread of invasive species is alarming and is **wiping out local native species** like grasses and other herbaceous species. As a result, the **local food chain is affected** with the invasive species competing for space and light with native flora.
- Eg: The widespread prevalence of invasive species like **Lantana**

**camara** has reduced the proportion of natural grasses for herbivorous animals forcing their movement to human habitats in search of paddy crops and other edible items.

- These species can **change the functions of ecosystems** and **increase losses in forestry and natural resource management costs** as well as being a **potential threat to livestock health**.
- The unchecked growth of invasive species affects **soil health**, which is prone to faster deterioration.

#### Why in News?

- The Madras High Court has called for monthly progress reports from District Collectors across Tamil Nadu on the eradication of the exotic and invasive species of shrub **Prosopis juliflora** that is considered harmful to the ecology.
- It also issued directions to the District Collectors with respect to eradication of the shrub from forests and water bodies across the state.

### 4) Mission LiFE

#### What's the news?

- Prime Minister Narendra Modi, in the presence of U.N. Secretary-General Antonio Guterres, launched 'Mission LiFE' (Lifestyle For Environment), a new initiative for sustainable and healthy lifestyle in Gujarat.

#### About the Initiative

- Mission LiFE is a global initiative by India to **help the world in its fight against climate change and lead to a sustainable way of life** to achieve the sustainable development goals set by the U.N.
- Mission LiFE will be India's signature initiative at the UN and other international platforms for showcasing climate action and

early achievement of the Sustainable Development Goals.

- It envisages a **circular economy through people's participation**. It also plans to **nurture a global network of individuals**, namely "**pro-planet people**" or **P3**, who will have a shared commitment to adopt and promote environment-friendly lifestyles.
- It aims at following a **three-pronged strategy** for changing people's collective approach towards sustainability.
- This includes **nudging individuals** to practice simple yet effective environment-friendly actions in their daily lives (demand), **enabling industries and markets** to respond swiftly to the changing demand (supply), and to **influence government and industrial policy** to support both sustainable consumption and production (policy).

### 5) Blue Flag Certification

#### What is Blue Flag Certification?

- The Blue Flag certification is a globally recognised **eco-label** accorded to **environmental-friendly, clean beaches, marinas and sustainable boating tourism operators**. The programme was started in France in 1985 and in areas out of Europe in 2001.
- The programme **promotes sustainable development in freshwater and marine areas** through **four main criteria**: water quality, environmental management, environmental education and safety.
- There are **33 environment and tourism-related conditions** for Blue Flag Certification. Few of them include, having proper waste disposal systems, availability of

clean water for tourists, disabled friendly etc.

- The certification is awarded by the Denmark-based non-profit **Foundation for Environmental Education (FEE)**, which sets stringent environmental, educational, safety-related and access-related criteria that applicants must meet and maintain.
- It is awarded **annually** to beaches and marinas in FEE member countries. A total of 5,042 beaches, marinas, and tourism boats in 48 countries have been awarded the label so far.

#### Why in News?

- Indian beaches **Minicoy Thundi** and **Kadmat**, both in **Lakshadweep**, have been awarded the coveted international eco-label

"Blue Flag." The country now has 12 beaches with the Blue Flag certification.

- The other 10 Indian beaches on the list, according to the FEE site, are **Shivrajpur** in Gujarat's Devbhumi Dwarka district; **Ghogla** beach in Diu; **Kasarkod** (Uttara Kannada) and **Padubidri** (Udupi) in Karnataka; **Kappad** (Kozhikode) in Kerala; **Eden beach** in Puducherry; **Kovalam** (Chennai) in Tamil Nadu; **Rushikonda** (Visakhapatnam) in Andhra Pradesh; **Golden beach** in Puri, Odisha; and **Radhanagar Swarajdeep** in Andaman and Nicobar.



## Flora & Fauna

### 1) Great Indian Bustard

#### About GIB

- Great Indian Bustard (GIB) is one of the heaviest flying birds **endemic to the Indian subcontinent**.
- Bustards generally favour flat open landscapes with minimal visual obstruction and disturbance, therefore adapt well in **grasslands**.
- **Protection Status:** IUCN Red List: **Critically Endangered**; CITES: **Appendix I**; Wildlife Protection Act (1972): **Schedule I**.
- Historically, the great Indian bustard was distributed throughout Western India, spanning 11 states, as well as parts of Pakistan. Today, its population is **confined mostly to Rajasthan and Gujarat**. Small populations occur in Maharashtra, Karnataka and Andhra Pradesh.

#### Conservation Issues

- The biggest threat to this species is hunting, which is still prevalent in Pakistan. This is followed by occasional poaching outside Protected Areas, collisions with high tension electric wires, fast moving vehicles and free-ranging dogs in villages.
- Other threats include habitat loss and alteration as a result of widespread agricultural expansion and mechanized farming, infrastructural development such as irrigation, roads, electric poles, as well as mining and industrialization.

#### Conservation strategies

- The only opportunity to potentially recover this species remains in the **Thar landscape of Rajasthan**, where the birds are now limited to two extant populations – one inside **Desert (National Park) Sanctuary** near Jaisalmer, and the second population located in the

**grasslands and agricultural lands of Pokhran and Ramdeora.**

- The Great Indian Bustard has also been identified as one of the species for the **recovery programme for critically endangered species** of the Ministry of Environment, Forest and Climate Change (MoEFCC).



#### Why in News?

- The Union Ministry of Environment, Forest and Climate Change held a meeting to discuss and decide on an action plan to protect the critically endangered Great Indian Bustard.
- It is believed that there are no more than 150 GIB left in the country and immediate action is required to ensure its population isn't dropped further.
- The bird species have already been wiped out from 90% of their original habitats. Hunting and grassland degradation are said to have pushed GIB to the brink of extinction.

#### Related Information

#### Recovery programme for critically endangered species

- The programme is a component of the centrally funded scheme, **Integrated Development of Wildlife Habitats (IDWH)**.
  - *Started in 2008-09, IDWH is meant for providing support to protected areas (national parks, wildlife sanctuaries, conservation reserves and*

*community reserves except tiger reserves), protection of wildlife outside protected areas and recovery programmes for saving critically endangered species and habitats.*

- The recovery programme includes **more than 20 wildlife species.**
- It includes Snow Leopard, Bustard, Dolphin, caracal, Hangul, Nilgiri

Tahr, Marine Turtles, Dugongs, Edible Nest Swiftlet, Asian Wild Buffalo, Nicobar Megapode, Manipur Brow-antlered Deer, Vultures, Malabar Civet, Indian Rhinoceros, Asiatic Lion, Swamp Deer, Jerdon's Courser, the Northern River Terrapin, Clouded Leopard, Arabian Sea Humpback Whale and Red Panda.

# Agriculture

## 1) Soil Health Card

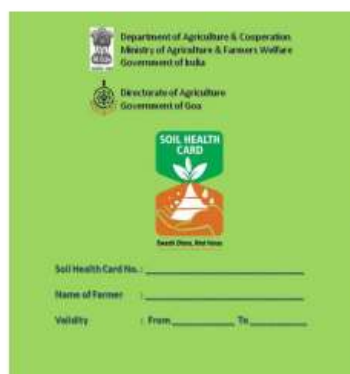
### About the scheme

- The Soil Health Card (SHC) scheme is promoted by the **Ministry of Agriculture and Farmers' Welfare** to provide information to farmers on **nutrient status of their soil** along with recommendations on appropriate dosage of nutrients to be applied for improving soil health and its fertility.
- Launched in 2015, it is being **implemented through the Department of Agriculture of all the State and Union Territory Governments.**

- SHC is a printed report that a farmer will be handed over for each of his holdings.
- It will contain the status of his soil with respect to **12 parameters**, namely N, P, K (Macronutrients); S (Secondary- nutrient); Zn, Fe, Cu, Mn, Bo (Micronutrients); and pH, EC, OC (Physical parameters).

**N - Nitrogen , P - Phosphorus, K - Potassium, S - Sulphur, Zn - Zinc, Fe - Iron, Cu - Copper, Mn - Manganese, Bo - Boron, pH - potential of hydrogen, EC - Electrical Conductivity, OC - Organic Carbon.**

### Constituents of a Soil Health Card



SOIL HEALTH CARD				Name of Laboratory	
Farmer's Details				SOIL TEST RESULTS	
Name				S. No.	Parameter
Address				Test Value	Unit
Village				Rating	
Sub-District				1	pH
District				2	EC
PIN				3	Organic Carbon (OC)
Aadhaar Number				4	Available Nitrogen (N)
Mobile Number				5	Available Phosphorus (P)
Soil Sample Details				6	Available Potassium (K)
Soil Sample Number				7	Available Sulphur (S)
Sample Collected on				8	Available Zinc (Zn)
Survey No.				9	Available Boron (B)
Khasra No. / Dag No.				10	Available Iron (Fe)
Farm Size				11	Available Manganese (Mn)
Geo Position (GPS)	Latitude:	Longitude:		12	Available Copper (Cu)
Irrigated / Rainfed					

Secondary & Micro Nutrients Recommendations		
Sl. No.	Parameter	Recommendations for Soil Applications
1	Sulphur (S)	
2	Zinc (Zn)	
3	Boron (B)	
4	Iron (Fe)	
5	Manganese (Mn)	
6	Copper (Cu)	
General Recommendations		
1	Organic Manure	
2	Biofertiliser	
3	Lime / Gypsum	
International Year of Soils		Healthy Soils for a Healthy Life
2015		

Fertilizer Recommendations for Reference Yield (with Organic Manure)				
Sl. No.	Crop & Variety	Reference Yield	Fertilizer Combination-1 for N P K	Fertilizer Combination-2 for N P K
1	Paddy (Dhaan)			
2				
3				
4				
5				
6				

- SHC will be made available once in a **cycle of 3 years**, which will indicate the status of soil health of a

farmer's holding for that particular period.

- The SHC will also **indicate fertilizer recommendations and**

**soil amendment required for the farm.**

#### **Benefits of Soil Health Card**

- Soil Health Card help the farmers in the following ways:
  - i. The report generated through soil health card scheme encourages **judicious and balanced use of fertilizers.**
  - ii. The report card also suggests **use of bio fertilizers, micronutrients and organic manures to increase soil fertility.**
  - iii. Farmers training and demonstrations on farmers fields, under the scheme creates **awareness among the farmers to increase soil fertility.**
  - iv. The SHC will monitor the soil of the farmers well and will give them a formatted report. So, they can **decide well which crops they should cultivate and which ones they should skip.**

- v. The authorities will **monitor the soil on a regular basis.** So, farmers need not worry if the nature of the soil changes due to certain factors and also they will always have updated data about their soil.
- vi. Apart from listing down measures required to improve the quality of the soil, experts are also employed to help farmers in carrying out the **corrective measures.**

#### **Why in the news?**

- The Ministry of Agriculture & Farmers' Welfare organized workshops on soil health card scheme across the country to scale up awareness on the importance, values, and benefits of soil health card-based recommendations amongst the farmers.

# Economy

## 1) Priority Sector lending norms

### What is Priority Sector Lending?

- Priority Sector means those sectors which the Government of India and Reserve Bank of India consider as important for the development of the basic needs of the country and are to be given priority over other sectors. The banks are mandated to encourage the growth of such sectors with adequate and timely credit.
- Priority Sector includes the following categories:
  - **Agriculture**
  - **Micro, Small and Medium Enterprises**
  - **Export Credit**
  - **Education**
  - **Housing**
  - **Social Infrastructure**
  - **Renewable Energy**
  - **Others**
- Targets Under the Priority Sector Lending
  - **Domestic scheduled commercial banks** (excluding Regional Rural Banks and Small Finance Banks) and **Foreign banks with 20 branches and above**: 40 per cent of Adjusted Net Bank Credit or Credit Equivalent Amount of Off-Balance Sheet Exposure, whichever is higher.
  - **Regional Rural Banks & Small finance banks**: 75 per cent of Adjusted Net Bank Credit or Credit Equivalent Amount of Off-Balance Sheet Exposure, whichever is higher.
  - **Foreign banks with less than 20 branches**: 40 per cent of Adjusted Net Bank Credit or Credit Equivalent

Amount of Off-Balance Sheet Exposure, whichever is higher, to be achieved in a phased manner by 2020.

- **Sub-targets** are specified for certain sectors like **18% to agriculture with 8% to small and marginal farmers, 7.5% to micro units and 12% to Advances to Weaker Sections.**

### Changes Made

- In 2020, the RBI released revised priority sector lending guidelines to augment funding to segments including start-ups and agriculture.
- According to the revised guidelines,
  - **Bank finance of up to ₹50 crore to start-ups,**
  - **loans to farmers both for installation of solar power plants for solarisation of grid-connected agriculture pumps, and for setting up compressed biogas (CBG) plants** have been included as fresh categories eligible for finance under the priority sector.
- The revised PSL guidelines have been framed to **address regional disparities** in the flow of priority sector credit. Higher weightage has been assigned to incremental priority sector credit in '**identified districts**' where priority sector credit flow is comparatively low.

### Why in News?

- According to a report by a private financial services company, priority sector loans are set to rise with the pick up in credit offtake in the country.



- Over the past few years, the PSL loans for several major banks have grown faster than overall loans due to slower growth in the corporate loans.

## 2) Insolvency and Bankruptcy Code (IBC)

### About Insolvency and Bankruptcy Code, 2016

- **Insolvency** is a situation where individuals or companies are unable to repay their outstanding debt.
- The Insolvency and Bankruptcy Code (IBC) provides a time-bound process for resolving the insolvency of corporate debtors called the **corporate insolvency resolution process (CIRP)**.
- Earlier, the **minimum amount of default** after which the creditor or debtor could apply for insolvency was ₹1 lakh, but considering the stress on companies amid the pandemic, the government increased the minimum amount to **₹1 crore**.
- Under CIRP, a **committee of creditors** is constituted to decide on the insolvency resolution. The committee may consider a **resolution plan** which typically provides for the payoff of debt by merger, acquisition, or restructuring of the company. If a resolution plan is not approved by the committee of creditors within the specified time, the company is **liquidated** (the assets of the borrower will be sold to repay creditors).
- During CIRP, the affairs of the company are managed by the **Resolution Professional (RP)**, who is appointed to conduct CIRP.
- The **National Company Law Tribunal (NCLT)** adjudicates insolvency resolution for

companies and Limited Liability Partnerships. The **Debt Recovery Tribunal (DRT)** adjudicates insolvency resolution for individuals and partnership firms.

- The **Insolvency and Bankruptcy Board of India (IBBI)** regulates the functioning of IPs, IPAs and IUs.
- The code was amended in 2019 which mandated a deadline for the completion of the resolution process **within 330 days, including all litigation and judicial processes**.

### Insolvency and Bankruptcy Code (Amendment) Act, 2021

- Last year, the Parliament passed the Insolvency and Bankruptcy Code (Amendment) Act, 2021 to expedite and provide an efficient **alternate insolvency resolution process for corporate persons classified as micro, small and medium enterprises (MSMEs)** under IBC.

### Highlights of the Act

#### Pre-packaged insolvency resolution

- The Act introduces an **alternate insolvency resolution process for micro, small, and medium enterprises (MSMEs)**, called the **pre-packaged insolvency resolution process (PIRP)**.
- Unlike CIRP, **PIRP may be initiated only by debtors**. The debtor should have a **base resolution plan** in place. During PIRP, the **management of the company will remain with the debtor**.

#### Minimum default amount

- Application for initiating PIRP may be filed in the event of a **default of at least one lakh rupees**. The current law limits the pre-pack resolution mechanism to **defaults not exceeding one crore rupees**.

#### Debtors eligible for PIRP

- PIRP may be initiated in the event of a default by a corporate debtor classified as an MSME under the **MSME Development Act, 2006**.
  - Currently, under the 2006 Act, **an enterprise with an annual turnover of up to Rs 250 crore, and investment in plant and machinery or equipment up to Rs 50 crore**, is classified as an MSME.

### Why in News?

- The Ministry of Corporate Affairs is conducting consultations with the required stakeholders to amend the Insolvency and Bankruptcy Code in order to adhere to time bound resolution of the companies.

### What are the challenges for the IBC?

- According to its regulator, the **Insolvency and Bankruptcy Board of India (IBBI)**, the **first objective of the IBC is resolution**— a way to save a business as a going concern, through restructuring, change in ownership, mergers and other methods. The second objective is to **maximize the value of assets** of the corporate debtor and the third objective is to **promote entrepreneurship, availability of credit, and balancing the interests**.
- However, in the last six years, **more than 50% of the cases ended in liquidation, and only 14% could find a proper resolution**, which is the first objective.

### Time Taken

- The IBC is a time-bound mechanism. The IBC initially stipulated a **180-day deadline** to complete the resolution process, with a permitted **90-day extension**. The IBC was subsequently amended to further

make the total timeline for completion **330 days**.

- While in 2018, when the timeline was 180+90 days, most cases were completed in under 300 days. However, in FY22, it took **772 days** to resolve cases involving companies that owed more than ₹1,000 crore. The average number of days it takes to resolve such cases **increased rapidly over the past five years**.
- Besides, when a resolution happens, it is envisaged that creditors can realise the maximum value of the outstanding claims. On the other hand, when liquidation takes place, it is a **piecemeal selling of the company's assets**. This means the **value realisable through resolution should be more than through the last resort of liquidation**.
- But the **gap between these two values has been narrowing over the years**, and in the last quarter of 2022, the amount realised fell below what the assets would have fetched if they were liquidated.

### Haircuts

- A haircut is the **debt foregone by the lender as a share of the outstanding claim**. The **Parliamentary Standing Committee on Finance** pointed out in 2021, that in the five years of the IBC, creditors on an average had to bear an **80% haircut in more than 70% of the cases**.
- There are also other challenges to the IBC, some of which were pointed out by the Standing Committee. These were related to the **conduct of the CoCs and the IPs**. The Committee stated that the committee of creditors has significant discretion in accepting resolution plans and appointing IPs and called for **more transparency**

**and the framing of a professional code of conduct for the CoC.**

#### Other Recommendations

- In order to address the delays, the Parliamentary Standing Committee suggested that the **NCLT should not take more than 30 days after filing**, to admit the insolvency application and transfer control of the company to a resolution process.
- Citing the **more than 50% vacancy** in the Tribunal compared to the sanctioned strength, it suggested **recruitment in advance** based on the projected number of cases.
- It also recommended the setting up of **dedicated benches of the NCLT for IBC cases**. To reduce caseloads, the Committee suggested that the **pre-packs option be extended to all corporates after review**. This is because, under PIRP, unlike CIRP, the debtor continues to manage company operations during the resolution process.

### 3) Foreign Exchange Reserve

#### What is it?

- Foreign Exchange Reserve indicates the reserves held by RBI in the form foreign currency assets, gold, SDR and reserve tranche. Components of foreign exchange reserve:
  1. **Foreign Currency Assets:** Currencies of foreign countries are held in foreign exchange reserves. Apart from currency it also includes foreign currency deposits held by RBI with foreign central banks and the Bank for International Settlements (BIS).
  2. **Gold Stock of RBI:** The RBI has gold stock as a backup

to issue currency and to meet unexpected Balance of Payments (BOP) problems. (*BOP problem occurs when a nation is unable to pay for essential imports or service its external debt repayments*)

3. **SDR Holdings:** Special Drawing Rights (also called "paper gold") is a reserve created by the **International Monetary Fund (IMF)** to help countries that have BOP problems. The member countries have to contribute to this account in proportion to their IMF quota. The SDR basket consists of **five** major currencies of the world - the US dollar, Euro, British Pound, Chinese Renminbi and Yen (Japan).
4. **Reserve Tranche:** The reserve tranche is a portion of the required quota of currency that each **IMF** member country must provide to the IMF. It can be accessed by the member country at any time for its own purposes without a service fee.

#### Why in News?

- India's foreign exchange reserves depleted further to **\$545 billion** from a peak of \$642 billion a year ago.
- The forex reserves are the lowest at the moment since October 2020.

#### Reason for Declining Trend

- One part of the Reserve Bank of India's (RBI) mandate is to **intervene in the foreign exchange market**, which it does through **sales or purchases of dollars in order to curb excessive volatility in rupee**.

- Experts say, this could be a reason as to why India is seeing a depletion of its forex reserves.
- The value of any currency is determined by demand for the currency as well as its supply. When the supply of a currency increases, its value drops. On the other hand, when the demand for a currency increases, its value rises.
- In the forex market, the **supply of rupees** is determined by the **demand for imports and various foreign assets**. So, if there is high demand to import oil, it can lead to an increase in the supply of rupees in the forex market and cause the rupee's value to drop.
- The **demand for rupees** in the forex market, on the other hand, **depends on foreign demand for Indian exports and other domestic assets**. So, for instance, when there is great enthusiasm among foreign investors to invest in India, it can lead to an increase in the supply of dollars in the forex market which in turn causes the rupee's value to rise against the dollar.

#### 4) U.S. Federal Reserve Rate Hike

##### Context

- The U.S. Federal Reserve has increased its benchmark interest rate by three-quarters of a point for a fourth straight time. The Fed's move **raised its key short-term rate to a range of 3.75% to 4%**, its highest level in 15 years.

##### Impacts

- Emerging economies such as India tend to have higher inflation and, thereby, **higher interest rates** than those in developed countries such as the US and Europe. As a result, Foreign Institutional Investors (FIIs) would want to borrow money in the US at low

interest rates in dollar terms, and then invest that money in bonds of emerging countries such as India in rupee terms to earn a higher rate of interest.

- When the US Fed increases its interest rates, the difference between the interest rates of the two countries reduces (known as **interest rate differential**), thus making India less attractive for foreign investors. It results in **Outflow of foreign investments from India and other emerging economies**.
- In the Indian context, net capital outflows influence the shortage of dollar liquidity, which result in **rupee depreciation**.

#### 5) CPI-IW

##### About CPI

- Consumer Price Index is an index which measures the weighted average of prices of a basket of consumer goods and services such as transportation, food and medical care.
- It is calculated by measuring price changes for each item in the **predetermined basket of goods and services** and averaging them.

##### How does the Consumer Price Index help?

- The Reserve Bank of India and other statistical agencies study CPI so as to understand the price change of various commodities and keep a tab on inflation.
- CPI is also a helpful pointer in understanding the real value of wages, salaries and pensions, the purchasing power of a country's currency, and regulating prices.

##### Who maintains the Consumer Price Index in India?

- In India, different types of consumer price index numbers are

released by the government which includes:

- CPI for Industrial Workers (IW)
- CPI for Agricultural Labourers (AL)
- CPI for Rural Labourers (RL)
- The **Ministry of Labour & Employment** collects the data for CPI (IW), CPI (AL) and CPI (RL) and compiles it.
- In addition to these, the **National Statistical Office (NSO), Ministry of Statistics and Programme Implementation** is releasing
  - CPI for Rural
  - CPI for Urban and
  - CPI Combined (computed by combining CPI Rural and CPI Urban)

#### What is the base year of an Index?

- The CPI is calculated with **reference to a base year**, which is

used as a benchmark. The price change pertains to that year.

- In India, the base year of the current series of CPI (IW) is **2016**. The base year of CPI (AL) and CPI (RL) is **1986-87**.
- For CPI Rural, Urban and Combined, the base year is **2011-12**.

#### Why in News?

- The **Labour Bureau**, an attached office of the Ministry of Labour & Employment, has been compiling the Consumer Price Index for Industrial Workers every month on the basis of retail prices collected from 317 markets spread over 88 industrially important centres in the country.
- The All-India CPI-IW for September, 2022 increased by 1.1 points and stood at **131.3**.



# Organisations

## 1) IORA

### About Indian Ocean Rim Association

- IORA is an inter-governmental organisation which was established in 1997 to strengthen regional cooperation and sustainable development within the Indian Ocean region.
- IORA consists of 23 Member States (including **India**) and 9 Dialogue Partners.
- All sovereign States of the Indian Ocean Rim are eligible for membership of the Association. To become members, States must

adhere to the principles and objectives enshrined in the Charter of the Association.

- IORA's apex body is the **Council of Foreign Ministers (COM)** which meets annually.
- IORA became an **observer to the UN General Assembly** in 2015.
- Decisions made within IORA are reached by **consensus** and commitments are undertaken on a **voluntary basis**.
- The IORA Secretariat is based in **Mauritius**. It is headed by a fixed term Secretary-General.



### Why in News?

- Indian Navy recently conducted a seminar on Illegal, Unreported and Unregulated (IUU) Fishing under the aegis Indian Ocean Rim Association at Goa.

## 2) OPEC & OPEC+

### About OPEC

- The Organization of the Petroleum Exporting Countries (OPEC) is a group consisting of **13 of the world's major oil-exporting nations**.

- Countries that belong to OPEC include **Iran, Iraq, Kuwait, Saudi Arabia, and Venezuela** (the five founders), plus the **United Arab Emirates, Libya, Algeria, Nigeria, Angola, Congo, Equatorial Guinea and Gabon**.
- OPEC was founded in 1960 to coordinate the petroleum policies of its members and to provide member states with technical and economic aid.
- OPEC is used to work as a cartel and fix prices in a favourable band. It could bring down prices by

increasing oil production and raise prices by cutting production.

#### OPEC Plus

- The 2014 oil crisis, which was accentuated by oversupply of crude, brought down prices below \$30 a barrel. Since then, OPEC has been working with **non-OPEC countries** like Russia, Azerbaijan, Bahrain, Brunei, Kazakhstan, Malaysia, Mexico, Oman, Sudan and South Sudan to fix the global prices and supply.
- Known as the **“OPEC Plus” arrangement**, this alliance kept production lower and pumped up the prices.
- Together, these nations produce about 40% of the entire world's crude oil.

#### Why in News?

- The Organization of the Petroleum Exporting Countries (OPEC) and their allies (OPEC+ countries) agreed to slash output by two million barrels per day (bpd).
- The move is designed to boost the cost of oil, which has fallen below \$90 from a peak of \$122 in June.

### 3) International Solar Alliance

#### About ISA

- The International Solar Alliance (ISA) was conceived as a **joint effort by India and France** to mobilize efforts against climate change through deployment of solar energy solutions.
- It was conceptualized on the sidelines of the 21st Conference of Parties (COP21) to the United Nations Framework Convention on Climate Change (UNFCCC) held in **Paris in 2015**.
- The **Paris Declaration** that established the ISA states that the alliance is an action-oriented, member-driven, collaborative platform for **increased**

**deployment of solar energy technologies** as a means for bringing energy access, ensuring energy security, and driving energy transition in its member countries.

- ISA was conceived as a **coalition of solar-resource-rich countries** (which lie either completely or partly between the Tropic of Cancer and the Tropic of Capricorn) to address their special energy needs.
- The first general assembly of the ISA, held in 2018, adopted the amendment to its framework agreement to **expand the scope of membership to all member states of the United Nations**.
- The ISA is guided by its **‘Towards 1000’ strategy** which aims to **mobilise USD 1,000 billion of investments** in solar energy solutions by 2030, while **delivering energy access to 1,000 million people** using clean energy solutions and resulting in **installation of 1,000 GW** of solar energy capacity. This would help **mitigate global solar emissions** to the tune of **1,000 million tonnes of CO2 every year**.
- As guided by the Framework Agreement of the ISA, the **interests and objectives** of the ISA are as follows:
  - To collectively address key common challenges to scale up solar energy applications in line with their needs;
  - To take coordinated action through programmes and activities launched on a voluntary basis, aimed at better harmonization, aggregation of demand, risk and resources, for promoting solar finance, solar technologies,

- innovation, R&D, capacity building etc.;
- Reduce the cost of finance to increase investments in solar energy in member countries by promoting innovative financial mechanisms and mobilizing finance from Institutions;
- Facilitate collaborative research and development (R&D) activities in solar energy technologies among member countries.
- The ISA is headquartered in **Gurugram, Haryana**.
- At present, 110 countries are signatories to the ISA Framework Agreement, of which 90 countries have submitted the necessary instruments of ratification to become full members of the ISA.

#### Why in News?

- The Fifth Assembly of the International Solar Alliance was held recently.
- The Assembly is the **apex decision-making body** of ISA which meets every year. It makes decisions concerning the implementation of the ISA's Framework Agreement.
- During the assembly, **India and France** have been re-elected as President and Co-President of the Alliance.

## 4) UNPKF

### About UN Peacekeeping Forces

- The United Nations Peacekeeping Forces are employed by the UN to maintain or re-establish peace in an area of armed conflict.
- The UN may engage in conflicts between states as well as in struggles within states. The UN acts as an impartial third party in order to prepare the ground for a

settlement of the issues that have provoked armed conflict.

- The **three basic principles** that guide U.N.'s Peacekeeping missions are:
  - **Consent of the parties**
  - **Impartiality**
  - **Non-use of force except in self-defence and defence of the mandate.**
- The UN Peacekeeping Forces may **only be employed when both parties to a conflict accept their presence.**
- The Peacekeeping Forces are subordinate to the leadership of the United Nations. They are normally deployed as a consequence of a **UN Security Council** decision. However, on occasion, the initiative has been taken by the **General Assembly**. Operational control belongs to the **Secretary-General and his secretariat.**
- **India** has been among the largest troop-contributing countries to the U.N. peacekeeping missions.
- The first UN peacekeeping mission was a team of observers deployed to the Middle East in 1948, during the **1948 Arab-Israeli War.**

#### Why in News?

- Britain has announced that it will pull out its troops from a U.N. peacekeeping force in Mali following similar withdrawals this year by other Western nations.
- The early withdrawal comes after France and its military allies began withdrawing thousands of troops from Mali this year as the country's military junta began collaborating with private contractors belonging to Russia's Wagner Group (a private military company).

#### Geographical Location

- Mali is a landlocked country of **western Africa.**



- Mali is bounded on the north by **Algeria**, on the east by **Niger and Burkina Faso**, on the south by **Côte d'Ivoire and Guinea**, and on the west by **Senegal and Mauritania**.
- The **Niger River** flows through its interior, functioning as the main trading and transport artery in the country.

# Science and Technology

## 1) Metaverse

### What is Metaverse?

- Metaverse is currently in the evolutionary phase, so it has no clear-cut definition and is interpreted by different people depending on its different application.
- However, broadly it can be defined as a **digital reality** that **combines aspects of social media, online gaming, augmented reality (AR) and virtual reality (VR)** to allow users to interact virtually.
  - *Augmented Reality involves overlaying visual elements, sound, and other sensory stimuli onto a real-world setting to enhance the user experience. AR can be accessed with a smartphone, and users can control their presence in the real world.*
  - *In comparison, virtual reality is completely virtual and enhances fictional realities. VR requires a headset device, and users are controlled by the system.*
- In the metaverse, these technologies are combined to create a sense of "**virtual presence**."
- As the metaverse grows, it may likely create online spaces where **user interactions are more multidimensional** than current technology supports.
- In simple terms, the metaverse will allow users to go beyond just viewing digital content, users in the metaverse will be able to immerse themselves in a space where the digital and physical worlds converge.

### Why in News?

- The Interpol has recently unveiled the first-ever 'metaverse' specifically designed for law enforcement worldwide.
- The Interpol metaverse allows the registered users to take a virtual tour of its general secretariat headquarters in France's Lyon, interact with other officers via their avatars, and even take training courses in forensic investigation and other policing skills.

### Related Information

#### Interpol

- Founded in 1923, Interpol is an international police organisation made up of 195 member countries (including **India**).
- It is not a police force in the traditional sense—its agents are not able to arrest criminals. Instead, it is more of an **information-sharing network**, providing a way for national police forces to co-operate effectively and tackle international crime ranging from human trafficking and terrorism to money laundering and illegal art dealing.
- The organisation, based in **Lyon, France**, operates centralised criminal databases that contain fingerprint records, DNA samples and stolen documents.
- Interpol's other main function is to issue notices: alerts to member states for missing or wanted persons. The best-known of these is the "**Red Notice**", a notification that a member state would like someone arrested. States are not obliged to follow these notices, but will often treat them as a warrant for someone's arrest and extradition.



## 2) Launch Vehicle Mark 3 (GSLV Mark 3)

### About GSLV Mark 3 Rocket

- GSLV (Mark III) or Geosynchronous Satellite Launch Vehicle (Mark III) is ISRO's **three-stage vehicle** with **two solid motor strap-on, a liquid propellant core stage and a cryogenic stage**.
- Standing 44-nearly metres tall and weighing 640 tonnes, the GSLV Mark 3 is **India's heaviest operational rocket**.
- It is capable of lifting **4 tonne class satellites to Geosynchronous Transfer Orbit (GTO)** and about **8 tonnes to Low Earth Orbit (LEO)**.
- The rocket is mainly used by the space organisation to launch **geostationary communication satellites**.
- This rocket was deployed to launch the **Chandrayaan-2 mission** to the moon in 2019. It will also be used for **India's maiden human space flight** tentatively scheduled for late 2024.

### LVM III

- ISRO has recently renamed GSLV Mark III to **Launch Vehicle Mark III or LVM III**, mainly to identify its task of placing satellites into a variety of orbits.



### Why in News?

- India's heaviest rocket, GSLV Mark III or LVM III, has successfully placed **36** broadband communication satellites of UK-based OneWeb.
- These satellites that were successfully placed would be used to provide **high speed, low-latency internet connectivity**.
- It is the **first commercial mission of GSLV-Mk III** and marks its entry into the global commercial launch service market.

### Significance of the latest mission

- The mission was part of a **commercial agreement between New Space India Ltd, a space PSU, and UK-based OneWeb Ltd.**
  - *Refer Pulse June @ A Glance 2022 edition for more details about New Space India Ltd.*
- The success of the mission means that India has a second launch vehicle after PSLV to **offer to customers around the world**. The successful demonstration of GSLV Mark 3 rocket's ability to carry heavier payloads will boost revenues from each launch.
- This success of the mission also **enhanced the credibility of GSLV Mark 3 launch vehicle**.

## 3) Chandrayaan-2 finds sodium on the moon

### About Chandrayaan 2

- Chandrayaan 2 is an **Indian lunar mission that attempted to conduct a soft landing on the Moon's south polar region**.
- **Indian Space Research Organization (ISRO)** launched Chandrayaan 2, a mission comprising an **orbiter and a soft lander carrying a rover**, in July 2019.
- The primary objective of Chandrayaan 2 is to **demonstrate**

**the ability to soft- land on the lunar surface and operate a robotic rover on the surface.**

- Scientific goals include studies of lunar topography, mineralogy, elemental abundance, the lunar exosphere, and signatures of hydroxyl and water ice.
- It was launched on **GSLV Mk-III** and reached the lunar orbit in August 2019. The **lander and rover** were set to land on the far side of the Moon after being separated from the orbiter. However, the missions did not go as planned when the combination **crash-landed on the surface of the Moon.**
- While the lander and rover were lost in the accident, the **orbiter continues operating in the lunar orbit** to date providing key observations of the surface.

#### Why in News?

- Chandrayaan-2, which has been hovering around the Moon since 2019, has **mapped an abundance of sodium on the moon** for the first time using its **large area X-ray spectrometer, CLASS.**
- Sodium was found in the wispy atmosphere of the moon, a region so thin that the atoms there rarely meet. This region, termed an '**exosphere**', begins at the surface of the moon and extends several thousand kilometres merging into interplanetary space.
- The new findings provide an avenue to study surface-exosphere interaction on the moon that would aid development of similar models for mercury and other airless bodies in our solar system and beyond.

#### Other Significant Findings

- Last year, ISRO released the information gathered by Chandrayaan-2 till then.

- The Chandrayaan-2 Orbiter is carrying eight instruments. Through different methods, these instruments are meant to carry out a few broad tasks — study in more detail the **elemental composition of the lunar surface and environment, assess the presence of different minerals, and do a more detailed mapping of the lunar terrain.**

#### Water Molecule

- The **presence of water on the Moon had already been confirmed by Chandrayaan-1**, India's first mission to the Moon that flew in 2008. Before that, **NASA missions Clementine and Lunar Prospector** too had picked up signals of water presence.
- But the instrument used on Chandrayaan-1 was **not sensitive enough to detect whether the signals came from the hydroxyl radical (OH) or the water molecule (H<sub>2</sub>O, which too has OH).**
- Using far more sensitive instruments, the **Imaging Infra-Red Spectrometer (IIRS)** on board Chandrayaan-2 has been able to distinguish between hydroxyl and water molecules, and **found unique signatures of both.** This is the **most precise information about the presence of H<sub>2</sub>O molecules on the Moon till date.**
- Previously, water was known to be present mainly in the polar regions of the Moon. Chandrayaan-2 has now found **signatures of water at all latitudes**, although its abundance varies from place to place.

#### Minor Elements

- The **Chandrayaan-2 Large Area Soft X-Ray Spectrometer (CLASS)** measures the Moon's X-ray spectrum to examine the presence

of major elements such as magnesium, aluminium, silicon, calcium, titanium, iron, etc.

- This instrument has **detected the minor elements chromium and manganese** for the first time through remote sensing. The finding can lay the path for understanding magmatic evolution on the Moon and deeper insights into the nebular conditions as well as planetary differentiation.
- **Sodium**, also a minor element on the Moon surface, was detected without any ambiguity for the first time.
- CLASS has **mapped nearly 95% of the lunar surface in X-rays for the first time.**

#### Studying the Sun

- One of the payloads, called **Solar X-ray Monitor (XSM)**, besides studying the Moon through the radiation coming in from the Sun, has **collected information about solar flares**. Solar flares are large eruptions of electromagnetic radiation from the Sun lasting from minutes to hours.
- XSM has observed a large number of microflares outside the active region for the first time, and this **has great implications on the understanding of the mechanism behind heating of the solar corona.**

#### How does all this help?

- While the Orbiter payloads build upon existing knowledge of the Moon in terms of its surface, sub-surface and exosphere, it also **paves the path for future Moon missions.**
- **Four aspects** - mineralogical and volatile mapping of the lunar surface, surface and subsurface properties and processes involved, quantifying water in its various forms across the Moon surface, and

maps of elements present on the moon — will be key for future scope of work.

- A key outcome from Chandrayaan-2 has been the **exploration of the permanently shadowed regions as well as craters and boulders** underneath the regolith, the loose deposit comprising the top surface extending up to 3-4m in depth.
- This is expected to help scientists to zero in on future landing and drilling sites, including for human missions.

## 4) Avian influenza

### About Bird Flu

- Bird flu, also called **avian influenza**, is a viral infection caused by **Influenza Type A viruses** which spreads from bird to bird.
- These viruses occur naturally among wild aquatic birds worldwide and can infect domestic poultry and other bird and animal species.
- There are **several subtypes** of the avian influenza virus. Currently, a particularly deadly strain of bird flu -- **H5N1** -- continues to spread among poultry in Egypt and in certain parts of Asia. The H5N1 virus can cause severe flu with a high mortality rate.
- Avian influenza viruses **do not normally infect humans**. However, there have been instances of certain highly pathogenic strains causing severe respiratory disease in humans. In most cases, the people infected had been in close contact with infected poultry or with objects contaminated by their faeces.
- However, the **World Health Organization** had expressed concern that the virus could mutate to become more easily

transmissible between humans, raising the possibility of an influenza pandemic.

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

- The Union Ministry of Health and Family Welfare has deputed a high-level team to Kerala to take stock of Avian Influenza outbreak in the state.

## Reports and Indices

### 1) Global Hunger Index

#### What is it?

- The Global Hunger Index is an annual score ranking countries of the world on hunger levels.
- The Index is a peer-reviewed report released annually by **Concern Worldwide**, Ireland based humanitarian agency and **Welthungerhilfe**, one of the largest private aid organisations in Germany.
- The GHI determines hunger on a **100-point scale**, where 0 is the best possible score (no hunger) and 100 is the worst. Each country's GHI score is classified by severity, from low to extremely alarming.
- It is based on 4 indicators:
  - **Undernourishment** - population with inadequate food availability
  - **Child wasting** - the share of children under the age of five who have low weight for their height, reflecting acute undernutrition
  - **Child stunting** - children under the age of five who have low height for their age, reflecting chronic undernutrition
  - **Child mortality** - the mortality rate of children under the age of five.
- The reason for mapping hunger is to ensure that the world achieves **"Zero Hunger by 2030"** — one of the Sustainable Development Goals laid out by the United Nations. It is for this reason that GHI scores are **not calculated for certain high-income countries**.

#### Why in News?

- The Global Hunger Index (GHI) 2022 was released recently.

#### Highlights of the Index

- India has ranked **107th out of 121 countries**, from the 101st position the previous year.
- **Yemen** has ranked in the lowest position at 121, while seventeen countries, including China, Turkey, and Kuwait, shared the top rank with a GHI score of less than five.
- With a **score of 29.1**, which falls in the **'serious' category** of hunger, India was ranked behind its neighbours Nepal (81), Pakistan (99), Sri Lanka (64), and Bangladesh (84). India has been recording **decreasing GHI scores** over the years.
- The **proportion of undernourishment** in India went from 14.8 in 2014 to **16.3** in 2022, and the **prevalence of wasting** in children under five years jumped from 15.1 in 2014 to **19.3** in 2022.
- India has shown improvement in the other two indicators - **child stunting** has declined from 38.7% to **35.5%** between 2014 and 2022 and **child mortality** has also dropped from 4.6% to **3.3%** in the same comparative period.

#### India's Response

- However, the Government of India rejected the findings of the report, saying the index suffers from serious methodological issues and is disconnected from reality.
- It also said that data used in the report are sourced from international agencies which are not updated as per the latest data available in the country.

### 2) Living Planet Report 2022

#### What's in the news?

- World Wide Fund For Nature (formerly World Wildlife Fund) has

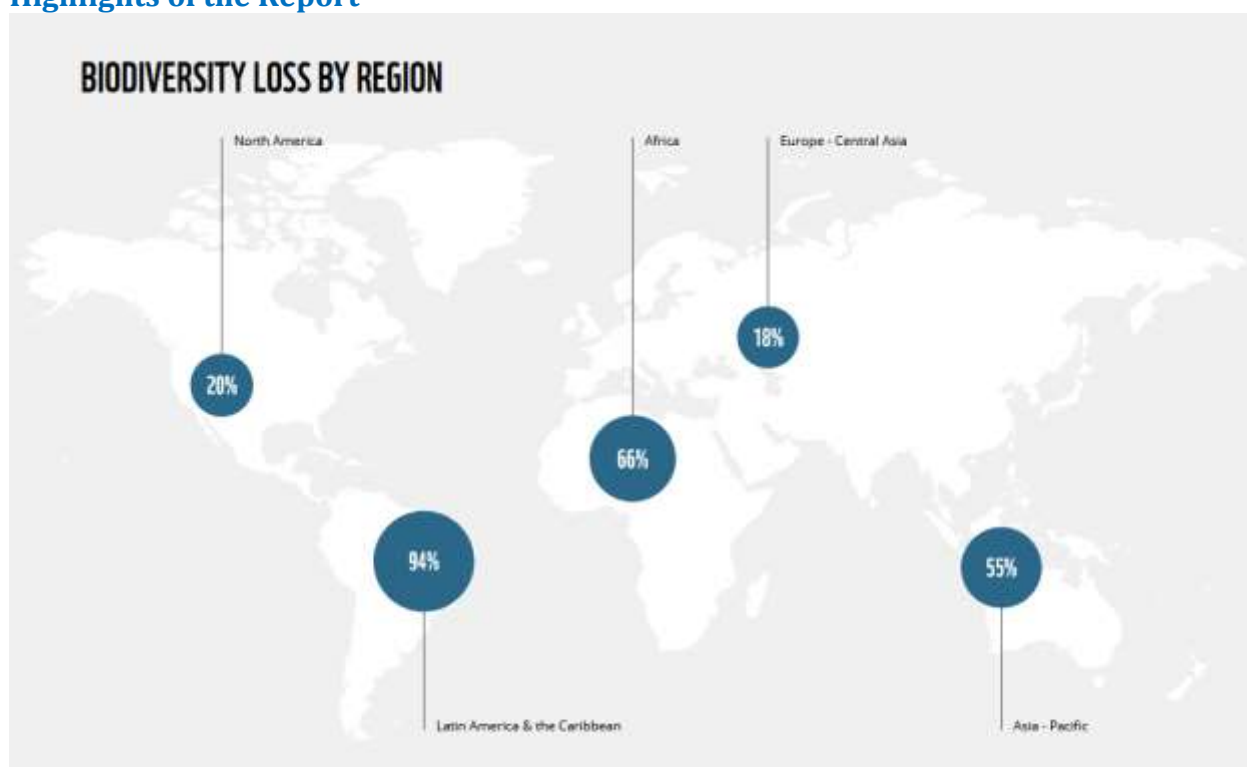


released its flagship Living Planet Report for the year 2022.

#### About the Report

- The Living Planet Report (LPR) is a comprehensive study of trends in global biodiversity and the health of the planet.
- It has been published **every 2 years** by the World Wide Fund for Nature (WWF) since 1998.
- This year's edition analyses about 32,000 populations of 5,230 species across the world.

#### Highlights of the Report



#### Biodiversity Loss & Climate Crisis

- The report noted that **biodiversity loss and climate crisis should be dealt with as one** instead of two different issues as they are intertwined, highlighting the link between the two issues for the first time.
- It added that climate change and biodiversity loss are not only environmental issues, but economic, development, security, social, moral and ethical issues too.

#### Drop in Freshwater Population

#### Decline in Wildlife Population

- There has been a **69 per cent decline** in the **wildlife populations of mammals, birds, amphibians, reptiles and fish**, across the globe in the last 50 years.
- The **highest decline** (94 per cent) was in **Latin America and the Caribbean region**. **Africa** recorded a 66 per cent fall in its wildlife populations from 1970-2018 and the **Asia Pacific** 55 per cent.

- Monitored freshwater populations have **declined by an average of 83%** since 1970, more than any other species groups.
- **Habitat loss and barriers to migration routes** account for around half the threats to these populations.

#### Threats to Biodiversity

- WWF identified **six key threats to biodiversity** — **agriculture, hunting, logging, pollution, invasive species and climate change** — to highlight 'threat

**hotspots' for terrestrial vertebrates.**

#### **Loss of Mangroves**

- Mangroves continue to be lost to aquaculture, agriculture and coastal development at a rate of 0.13 per cent per year. Many mangroves are also degraded by overexploitation and pollution, alongside natural stressors such as storms and coastal erosion.
- Mangrove-loss represents **loss of habitat for biodiversity and the loss of ecosystem services** for coastal communities. In some locations, it can mean the loss of the very land where coastal communities live.
- For instance: around 137 square kilometres of the **Sundarbans** mangrove forest in India and Bangladesh has been eroded since 1985, reducing land and ecosystem services for many of the 10 million people who live there.

#### **Way Forward**

- A **global goal of reversing biodiversity loss to secure a nature-positive world by 2030** is necessary if we are to turn the tide on nature loss and safeguard the natural world for current and future generations.
- A nature-positive future needs transformative, game-changing shifts in how we produce, how we consume, how we govern and what we finance.

### **3) World Economic Outlook**

#### **What is it?**

- The World Economic Outlook (WEO) is an **International Monetary Fund's** report that provides analysis and forecasts of economic developments and policies in its member countries.
- The report encapsulates the state of the global economy and highlights

risks and uncertainty that threaten growth.

- It is usually published **twice a year**.

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

- The International Monetary Fund (IMF) has released its latest World Economic Outlook for 2022.

#### **Highlights of the Report**

- The Report projected that the world, including India, will experience an **overall slowdown in the next year** owing to the impact of the Russia-Ukraine war, tightening monetary conditions globally, the highest inflation in decades, and lingering effects of the pandemic.
- **Global growth** is forecast to slow from 6.0 percent in 2021 to **3.2 percent in 2022** and **2.7 percent in 2023**. This is the weakest growth profile since 2001 except for the global financial crisis and the acute phase of the COVID-19 pandemic.
- **India is projected to grow at 6.8%** in the current fiscal year, following 8.7% growth in the fiscal year that ended March 31.

## Growth cut

The chart shows India's economic growth forecast for the current financial year. The IMF's cut in growth forecast after the RBI and the World Bank revised their forecast



- The growth rate for this year for India has been revised downward by 0.6 percentage points relative to the IMF's June 2022 forecast. The **forecast for the next fiscal year remains unaltered at 6.1%.**

### Related Information

#### About IMF

- The International Monetary Fund was conceived in 1944 at the

**United Nations Bretton Woods Conference** in New Hampshire, United States.

- The IMF and the World Bank are called **Bretton Woods twins**.
- The IMF is a permanent observer at the UN.
- It is an organization of 190 countries. **India is a founder member** of the IMF.
- The mandate of the IMF as follows:
  - To promote international monetary cooperation;
  - To facilitate the expansion and balanced growth of international trade;
  - To promote exchange stability;
  - To assist member countries in correcting maladjustments in their balance of payments without resorting to measures destructive of national or international prosperity;
  - To assist in the elimination of foreign exchange restrictions which hamper the growth of world trade.

## Polity

### 1) What is 'general consent' for CBI and its related issues

#### About CBI

- The Central Bureau of Investigation (CBI) traces its origins to the **Special Police Establishment**, a Central Government Police force, which was set up in 1941 by the British to investigate bribery and corruption.
- In **1963**, the Home Ministry expanded its power and changed its name to the **Central Bureau of Investigation**. It is governed by the **Delhi Special Police Establishment Act (DSPE), 1946**.
- The CBI was established with a view to investigate serious crimes related to Defence of India, corruption in high places, serious fraud, cheating and embezzlement and social crime, particularly of hoarding, black-marketing and profiteering in essential commodities, having all-India and inter-state ramifications.
- CBI acts as an **interface** between the law enforcement agencies of India and other countries to ensure cooperation. It facilitates exchange and sharing of information by these agencies.

#### Supervision over CBI

- The superintendence of CBI related to investigation of offences under the Prevention of Corruption Act, 1988 lies with the **Central Vigilance Commission (CVC)** and in other matters with the **Department of Personnel & Training (DOPT)** in the Ministry of Personnel, Pension & Grievances.

#### CBI Director

- Before the lokpal act was legislated, the CBI director was appointed by the DSPE Act. Now, the **Lokpal and**

**Lokayuktas Act, 2013** governs the appointment of the CBI director.

- Now, the CBI director is appointed by the Centre on the basis of the recommendation of a **search committee** comprising:
  - the Prime Minister as the chairperson,
  - the Chief Justice of India and
  - the Leader of Opposition.
- In the absence of a formal Leader of Opposition in the Lok Sabha, **the leader of the floor of the largest opposition party** takes part in the search committee meetings.

#### Requirement of Consent

- The CBI is governed by the Delhi Special Police Establishment Act, 1946 which grants the CBI power to investigate a case in Delhi, without any permission, since it is part of the Centre.
- However, in all the states, the CBI needs the **consent of the state** to investigate any case relating to that state or having jurisdiction of that state.
- The Central police cannot investigate or enter the state without the consent since **police and public order are state subjects** and the Centre cannot intervene in law and order matters.
- The CBI can initiate *suo motu* investigations only in **Union Territories**, under section 2 of the DSPE Act.
- The **Supreme Court and High Courts**, however, can order the CBI to investigate such a crime anywhere in the country without the consent of states.

#### Types of consent

- There are **two kinds of consent: case-specific and general**.

- “General consent” is normally given to help the CBI seamlessly conduct its investigation into cases of corruption against central government employees in the concerned state.
- Otherwise, the CBI would require consent in every case.
- When a state withdraws its general consent, the CBI will not be able to register any fresh case involving a central government official or a private person stationed in such states without getting case-specific consent.
- However, **there will be no bar on investigation into cases that are already being probed** by the CBI. The CBI cannot file any new FIRs in any new cases.

#### Why in News?

- Recently, the Maharashtra Government restored general consent for the CBI. So, it will no longer require the permission of the state government to open investigations in the state.
- Traditionally, almost all states have given CBI general consent. However, since 2015, several states have withdrawn their consent, citing various reasons.
- In March this year, Meghalaya became the ninth state to have withdrawn consent to the CBI — after Maharashtra, Punjab, Rajasthan, West Bengal, Jharkhand, Chhattisgarh, Kerala, and Mizoram. Out of these states, Maharashtra has now reversed its decision and restored general consent.

## 2) Citizenship (Amendment) Act, 2019

### How is citizenship acquired in India?

- In India, citizenship is regulated by the **Citizenship Act, 1955**.
- The Act specifies that citizenship may be acquired in India through **five methods** – by birth in India, by descent, through registration, by naturalisation (extended residence in India), and by incorporation of territory into India.

### Can illegal migrants acquire citizenship?

- An illegal migrant is prohibited from acquiring Indian citizenship.
- An illegal migrant is a foreigner who: **(i) enters the country without valid travel documents, like a passport and visa, or (ii) enters with valid documents, but stays beyond the permitted time period.**
- Illegal migrants may be imprisoned or deported under the **Foreigners Act, 1946** and the **Passport (Entry into India) Act, 1920**.

### Highlights of Citizenship (Amendment) Act 2019

- The Citizenship (Amendment) Act 2019 makes it clear that immigrants belonging to **Hindu, Sikh, Christian, Buddhist, Jain and Parsi communities** from **Pakistan, Bangladesh and Afghanistan** will not be treated as illegal. They will be eligible to get **naturalised citizenship**.
- One of the requirements for citizenship by **naturalization** under the 1955 Act is that the applicant must have resided in India during the last 12 months, and for 11 of the previous 14 years.
- The amendment act **relaxes this 11-year requirement to five years** for persons belonging to

these six religions from these three countries.

- They will also no longer be deported or jailed under the Foreigners Act of 1946 and the Passport (Entry into India) Act of 1920.
- The cut-off date for citizenship is **December 31, 2014** which means the applicant should have entered India on or before that date.

#### Rationale of the Law

- The Statement of Objects and Reasons in the amendment Act (SoR) states that India has had historic migration of people from Afghanistan, Pakistan and Bangladesh, and these countries have a **state religion**, which has resulted in **religious persecution** of minority groups.

#### Are the provisions of the Act applicable across the country?

- The Act clarifies that the amendments will not apply to certain areas. These are:
  - the tribal areas of Assam, Meghalaya, Mizoram, and Tripura, as included in the **Sixth Schedule to the Constitution**.
  - the **states regulated by the "Inner Line" permit** under the Bengal Eastern Frontier Regulation 1873.

#### How does the Act change the regulations for Overseas Citizens of India?

- The Act also amends the provisions on registration of Overseas Citizens of India (OCI).
- OCI cardholders are **foreigners who are persons of Indian origin**. The government may cancel a person's OCI registration on various grounds specified in the 1955 Act.
- The 2019 amendment **adds another ground for cancelling**

**OCI registration** — violation of any law notified by the central government.

#### Why in News?

- A three-judge Bench of the Supreme Court is hearing petitions challenging the validity of the contentious Citizenship (Amendment) Act, 2019.
- The Citizenship Amendment Act, 2019 seeks to grant citizenship to a class of migrants belonging to Hindu, Sikh, Buddhist, Jain, Parsi or Christian communities from Afghanistan, Bangladesh or Pakistan. The Act was notified in January 2020.
- While the government claimed the amendment was sympathetic and inclusionary, critics said it was unconstitutional and anti-Muslim. The law provoked widespread protests in the country.

#### Related Information

##### Inner Line Permit

- The Inner Line Permit (ILP) is an official travel document that allows Indian citizens to stay in an area under the ILP system.
- The document is currently required by visitors to **Arunachal Pradesh, Manipur, Nagaland and Mizoram**.
- The ILP is issued by the **concerned state government**. The permits issued are mostly of different kinds, provided separately for tourists, tenants and for other purposes.
- The main objective of the ILP system is to prevent settlement of other Indian nationals in the notified states in order to **protect the indigenous population**. It also offers protection for the locals with regards to lands, jobs and other facilities.

#### History of ILP

- Under the **Bengal Eastern Frontier Regulation Act, 1873**, the British framed regulations



restricting the entry and regulating the stay of outsiders in designated areas.

- This was to protect the Crown's own commercial interests by preventing "British subjects" (Indians) from trading within these regions.
- In 1950, the Indian government replaced "British subjects" with "Citizen of India". This was to address local concerns about protecting the interests of the indigenous people from outsiders belonging to other Indian states.

### 3) National Commission for Protection of Child Rights

#### About NCPCR

- The National Commission for Protection of Child Rights (NCPCR) is a **statutory body** established under the **Commission for Protection of Child Rights Act, 2005**.
- The commission works under the aegis of the **Ministry of Women and Child development**.
- NCPCR is mandated to function for the protection and promotion of child rights. It is also mandated to monitor the implementation of the **Protection of Children from Sexual Offences (POCSO) Act**.
- The Commission may inquire into complaints and take *suo motu* notice of matters relating to-
  - Deprivation and violation of child rights;
  - Non-implementation of laws providing for protection and development of children;
  - Non-compliance of policy decisions, guidelines or instructions aimed at mitigating hardships to and ensuring welfare of the children and to provide relief to such children;

#### Constitution

- The commission consist of the following members namely:-
  - A **chairperson** who, is a person of eminence and has done a outstanding work for promoting the welfare of children; and
  - **Six members**, out of which at least two are women, are appointed by the Central Government from amongst persons of eminence, ability, integrity, standing and experience in Education; Child health, care or related fields.

#### Why in News?

- The National Commission for Protection of Child Rights has revamped the **e-Baal Nidan portal** to include new features which would be beneficial for the complainants as well as the Commission while dealing with complaints.
- eBaalNidan is an online portal of the complaint management system of NCPCR. Through eBaalNidan, any individual or organisation can file a complaint relating to violation of child rights through an internet facility. Related Information

#### Related Information

#### Protection of Children from Sexual Offences Act, 2011

- The POCSO Act, which came into force in **2012**, is the first comprehensive law in the country **dealing specifically with sexual abuse of children**.
- Under the Act, any person below the **age of 18 years** is defined as a "child".
- The Act increased the scope of reporting offences against children, which were not earlier covered under the Indian Penal Code. This included **aggravated penetrative**

**sexual assault** to include punishment for **abuse by a person in position of trust or authority** including public servants, police, armed forces, management or staff of an educational or religious institution.

- It also defined the procedure for reporting of cases, including a provision for punishment for **failure to report a case or false complaint**.
- It provided **procedures for recording of the statement of a child** by the police and court, laying down that it should be done in a **child-friendly manner**, and by the setting up of **special courts**.
- Each district shall designate a Sessions Court to be a **Special Court**. The Court shall, as far as possible, **complete the trial within one year**. The trial shall be held in camera and in the presence of the child's parents or any person trusted by the child.
- The Act also includes penalties for **use of children for the purpose of pornography and abetment of an offence**.
- The Act was amended in 2019 to enhance punishment under various sections of the Act including punishment for aggravated penetrative sexual assault to be increased to include **death penalty**.

#### 4) Armed Forces Special Powers Act

##### About AFSPA

- Passed in 1958 for the North-East and in 1990 for Jammu & Kashmir, the Armed Forces Special Powers Act (AFSPA) **gives armed forces special powers to control "disturbed areas"**, which are designated by the government when it is of the opinion that a

region is in such a **disturbed or dangerous condition** that the use of armed forces in aid of civil power is necessary.

- An area can be disturbed due to differences or disputes between members of different religious, racial, language or regional groups or castes or communities.
- The **Central Government**, or the **Governor of the State** or **administrator of the Union Territory** can declare the whole or part of the State or Union Territory as a disturbed area.
- Under its provisions, the armed forces have been **empowered to open fire, enter and search without warrant, and arrest any person** who has committed a cognisable offence, all while having immunity from being prosecuted.
- The law has been repealed where insurgencies have subsided, and when governments have gained confidence in managing the region using the police force.

##### Criticisms

- Critics both in India and abroad have criticised government agencies for acting with impunity under AFSPA.
- **Manipuri activist Irom Sharmila** had been on a 16-year hunger strike in protest against AFSPA.
- The **Jeevan Reddy Committee** formed in 2004 recommended a complete repeal of the law.

##### Why in News?

- The central government has extended the application of the disturbed area under the Armed Forces (Special Powers) Act, AFSPA for another six months in parts of **Nagaland and Arunachal Pradesh**.
- Earlier this year, the Government of India withdrew AFSPA entirely from 23 districts in **Assam**; and

partially from seven districts in **Nagaland**, six districts in **Manipur**, and one district in **Assam**.

- AFSPA now remains in force in **parts of these three states as well as in parts of Arunachal Pradesh and Jammu & Kashmir**.

## 5) Right to Information Act

### About RTI Act, 2005

- Under the Right to Information Act, 2005, **Public Authorities** are required to make disclosures on various aspects of their structure and functioning.
- This includes: (i) disclosure on their organisation, functions, and structure, (ii) powers and duties of its officers and employees, and (iii) financial information.
- The intent of such *suo moto* disclosures is that the public should need minimum recourse through the Act to obtain such information. If such information is not made available, citizens have the right to request it from the Authorities.
- This may include information in the **form of documents, files, or electronic records** under the control of the Public Authority. The intent behind the enactment of the Act is to **promote transparency and accountability** in the working of Public Authorities.

### Who is included in the ambit of 'Public Authorities'?

- The RTI Act defines "public authorities" in **Section 2(h)**.
- A "public authority" means any authority or body or institution of self- government established or constituted
  - by or under the Constitution;
  - by any other law made by Parliament;
  - by any other law made by State Legislature;

- by notification issued or order made by the appropriate Government, and includes any –
- body owned, controlled or substantially financed;
- Non-Government organization substantially financed, directly or indirectly by funds provided by the appropriate Government.

### Section 8 of the RTI

- This provides for **exemption from disclosure of information** that are more valid in reasons
  - Which would affect the sovereignty and integrity of India, the security, strategic, scientific or economic interests of the State;
  - Which has been expressly forbidden to be published by any court of law or tribunal;
  - Which would cause a breach of privilege of Parliament or the State Legislature;
  - Information including commercial confidence, trade secrets or intellectual property;
  - Information received in confidence from foreign government;
  - Information which would endanger the life or physical safety of any person; etc.

### How is the right to information enforced under the Act?

- The Act has established a **three tier structure** for enforcing the right to information guaranteed under the Act.
- The first request for information goes to the **Central/State Assistant Public Information Officer** and **Central/State Public Information Officer**, designated by

the Public Authorities. These Officers are required to provide information to an RTI applicant **within 30 days** of the request. If information sought **concerns the life or liberty of a person**, it shall be supplied within **48 hours**.

- Appeals from their decisions go to an **Appellate Authority**.
- Appeals against the order of the Appellate Authority go to the **State Information Commission or the Central Information Commission**. These Information Commissions consist of a **Chief Information Commissioner**, and up to **10 Information Commissioners**.

#### Section 4(2) of the RTI

- It mandates that different authorities and government departments should **voluntarily disclose (*suo motu*) much information to the public at regular intervals through various means**, including the internet, so that the public have minimum resort to the use of this Act to obtain information.

#### Why in News?

- Nearly 3.15 lakh complaints or appeals under the Right to Information (RTI) Act are pending with 26 information commissions across India. The backlog of appeals or complaints is steadily increasing in commissions every year.

## 6) Law Commission of India

#### About

- The Law Commission of India is a **non-statutory body** constituted by the Government of India from time to time.
- The Commission was originally constituted in 1955 and is reconstituted every three years.
- Various Law Commissions have been able to make important

contributions towards the progressive development and codification of Law of the country.

#### Composition

- The Law Commission consists of:
  - a full-time Chairperson
  - four full-time Members
  - Secretary, Department of Legal Affairs as ex-officio Member;
  - Secretary, Legislative Department as ex officio Member; and
  - Not more than five part-time Members.
- There are **no defined eligibility criteria** for chairperson and members and the terms of reference are specified afresh each time it is reconstituted.

#### Functions of the Law Commission

- The Law Commission advises the government on legal issues, conducts research to review and reform the law or to bring new legislation.
- Either through a reference made to it by the government or suo-motu, it researches laws and reviews existing laws in India to reform them, remove them or bring new legislation.
- It also undertakes studies for reforms in the justice delivery systems.

#### Why in News?

- The Centre has constituted the Law Commission of India with Justice (retd) Rituraj Awasthi, former Chief Justice of Karnataka High Court, at its head.

## 7) National Human Rights Commission

#### About NHRC

- The National Human Rights Commission (NHRC) is a **statutory organisation** established in 1993

under the Protection of Human Rights Act (PHRA), 1993.

- The Act also created Human Rights Commissions at the levels of the various States.
- NHRC was established in conformity with the **Paris Principles**, adopted at the first international workshop on national institutions for the promotion and protection of human rights held in Paris in 1991, and endorsed by the General Assembly of the United Nations in 1993.

### Functions of NHRC

- The NHRC enquires into complaints of violation of human rights or negligence in the prevention of such violation by a public servant, studies treaties and international instruments on human rights and makes recommendations for their effective implementation to the Government.
- It is responsible for spreading human rights awareness amongst the masses.
- While inquiring into complaints under the Act, the Commission shall have all the powers of a **civil court**.

### Composition of NHRC

- According to the **Protection of Human Rights (Amendment) Act, 2019**, the NHRC consists of
  - A **Chairperson**, who has been a Chief Justice of India or a Judge of the Supreme Court
  - One member who is, or has been, a Judge of the Supreme Court of India
  - One member who is, or has been, the Chief Justice of a High Court
  - Three Members, out of which at least one shall be a woman to be appointed from amongst persons

having knowledge of, or practical experience in, matters relating to human rights

- In addition, the Chairpersons of National Commissions viz., National Commission for Scheduled Castes, National Commission for Scheduled Tribes, National Commission for Women, National Commission for Minorities, National Commission for Backward Classes, National Commission for Protection of Child Rights; and the Chief Commissioner for Persons with Disabilities serve as **ex officio members**.

- The term of the Chairperson and Members of the Commission is **three years or until he attains the age of seventy years**, whichever is earlier. They shall be **eligible for re-appointment**.
- They can be removed only on the **charges of proved misbehavior or incapacity**, if proved by an inquiry conducted by a Supreme Court Judge.

### Limitations of NHRC

- As per the Protection of Human Rights Act, the NHRC **can only recommend the government but the recommendations are non-binding**. This lack of authority gives an outright rejection of any recommendation or partial compliance.
- Under the Act, human rights commissions **cannot investigate** an event if the complaint was made more than **one year after the incident**. Therefore, a large number of genuine grievances go unaddressed.
- State human rights commissions cannot call for information from the

national government, which means that they are implicitly denied the power to investigate armed forces under national control.

- Also, the National Human Rights Commission powers related to violations of human rights by the armed forces have been **largely restricted**.

- Another major problem is that it is **flooded with too many complaints**, and is finding it difficult to address the increasing number of complaints.

#### Why in News?

- The 29th National Human Rights Commission Foundation day was observed recently.



# International Relations

## 1) 1267 Committee

### What is the 1267 Al Qaeda Sanctions Committee?

- The committee is **part of the UN Security Council** and its job is to **implement international sanctions against terrorists**. The other two committees with similar roles are the **Counter-Terrorism Committee and the Security Council Committee**.
- The Al Qaeda committee was established as the **Al-Qaida and Taliban Sanctions Committee** on in 1999, after Security Council Resolution 1267 designated al-Qaeda and the Taliban as terrorist bodies. In 2011, a separate committee was formed for the Taliban.
- The committee **allows any UN member state to propose adding the name of a terrorist or terror group to a consolidated list**, maintained by the Committee, that has **affiliations to Al Qaeda**.
- Resolution 1267 requires all UN member states to “freeze the assets of, prevent the entry into or transit through their territories by, and prevent the direct or indirect supply, sale and transfer of arms and military equipment to any individual or entity associated with Al-Qaida, Osama bin Laden and/or the Taliban as designated by the Committee.”

### Why in News?

- China placed a “hold” on two joint India-US proposals, to list Lashkar-e-Taiba (LeT) top leaders under the UNSC’s 1267 list of terrorists affiliated to Al Qaeda.
- The hold marked the fourth and fifth time China had attempted to block a listing move by India and the U.S. in the past four months.

### What does “placing a hold” mean?

- According to the rules, once a listing is proposed, it will be adopted into the list **according to a “no-objections” procedure**: which means, if any member of the Committee, which comprises all members of the UN Security Council, places a hold on the listing or objects outright to it, the listing cannot be adopted.
- As a permanent member of the UNSC, China can do this any number of times as its term doesn’t run out, and it **carries a veto vote**.

### What are the reasons China has given for holding the listings?

- Since 2001, China has placed holds on a number of listing proposals relating mainly to Pakistan-based groups and their leaders, given the **close bilateral ties between the two countries**.
- Most notable was China’s objections to the listing of JeM founder Masood Azhar. Even after the Parliament attack and the Mumbai 26/11 attacks, China kept placing a hold on the UNSC terror listing proposals for him: in 2009, 2010, 2016-18, claiming it had “inadequate information” on Masood Azhar’s terror activities.
- In May 2019, three months after the Pulwama attacks that were traced to the JeM, China finally withdrew its hold.

## 2) Nord Stream pipeline

### What are the Nord Stream pipelines?

- Nord Stream 1 is a **1,224 km underwater gas pipeline** running from **Vyborg in northwest Russia to Lubmin in northeastern Germany** via the **Baltic Sea**. It was opened in 2011.

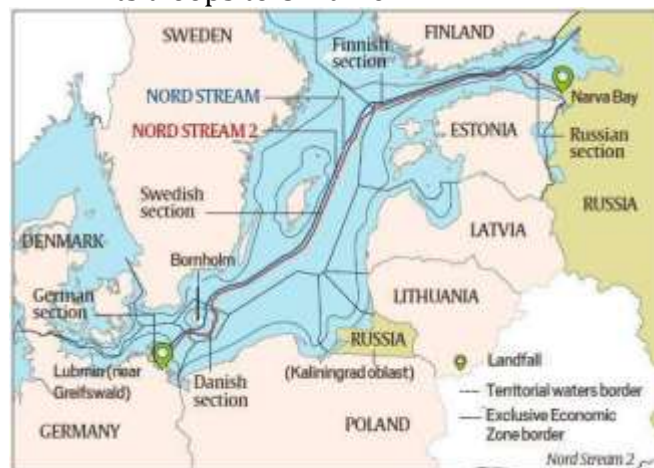
- The Nord Stream route crosses the Exclusive Economic Zones of **Russia, Finland, Sweden, Denmark and Germany**, as well as the territorial waters of **Russia, Denmark, and Germany**.
- It is the primary network through which gas reaches Germany. Most of the gas goes directly to Germany, while the rest travels west and southwards through onshore links to other countries and into storage caverns.
- The flows through Nord Stream play a vital role in filling up the national storage tanks of Germany and the EU. In 2021, **Russia supplied nearly 40 per cent of the EU's natural gas needs** through this pipeline.
- The pipeline is owned and operated by Nord Stream AG, whose majority shareholder is the Russian state-owned company Gazprom.

### Nord Stream 2

- Gazprom and five other European firms decided to build **Nord Stream 2** in 2015. The 1,200-km pipeline was to run from **Ust-Luga in Russia to Greifswald in Germany** through the **Baltic Sea** and carry 55 billion cubic metres of gas per year. It was meant to run

along with the Nord Stream 1 system.

- Germany, however, **suspended the approval for operating the pipeline** days before Russia sent its troops to Ukraine.



### Why in News?

- Several leaks were reported in the underwater Nord Stream 1 and 2 gas pipelines, located near Denmark and Sweden.
- The pipelines have been at the centre of geopolitical tensions in recent months as Russia cut gas supplies to Europe in suspected retaliation against Western sanctions following its invasion of Ukraine.

# Defence

## 1) Agni-P

### What's in the news?

- Defence Research and Development Organisation (DRDO) has successfully test-fired **indigenously-developed new generation medium-range ballistic missile Agni-P (Prime)**.
  - Ballistic missiles are powered by rockets initially but then they follow an unpowered, free-falling trajectory toward their targets. Ballistic missiles can carry conventional high explosives as well as chemical, biological, or nuclear munitions. They can be launched from aircraft, ships, and submarines in addition to land-based silos and mobile platforms.
  - On the other hand, Cruise missiles are unmanned vehicles that are propelled by jet engines, much like an airplane. They can be launched from ground, air, or sea platforms. Cruise missiles remain within the atmosphere for the duration of their flight and can fly as low as a few meters off the ground.

### What makes Agni-P different?



- Agni-P is a new generation advanced variant of the Agni class of missiles. It is a **canisterised missile with range capability between 1,000 and 2,000 km**.

- The process of canisterisation means the warhead will be mated with the missile for storage, not stored separately and mounted on the missile shortly before launch. Canisterisation of missiles reduces the time required to launch the missile while improving its storage and mobility.

- Agni-P has improved parameters including manoeuvring and accuracy.

### Agni Class of Missiles

- Agni class of missiles are the **mainstay of India's nuclear launch capability** which also includes the Prithvi short range ballistic missiles, submarine launched ballistic missiles and fighter aircraft.
- The longest of the Agni series, **Agni-V, an Inter-Continental Ballistic Missile (ICBM)** with a range of over 5,000 km, has already been tested several times and validated for induction.
  - An ICBM is a missile with a minimum range of 5,500 kilometres primarily designed for nuclear weapons delivery.

### Nuclear Triad

- In the last few years, India has also operationalized its submarine-based nuclear launch capability, **completing the nuclear triad**.
- Nuclear triad is a **three-sided military-force structure** consisting of land-launched nuclear missiles, nuclear-missile-armed submarines, and strategic aircraft with nuclear bombs and missiles.
- This is especially important given **India's No-First-Use policy** i.e. India will use the weapon only in

retaliation to a nuclear attack on Indian territory or against Indian forces anywhere.

#### **Related Information**

#### **IGMDP (Integrated Guided Missile Development Program)**

- It was conceived by Former President Dr. A.P.J. Abdul Kalam to enable India attain self-sufficiency in the field of missile technology.
- The 5 missiles developed under this program are:
  - **Agni:** Ballistic missiles with different ranges, i.e. Agni (1, 2, 3, 4, 5)
  - **Akash:** Medium range surface to air missile
  - **Prithvi:** Short range surface to surface ballistic missile
  - **Trishul:** Short range low level surface to air missile
  - **Nag:** 3rd generation anti-tank missile.