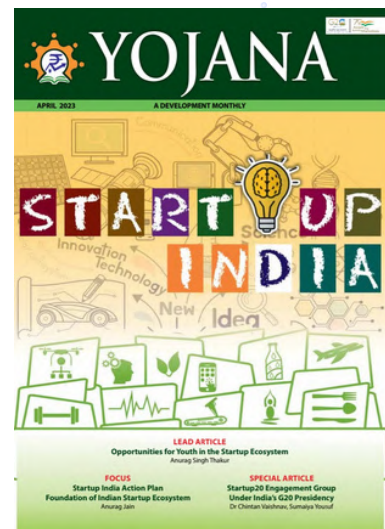


# OFFICERS' Pulse

APRIL 2023 - AT A GLANCE



DownToEarth Business Standard



**Current Affairs Monthly**  
The **PULSE** of UPSC at your fingertips.

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# Schemes

## 1) PM-DevINE

### About the Scheme

- The **Prime Minister's Development Initiative for North-East Region (PM-DevINE)** was announced by the government in the **Union Budget 2022-23**.
- PM-DevINE is aimed at **rapid and holistic development of the North- East Region** by **funding infrastructure and social development projects**, based on felt needs of the States.
- It strives to fill the gaps in various sectors and **will not be a substitute for existing Central and State Schemes**.
- The objectives of PM-DevINE are:
  - To **Fund infrastructure convergently**, in the spirit of **PM GatiShakti**;
  - To **Support social development projects** based on felt needs of the North East;
  - To **Enable livelihood activities** for youth and women;
  - To **Fill the development gaps** in various sectors.
- PM-DevINE is implemented by the **Ministry of Development of North Eastern Region (DoNER)** through the **North Eastern**

**Council** or **Central Ministries/agencies**.

### Why in News?

- Eleven projects amounting to Rs 1503 crore have been selected for sanction in FY 2022-23 under PM-DevINE.

### Related Information

#### North Eastern Council

- The North Eastern Council is the **nodal agency for the economic and social development** of the **North Eastern Region** which consists of the **eight States** of **Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim and Tripura**.
- It is a **statutory organization** established under the **North Eastern Council Act, 1971** at **Shillong, Meghalaya**.
- Initially, NEC was an Advisory Body for the North Eastern Region. Now NEC is mandated to function as a **Regional Planning Body** for the North Eastern Region.
- The Council comprises **Governors and Chief Ministers** of constituent States and **three members nominated by the President**.

## Initiatives

Dear Aspirants,

In Pulse November @ A Glance 2022 edition, under **National Suicide Prevention Strategy** topic (Initiatives section), it is mentioned that the goal of the strategy is to reduce suicide mortality in the country by 10 per cent by 2023. It is an error. The strategy aims to reduce suicide mortality in the country by 10 per cent by **2030**. The error is regretted.

### 1) e-RUPI

#### Context

- The **National Payments Corporation of India (NPCI)**, the body overseeing the digital payments ecosystem in India, launched **e-RUPI**, a **voucher-based payments system** to promote cashless transactions in August 2021.
- Over the past year and a half it has emerged as a contactless, cashless and trustworthy instrument for digital payments.

#### What is the e-RUPI system?

- e-RUPI is a **digital voucher that can be redeemed by beneficiaries** when they make use of any specific government services.
- The digital system **does not require a card, app or internet access** to redeem the vouchers. The digital tokens will be sent to respective citizens by the government via SMS strings or QR codes to be used for a specific purpose.
- The digital token-style **cashless and contactless medium** is seen as a way to **spot potential gaps in the existing welfare payments infrastructure and fix them**.

#### How does it work and where can it be used?

- The beneficiaries will be given **digital vouchers to access targeted welfare services** like medicines and nutritional support, and medical diagnostics under the government's health schemes.
- These vouchers are like **e-gift cards**, which are **prepaid in nature**. The code of the cards can be shared either via SMS or the QR code can be shared. These e-vouchers will be **person and purpose-specific**, and they **can't be transferred or cashed out**.
- e-RUPI is **powered by NPCI's UPI platform** and the service has onboarded about a dozen banks to be issuing entities. These include **both private and public banking institutions**.
- The beneficiaries will be identified by their mobile number, and the vouchers will be linked to it. The digital voucher can be redeemed only by that individual.
- The government also **plans to open the service to private enterprises** so they can use it as part of their employee welfare or benefits programmes. If private companies opt to use e-RUPI for their employees, they will have to approach one of the partner banks with details of specific individuals and the service they would like to avail.

#### Is e-RUPI a digital currency?

- **No**, the e-RUPI is built for a specific transaction for a service availed at a particular welfare centre. The digital vouchers are **backed by the Indian rupee and are not transferable**.
- This puts e-RUPI within the framework of a voucher-based payment system rather than a

virtual currency, which has a different character.

#### Benefits for End-users

- **Contactless** - Beneficiary need not carry a print out of the e-voucher;
- **Easy redemption** - It is a **2-step redemption process**;
- **Safe and Secure** - Beneficiaries do not need to share personal details and hence their privacy is maintained;
- **Only mobile phone and e-voucher required** - Users redeeming the voucher need not have a digital payment app or a bank account.

## 2) Mahila Samman Savings Certificate

#### About MSSC

- In the Union Budget 2023-24, the Government announced the Mahila Samman Savings Certificate (MSSC), a **new small-savings scheme for women**.
- An account under this scheme can be opened by a **woman** for herself or by the **guardian** on behalf of a **minor girl child**.

#### Minimum and Maximum Limit

- An individual may open an **unlimited number of accounts**, subject to the maximum deposit limit, and **three months** shall be maintained between the existing account and the opening of another account.

- A **minimum of Rs 1000 and any sum in multiples of Rs 100** can be deposited in an account with **maximum limit of Rs 2 lakh**, with no additional deposits permitted.

#### Interest on MSSC

- The interest rate on deposits made under this Program is **7.5% per year**.
- Interest is calculated **quarterly** and credited to the account.

#### Withdrawal

- **Partial withdrawal upto 40%** of eligible balance can be availed after the expiry of **one year** from the date of opening of the account.
- The account will **mature after 2 years** from the date of opening.
- **Premature closure** of the account may be permitted, any time after the completion of **6 months** from the date of opening of the account for any reason and in such cases **interest payable shall be two percent less** than the rate specified for the scheme i.e. 5.5%.

#### Why in News?

- The Prime Minister has urged women to enroll for Mahila Samman Saving Certificate (MSSC).



# Environment

## 1) All India Tiger Estimation

### What's in the news?

- The Government of India has released the All India Tiger Estimation 2022 (5th cycle) which shows that the **tiger population in India grew by 200** from 2018 to 2022. The number of tigers in India was **3,167 in 2022**, up from 2,967 in 2018.
- The **growth**, however, **slowed to 6.7 per cent** in these four years from around 33 per cent during 2014-2018.
- India is now home to **more than 75% of the global tiger population**.

### Highlights of the Census

- The fifth cycle of All India Tiger Estimation covered **forested habitats in 20 states of India**.
- The tiger numbers are estimated by adding animals caught in **camera traps**, as well as those that may not have been captured in this way. The latter are estimated by **statistical techniques**.
- The **tiger population has grown the most in the Shivalik hills and Gangetic flood plains**, followed by central India, the north eastern hills, the Brahmaputra flood plains, and the Sundarbans.
- The big cat was found to occupy **several territorial areas of Madhya Pradesh and Maharashtra**, which were not occupied in 2018. This expansion requires **urgent attention and preparedness** to deal with negative human-tiger interactions.
- **Tiger occupancy in Jharkhand, Odisha, Chhattisgarh and Telangana** showed a decline. Tigers were **locally extirpated** from **Kawal tiger reserve and Chennur of Telangana, Sri**

Venkateswara National park in Andhra Pradesh, Satkosia Tiger Reserve in Odisha and Sahyadri Tiger reserve from Maharashtra.

- **Tiger occupancy in the Western Ghats declined**, the latest analysis showed.

## 2) Project Tiger

### Genesis of Project Tiger

- While there were **40,000 tigers** in the country at the time of the **Independence**, they were soon reduced to below **2,000 by 1970** due to their widespread hunting and poaching.
- Two years later, the Indian government conducted its own tiger census and found that there were **only 1,800** of them left in the country.
- To tackle the problem of hunting and poaching of not just tigers but also other animals and birds, then **Prime Minister Indira Gandhi** promulgated the **Wildlife Protection Act in 1972**.
- A year later, after a task force urged the government to create a chain of reserves dedicated to tiger preservation, the government unveiled Project Tiger.

### About Project Tiger

- Project Tiger is a **Centrally Sponsored Scheme** of Government of India which was launched in **1973** for **in-situ conservation of wild tigers** in designated tiger reserves.
- Broadly, the strategy involves **exclusive tiger agenda** in the **core/critical tiger habitat**, **inclusive people-wildlife agenda** in the **outer buffer**, besides fostering the latter agenda in the corridors.



- This strategy is reflected in a tiger reserve specific **Tiger Conservation Plan** for each reserve prepared under the **Wildlife (Protection) Act, 1972**.
- The initiative is administered under the Ministry of Environment, Forests and Climate Change (MoEFCC). **National Tiger Conservation Authority**, a **statutory body** under MoEFCC, is the immediate supervising agency.
- It was launched from the **Jim Corbett National Park** of **Uttarakhand**. At present, there are more than **50 Tiger Reserves** in India governed by Project Tiger.
- Notably, Project Tiger didn't just focus on the conservation of the big cats. It also ensured the **preservation of their natural**

**habitat** as tigers are at the top of the food chain.

#### **What are the major Challenges for conservation of species in the long run?**

- The present tiger reserves might not be able to conserve the species in the long run because there is a **need for more corridors**.
- More than 15 corridors are approaching the peak of their capacity at sustaining tiger populations.
- In today's scenario, **human-animal conflict** is increasing day-by-day and the major reason lies in **fragmentation or shrinking of habitat**.
- Due to **illegal poaching** and illegal markets, there is grave danger for the tiger species.



- It is found that **one-third of tigers live outside the tiger reserves.**
- The **inter-connectivity of Tiger reserves is very poor** due to which the translocation of tigers is difficult.

#### Why in News?

- The Government of India has inaugurated the commemoration of **50 years of Project Tiger Project.**
- India has also launched the **International Big Cats Alliance (IBCA)** which will focus on protection and conservation of **seven major big cats** of the world - **Tiger, Lion, Leopard, Snow Leopard, Puma, Jaguar and Cheetah**, with membership of the range countries harbouring these species.

#### About IBCA

- The International Big Cat Alliance will **reach out to 97 range countries that are home to the seven big cats** to strengthen efforts to conserve these denizens in the wild.
- Notably, the alliance will provide a **platform for the member nations to share knowledge and expertise and extend support to recovery efforts** in potential habitats.
- IBCA will also **assist existing species-specific inter-governmental platforms** to boost conservation efforts.

### 3) Eco-sensitive zones

#### What are Eco-sensitive zones?

- As a general principle, **land falling within 10 kms** (in some exceptional cases it can even go beyond that) of the **boundaries of the National Parks and Wildlife Sanctuaries** are categorised as Eco-Fragile Zones or Eco-sensitive Zones.

- They are declared under the **Environment Protection Act, 1986 and are notified by the Ministry of Environment, Forest and Climate Change.**
- The purpose of declaring Eco-sensitive Zones around National parks and Sanctuaries is to create some kind of "**Shock Absorber**" for the Protected Areas. They would also act as a **transition zone** from areas of high protection to areas involving lesser protection.
- The activities in the eco-sensitive zones would be of a **regulatory nature rather than prohibitive nature**, unless and otherwise so required.

#### SC Judgment

- Last year, the Supreme Court directed that **all national parks and wildlife sanctuaries in the country must earmark a minimum distance of one-kilometre as eco-sensitive zone** where prohibited activities specified by the Centre, including mining and establishment of any new permanent structure will not be permitted.
- The Court said that the order would apply in all such states/UTs **where the minimum ESZ is not prescribed.** However, in the event there are states which have prescribed minimum ESZ beyond one kilometer, the **wider margin as ESZ shall prevail.**
- A 10-km ESZ was declared by the Union government in 2001, but several State governments failed to execute it.

#### Why in News?

- The Supreme Court has **modified its 2002 order mandating a minimum 1-km eco-sensitive zone** around national parks or wildlife sanctuaries, saying it would have prevented the government

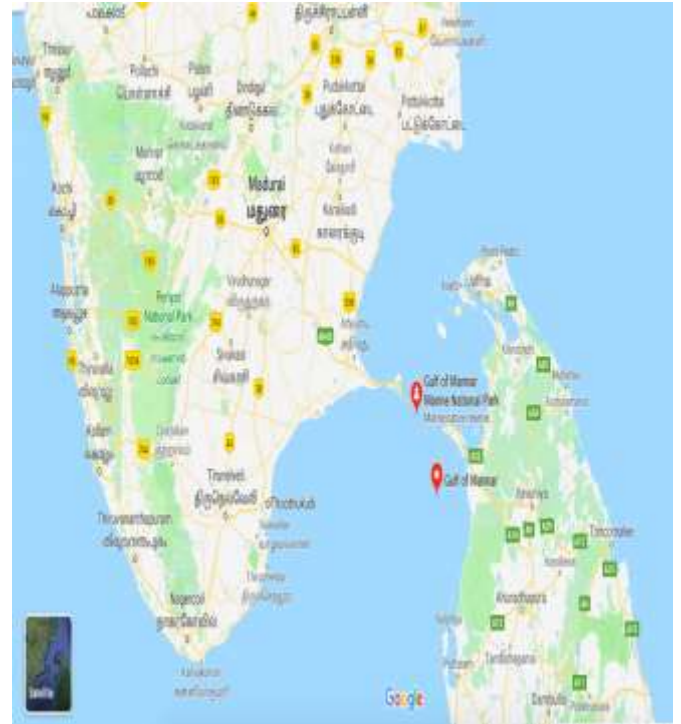
from building roads and other important infrastructure in those areas.

- With the 2022 order sparking concerns about human habitations falling within the proposed ESZs, the Centre had approached the court seeking modification of some of the directions.
- The apex court has clarified that the previous order will not apply either to ESZs for which draft or final notifications have been issued by the Ministry of Environment, Forests and Climate Change (MoEFCC) or in case of proposals pending with the latter.
- The court reasoned that **ESZ cannot be uniform across the country and has to be “protected area-specific”**.
- But it underlined that **no mining** would be allowed, either within national parks and sanctuaries or in a 1-km radius.

#### 4) Gulf of Mannar Islands under threat

##### About Gulf of Mannar Marine Biosphere Reserve

- Located at the **south-eastern tip of India**, the Gulf of Mannar Marine Biosphere Reserve is the **first Marine Biosphere Reserve in South and South-East Asia**.
- The Gulf is where the **southward extension of the Bay of Bengal meets the Indian Ocean**, and is one of the most biologically diverse regions in India.
- Globally threatened species include the **dugong** (*Dugong dugon*), **whale shark** (*Rhincodon typus*), **green sea turtle** (*Chelonia mydas*), **hawksbill turtle** (*Eretmochelys imbricata*) and **Indo-Pacific humpback dolphin** (*Sousa chinensis*).



- The local communities are mainly **Marakeyars**, with fishing their main livelihood.
- Although classified as a **Marine National Park** and recognized as a **World Heritage Site**, **habitat destruction, over-harvesting of marine resources** and localized land-based sources of **marine pollution** have been identified as threats to the ecological integrity of the Site.

##### Why in News?

- A recent study has revealed that an alien invasive plant is threatening the native vegetation across 21 islands in the Gulf of Mannar Biosphere Reserve (GoMBR).
- ***Prosopis chilensis***, a drought-resistant plant **native to the arid regions of four South American countries** — Argentina, Bolivia, Chile, and Peru — is threatening the biodiversity of the reserve.
- In addition to this, illegal coral quarrying and human settlements have also impacted the islands.

##### 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.

## 5) WMO's annual climate overview

### What's in the news?

- The World Meteorological Organisation (WMO) has released its annual climate overview which notes that the world's glaciers melted at dramatic speed last year and saving them is effectively a lost cause.
  - The WMO is a **specialized agency** of the United Nations. It is the UN system's authoritative voice on the state and behaviour of the Earth's atmosphere,

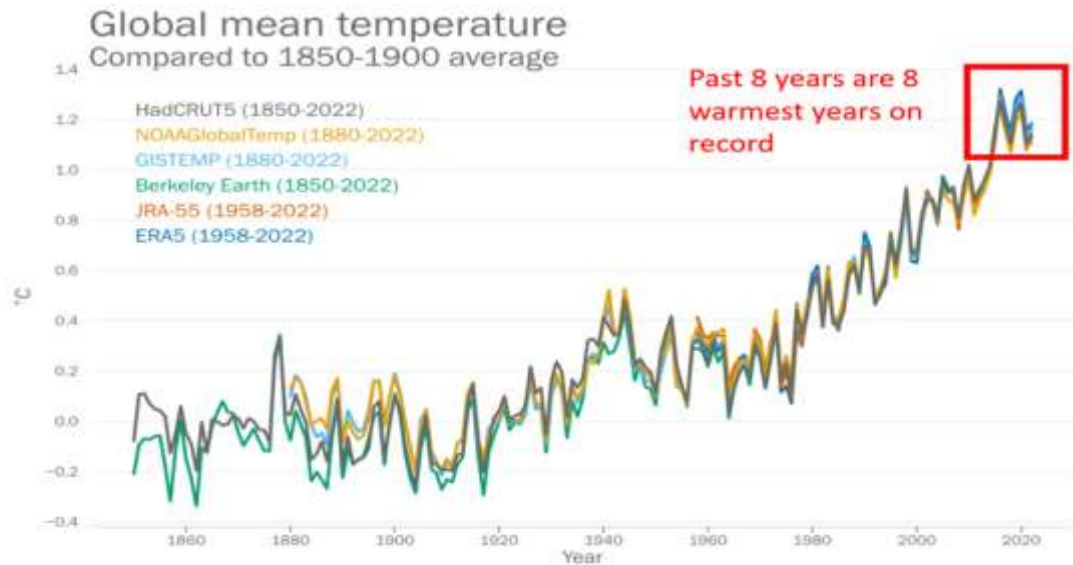
its interaction with the oceans, the climate it produces and the resulting distribution of water resources.

- WMO has a membership of 193 Member States and Territories (including **India**).
- The Secretariat, headquartered in **Geneva**, is headed by the **Secretary-General**.

### Highlights of the Report

#### Warmest Years on Record

- The **last eight years have been the warmest ever recorded**, while **concentrations of greenhouse gases such as carbon dioxide hit new peaks**.
- The **2015 Paris Agreement** saw countries agree to cap global warming at “**well below**” **two degrees Celsius** above average levels measured between 1850 and 1900 — and **1.5 degrees Celsius if possible**.
- The **global mean temperature in 2022 was 1.15 C above the 1850-1900 average**.
- Record global mean temperatures over the past eight years came **despite the cooling impact of a drawn-out La Nina weather phenomenon** that stretched over nearly half that period.
  - *La Nina is characterized by lower-than-normal air pressure over the western Pacific. These low-pressure zones contribute to increased rainfall. Rainfall associated with the summer monsoon in Southeast Asia tends to be greater than normal, especially in northwest India and Bangladesh.*



### Sea Levels

- **Sea levels are also at a record high**, having risen by an **average of 4.62 millimetres per year** between 2013 and 2022 — double the rate it was between 1993 and 2002.
- **Record high temperatures** were recorded in the **oceans** — where around 90% of the heat trapped on Earth by greenhouse gases ends up.

### GHG Concentrations

- The report said **greenhouse gas concentrations reached new global highs** in 2021.
- The concentration of **carbon dioxide (CO<sub>2</sub>)** reached 415.7 parts per million globally, or **149% of the pre-industrial (1750) level**, while **methane reached 262%** and **nitrous oxide hit 124%**.

### Glacier Loss

- The **world's reference glaciers** — those for which long-term observations exist — saw an **average thickness loss of more than 1.3 metres** between October 2021 and October 2022 — a loss much larger than the average over the last decade.
- The **cumulative thickness loss** since 1970 amounts to almost **30 metres**.

### Food Insecurity

- As of 2021, 2.3 billion people faced food insecurity, of which 924 million people faced severe food insecurity. Projections estimated 767.9 million people facing **undernourishment** in 2021, **9.8% of the global population**. **Half of these are in Asia and one third in Africa**.
- **Heatwaves** in the 2022 pre-monsoon season in **India and Pakistan** caused a **decline in crop yields**.

## 6) Eravikulam National Park

### About

- The Eravikulam National Park is situated in the **Kannan Devan Hills of the southern Western Ghats**.
- Located in the Idukki district in **Kerala**, the national park is divided into **three regions** - the core area, the buffer area and the tourism area.
- Eravikulam is famous for the **natural habitat of Nilgiri Tahr**, the endangered mountain goat and this park is built with the aim of conserving them.
- This is also the land of "**Neelakurinji**", the flower that blooms once in twelve years.



- **Anamudi Peak**, the **highest peak south of the Himalayas**, is located at the interior of the Eravikulam National Park.

#### Why in News?

- Officials of the Eravikulam National Park (ENP) have set up a Fernarium inside the park.
  - *A Fernarium is a specialized garden for the cultivation and display of ferns.*
- ENP is one of the rich biodiversity areas, and the new initiatives aim to provide visitors with awareness about the park's biodiversity.
- Ferns are part of the **Epiphytic family**. They **grow naturally in a soilless condition**. The plants obtain water and nutrients through **leaching from trees**.

### 7) First-ever census of water bodies

#### What's in the news?

- For the first time in the history of the country, the **Ministry of Jal Shakti** has conducted the first-ever census of water bodies across the nation.
- The census provides a **comprehensive inventory of India's water resources**, including natural and man-made water bodies like ponds, tanks, lakes, and more, and to collect data on the encroachment of water bodies.
- The Census also highlighted **disparities between rural and urban areas and varying levels of encroachment and revealed crucial insights into the country's water resources**.

#### The key features/findings of the Census are as follows:

- 24,24,540 water bodies have been enumerated in the country, out of which **97.1% (23,55,055) are in rural areas and only 2.9% (69,485) are in urban areas**.

- **Top 5 States** in terms of **number of water bodies** are **West Bengal, Uttar Pradesh, Andhra Pradesh, Odisha and Assam** which constitute around 63% of the total water bodies in the country.
- **Top 5 States** in terms of **number of water bodies in urban areas** are **West Bengal, Tamil Nadu, Kerala, Uttar Pradesh and Tripura**, whereas in **rural areas**, top 5 States are **West Bengal, Uttar Pradesh, Andhra Pradesh, Odisha and Assam**.
- **59.5% of water bodies are ponds**, followed by **tanks (15.7%)**, **reservoirs (12.1%)**, **Water conservation schemes/percolation tanks/check dams (9.3%)**, **lakes (0.9%)** and **others (2.5%)**.
- **55.2% of water bodies are owned by private entities** whereas **44.8% of water bodies are in the domain of public ownership**.
- Out of all public owned water bodies, **maximum water bodies are owned by Panchayats**, followed by **State Irrigation/State Water Resources Departments**.
- Out of all 'in use' water bodies, major water bodies are reported to be used in **pisciculture** followed by **Irrigation**.
- **78% water bodies are man-made water bodies** whereas **22% are natural water bodies**.
- **1.6% (38,496) water bodies** out of all the enumerated water bodies are reported to be **encroached** out of which **95.4% are in rural areas** and remaining **4.6% in urban areas**.



## 8) Wild life (Protection) Amendment Act, 2022

### Context

- The Wild life (Protection) Amendment Act, 2022 has come into force since 1st April 2023.
- The Act was passed in the Parliament in 2022.

### About Wild Life (Protection) Act, 1972

- The Wild Life (Protection) Act, 1972, provides for the **protection of wild animals, birds and plants**.
- The Act created **six schedules** which gave varying degrees of protection to classes of flora and fauna.
- It contains provisions **prohibiting the hunting of wild animals specified in the schedules**, unless the **Chief Wildlife Warden** believes that an animal has become dangerous to human life or is disabled or diseased beyond recovery.
- It also provides for **protection of specified plants, prohibiting picking or uprooting them**, and **allows governments to declare areas as sanctuaries**.

### Highlights of the 2022 Amendment

#### Streamlining the Schedules:

- The amendment **streamlines the Schedules of protected native wildlife to three Schedules** (Schedule I and II for animals; Schedule III for plants).
- The Act **removes the present schedule for vermin species** and inserts a **new schedule (Schedule IV) for specimens listed for extinction under CITES**.
- There has been a **significant addition of species to Schedule I**.

#### Obligations under CITES:

- The fresh amendments intend to **regulate wildlife trade** and to **implement the Convention on International Trade in**

**Endangered Species of Wild Fauna and Flora (CITES)**, which is an international agreement between governments to regulate international trade in species threatened with extinction.

- *Refer Pulse November @ A Glance 2022 edition for details about CITES.*

- The latest amendments seek to **increase the protected species as listed in the appendices under CITES**.
- The Act provides for **designation of a management authority**, which would be empowered to **grant export or import permits** for trade of specimens.
- The Act also provides for designating a **scientific authority**, which would **monitor the export permits** granted for the specimens listed in the schedule as well as the actual export of the specimens.
- An export permit would not be granted for certain species unless the scientific authority advises that the export will not be detrimental to the survival of that species.

#### Regulating Invasive Species:

- For the first time, a **regulatory mechanism to deal with 'invasive alien species'** has been inserted in the Act.
- It **empowers the central government to regulate or entirely prohibit the import, trade, possession or proliferation of invasive alien species**.
- An invasive alien species is defined as "a species of animal or plant which is **not native to India** and whose introduction or spread may **threaten or adversely impact wildlife or its habitat**".

#### Role of Gram Sabha:

- The amendment also makes it **mandatory to consult the Gram**

**Sabha in the management plan for all Wildlife Sanctuaries.**

**Protection of Elephants:**

- The original act categorises **elephants as Schedule 1 animals**, at par with tigers, but allows them to be held **captive legally**. In other words, the law prohibits capturing any Schedule 1 animal, irrespective of their wild or captive nature, except in certain circumstances with prior permission of the chief wildlife warden.
- The amendment adds a clause, allowing **transfer or transport of a captive elephant for “religious or any purpose”** by anybody having a valid certificate of ownership, subject to terms and

conditions prescribed by the central government.

- Many animal protection organisations have urged the government to remove this clause. Experts have also argued that the provision enlarges scope for exploitation of captive elephants.

**Increased Penalties:**

- The Act also **increased the penalties under the act**. For general violations, the amendment proposes an increase of the **maximum fine to Rs 1 lakh** from Rs 25,000 and for violating provisions related to specially protected animals, it increases the fine to **at least Rs 25,000** from at least Rs 10,000.

# Economy

## 1) India, Malaysia move beyond dollar to settle trade in INR

### What's in the news?

- The Ministry of External Affairs has announced that **trade between India and Malaysia can now be settled in Indian Rupee** in addition to the current modes of settlement.
- This follows the decision by the **Reserve Bank of India** in 2022 to **allow the settlement of international trade in the Indian Rupee (INR)**.
- This initiative by the RBI is aimed at facilitating the growth of global trade and to support the interests of the global trading community in Indian rupees.

### How does the new mechanism work?

- **India International Bank of Malaysia**, based in Kuala Lumpur, has operationalised it by opening a **Special Rupee Vostro Account** through its corresponding bank in India, which is the **Union Bank of India**.
  - *Refer Pulse February @ A Glance 2023 edition for details about Rupee Vostro Accounts.*
- **Malaysia is the 27th largest investor in India** with foreign direct investment of USD 1,161 million from April 2000 to September 2022. **Bilateral trade touched USD 13.86 billion** in April-November 2022.
- The mechanism will allow Indian and Malaysian traders to **invoice their trade in rupees**.
- At present, **Indian exports to Malaysia include machinery, instruments, electronic goods, fresh vegetables and meat**.
- The shift away from the **U.S. dollar** which has been the dominant

reserve currency for international trade so far has added significance as it indicates India is willing to take concrete steps towards **de-dollarisation of its international trade**.

## 2) Foreign Trade Policy 2023

### Context

- The government has unveiled its new Foreign Trade Policy 2023 (FTP 2023) which came into force on 1 April.
- The previous policy, launched in 2015, had to be extended several times due to the pandemic and geo-political developments.

### What is the significance of FTPs?

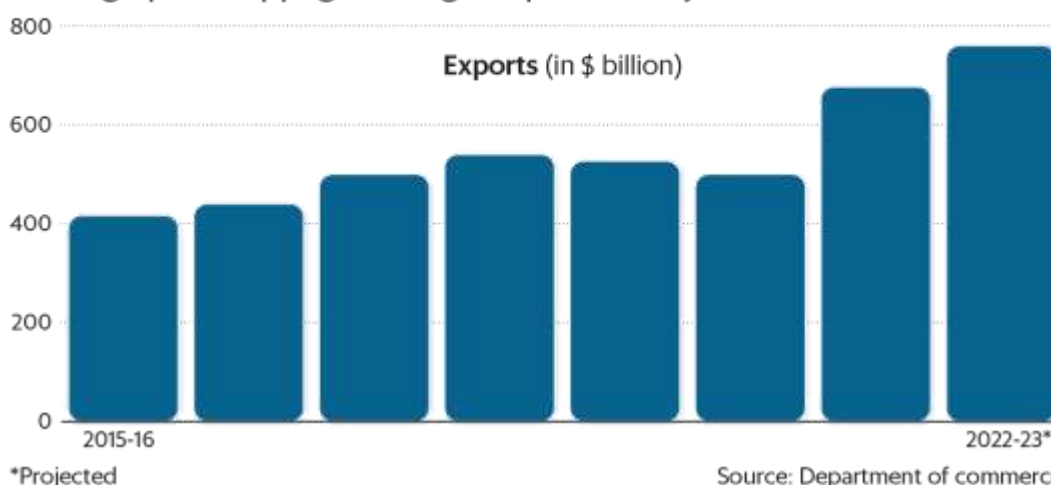
- Under the **Foreign Trade Development and Regulation Act, 1992**, the government is required to formulate, implement and monitor **trade policies** to boost exports, facilitate imports and maintain a favourable balance of payments.
- The **first five-year export-import (EXIM) policy of 1992** and the second in 1997-2002 aimed to remove many of the post-independence trade protectionist measures and promote India's integration with the global economy.
- In 2004, the **EXIM Policy was renamed FTP** to adopt a comprehensive approach to India's foreign trade. Later, FTPs were issued for 2009-14 and 2015-20.

### What is the duration of FTP 2023?

- The government has **broken away from the conventional practice of setting a five-year cycle**.
- The new policy is intended to be responsive to changing circumstances and will be **modified as and when required**.

## Big leap

India's merchandise and service exports have seen significant rise making up for slippage during the pandemic years.



- Additionally, the government will consistently gather input from relevant stakeholders to enhance and revise the policy.

### What are its key thrust areas?

- It has **four pillars**. These are:
  - **replacing the incentive-based system** of promoting exports with **remission and entitlement-based regimes**;
  - **facilitating enhanced collaboration** among exporters, states, districts and Indian missions;
  - **reducing transaction costs** and introducing **e-initiatives** for ease in business operations; and
  - **developing additional export hubs**.

### What are the goals and targets?

- The government aims to **increase India's overall exports to \$2 trillion by 2030**, with **equal contributions from the merchandise and services sectors**.
- The policy will **prioritize enhancing the ease of doing business** and **targets emerging**

**sectors, such as e-commerce and export hubs.**

- Under FTP 2023, the **towns of Faridabad, Moradabad, Mirzapur, and Varanasi** have been newly designated as **Towns of Export Excellence (TEE)** for apparel, handicrafts, handmade carpets and dari, and handloom and handicraft products, respectively. These additions expand the TEE list to **43 towns**.
- Also, the **dairy sector** will be **exempted from maintaining average export obligations** under the new policy.
- Further, the **special advance authorization scheme** has been extended to **apparel and clothing**. Under the Advance Authorization Scheme, **inputs required for manufacturing export products can be imported duty-free**.
- The new FTP aims to **boost the internationalization of trade in rupees** by allowing international trade settlement in India's currency.

### 3) What is 'Dabba trading'?

#### Context

- The National Stock Exchange (NSE) has issued a string of notices naming entities involved in 'dabba trading'.
  - NSE is the country's leading financial exchange, with headquarters in **Mumbai**. It was incorporated in **1992** and, since then, has evolved into an advanced, automated, electronic system offering trading facilities to investors across the country.
  - In 2021, this exchange system ranked **fourth in the world according to the metric of its trading volume**.

#### What is 'dabba trading'?

- Dabba (box) trading refers to **informal trading that takes place outside the purview of the stock exchanges**.
- **Traders bet on stock price movements without incurring a real transaction** to take physical ownership of a particular stock as is done in an exchange. In simple words, it is **gambling centred around stock price movements**.
- For example, an investor places a bet on a stock at a price point, say ₹1,000. If the price point rose to ₹1,500, he/she would make a gain of ₹500. However, if the price point falls to ₹900, the investor would have to pay the difference to the dabba broker.
- The primary purpose of such trades is to **stay outside the purview of the regulatory mechanism**, and thus, transactions are **facilitated using cash** and the mechanism is operated using **unrecognised software terminals**.

#### Where does it become particularly problematic?

- Since there are **no proper records of income or gain**, it helps dabba traders **escape taxation**.
- They would not have to pay the **Commodity Transaction Tax (CTT) or the Securities Transaction Tax (STT)** on their transactions.
- The **use of cash** also means that they are **outside the purview of the formal banking system**. All of it combined results in a **loss to the government exchequer**.
- In 'dabba trading', the **primary risk** entails the possibility that the **broker defaults** in paying the investor or the **entity becomes insolvent or bankrupt**.
- Being outside the regulatory purview implies that **investors are without formal provisions for investor protection, dispute resolution mechanisms and grievance redressal mechanisms** that are available within an exchange.
- Since all activities are facilitated using cash, and without any auditable records, it could potentially encourage the **growth of 'black money'** alongside perpetuating a **parallel economy**. This could potentially translate to risks entailing **money laundering and criminal activities**.

#### Offence

- 'Dabba trading' is recognised as an **offence under Section 23(1) of the Securities Contracts (Regulation) Act (SCRA), 1956** and upon conviction, can invite imprisonment for a term extending up to 10 years or a fine up to ₹25 crore, or both.



## 4) What is a Neobank?

### About Neo-banks

- Neo-banks are **completely online-based digital banking platforms**.
- They operate **entirely online**, with **no physical presence** apart from office space in the offline world.
- Neobanks operate **under mainstream finance's umbrella** but **empower specific services** long associated with traditional institutions such as banks, payment providers, etc.
- Examples of Neobanks in India: Instantpay, Jupiter Neobank, RazorpayX, etc.
- Many neo banks offer features such as **instant account opening, AI driven insights into spending, and payroll management** – essentially solving for inefficiencies and making banking more convenient.

### Regulations

- Unlike **traditional banks**, which are **authorised and regulated by the Reserve Bank of India** – neobanks are **not directly regulated**. In India, these firms **don't have a bank license of their own but rely on bank partners to offer licensed services**.
- They tie up with regulated banks to offer over the top services, on top of their partner banks' regular banking services.

### Why in News?

- Over the last few years, the number of neobanking platforms and global investments in the neo-banking segment has risen consistently.
- The growth of these institutions is spurred by the need for on-demand and easier-to-access financial solutions by a young and increasingly digitally savvy demographic.

## 5) Rating agencies

### What is a Rating Agency?

- A rating agency is a company that **assesses the financial strength of companies and government entities**, especially their ability to meet principal and interest payments on their debts.
- The rating shows an agency's level of confidence that the borrower will honor its debt obligations as agreed. Each agency uses **unique letter-based scores** to indicate if a debt has a low or high default risk and the financial stability of its issuer.
- The debt issuers may be sovereign nations, local and state governments, special purpose institutions, companies, or non-profit organizations.
- In India, the **Securities and Exchange Board of India (SEBI)** primarily regulates credit rating agencies and their functioning.

### How ratings affect the market?

- At the corporate level, companies planning to issue a security must find a rating agency to rate their debt. Rating agencies such as **Moody's, S&P Global Ratings, and Fitch** perform the rating service for a fee. Investors rely on the ratings to decide on whether to buy or not to buy a company's securities.
- At the country level, investors rely on the ratings given by the credit rating agencies to make **investment decisions**. Many countries sell their securities in the international market, and a good credit rating can help them **access high-value investors**. A favorable rating may also **attract other forms of investments** like foreign direct investments to a country.
- A rating downgrade means that bonds issued by the governments are now **"riskier" than before**.

Lower risk is better because it allows governments and companies of that country to raise debts at a lower rate of interest.

prominent global credit rating agencies to improve India's sovereign credit rating.

#### Why in News?

- The Government India has been proactively engaging with

# Organisations

## 1) India elected to UN Statistical Commission

### About UN Statistical Commission

- The UN Statistical Commission, established in 1947, is the **highest body of the global statistical system** bringing together the Chief Statisticians from member states from around the world.
- It is the **highest decision-making body for international statistical activities**, responsible for setting statistical standards and the development of concepts and methods, including their implementation at the national and international levels.
- The Commission consists of **24 member countries** of the United Nations elected by the **United Nations Economic and Social Council (ECOSOC)** on the **basis of equitable geographical distribution**.
  - Refer Pulse December @ A Glance 2022 edition for details about ECOSOC.

### Why in News?

- India has been elected to the UN Statistical Commission for a **four-year period**.
- India was a member of the Statistical Commission last in 2004 and the country is returning to the UN agency after a gap of two decades.

## 2) Finland joins NATO

### About NATO

- Formed in **1949** with the signing of the **Washington Treaty**, NATO is a **security alliance of 30 countries from North America and Europe**.
- Established in the Cold War as a bulwark against Soviet aggression, NATO's fundamental goal is to

safeguard the freedom and security of all its members by political and military means.

- **Article 5 of the Washington Treaty** states that an attack against one Ally is an attack against all — is at the core of the Alliance, a promise of **collective defence**.
  - Article 5 has been **invoked only once** in NATO history. It happened after the **September 11 attacks** on the United States in 2001, which led the alliance into Afghanistan.
- A **“NATO decision”** is the expression of the collective will of all 30 member countries since all decisions are taken by **consensus**.
- NATO has **30 members**. In 1949, there were **12 founding members** of the Alliance: Belgium, Canada, Denmark, France, Iceland, Italy, Luxembourg, the Netherlands, Norway, Portugal, the United Kingdom and the United States. The other member countries are: Greece and Turkey (1952), Germany (1955), Spain (1982), the Czech Republic, Hungary and Poland (1999), Bulgaria, Estonia, Latvia, Lithuania, Romania, Slovakia and Slovenia (2004), Albania and Croatia (2009), Montenegro (2017) and North Macedonia (2020).
- NATO's Headquarters are located in **Brussels, Belgium**.

### Why in News?

- **Finland** has become the 31st member of NATO, in a historic strategic shift provoked by Moscow's war on Ukraine.

### Significance

- Finland shares a **1,340km long border with Russia** and during the Soviet days, both countries signed a

**“friendship agreement,”** in which Finland agreed to be a **neutral country**.

- Russia’s invasion of Ukraine last year prompted Finland and its neighbor **Sweden** to drop decades of military non-alignment.
- While Finland and Sweden applied together for membership in NATO,

only Finland joined the military alliance as both countries faced certain hurdles in their bid for membership.

- According to the rules of the membership, **all members of the military alliance must agree to the entry of a new member.**



# Science and Technology

## 1) Genome sequencing and Genome India Project

### Context

- The Department of Biotechnology (DBT) recently said that the exercise to **sequence 10,000 Indian human genomes** and create a **database** under the Centre-backed **Genome India Project** is about **two-thirds complete**.
- About 7,000 Indian genomes have already been sequenced of which, 3,000 are available for public access by researchers.
- The proponents of the project say it would enable researchers anywhere in the world to **learn about genetic variants unique to the Indian population**.
- Countries including the United Kingdom, China, and the United States have launched similar programmes to sequence at least 1,00,000 of their population's genomes.

### What is genome sequencing?

- The **human genome** is the **entire set of deoxyribonucleic acid (DNA)** residing in the nucleus of every cell of each human body.
- It carries the **complete genetic information** responsible for the development and functioning of the organism.
- The DNA consists of a **double-stranded molecule built up by four bases – adenine (A), cytosine (C), guanine (G) and thymine (T)**. Every base on one strand pairs with a complementary base on the other strand (A with T and C with G). In all, the genome is made up of approximately **3.05 billion such base pairs**.
- While the **sequence or order of base pairs is identical in all**

**humans**, compared to that of a mouse or another species, there are **differences in the genome of every human being** that makes them **unique**.

- The **process of deciphering the order of base pairs, to decode the genetic fingerprint of a human is called genome sequencing**.

### Human Genome Project

- In **1990**, a group of scientists began to work on determining the **whole sequence of the human genome** under the **Human Genome Project**. The first results of the complete human genome sequence were given in **2003**. However, **some percentage of repetitive parts were yet to be sequenced**.
- The Human Genome Project released the **latest version** of the complete human genome in **2023**, with a **0.3% error margin**.

### Whole-genome sequencing

- There are **several approaches** to genome sequencing — including **whole genome sequencing or next generation sequencing** — that have different advantages.
- The process of **whole-genome sequencing**, made possible by the Human Genome Project, now facilitates the **reading of a person's individual genome to identify differences from the average human genome**.
- These differences or mutations can tell us about **each human's susceptibility or future vulnerability** to a disease, their **reaction or sensitivity** to a particular stimulus, and so on.

### What are the applications of genome sequencing?

- Genome sequencing has been used to **evaluate rare disorders, preconditions for disorders,**



even cancer from the viewpoint of genetics, rather than as diseases of certain organs.

- Nearly **10,000 diseases** — including cystic fibrosis and thalassemia — are known to be the **result of a single gene malfunctioning**.
- In the past decade, it has also been used as a tool for **prenatal screening**, to investigate whether the foetus has genetic disorders or anomalies.
- The Nobel Prize-winning technology **CRISPR**, which relies on sequencing, may potentially allow scientists to **repair disease-causing mutations in human genomes**.
- In public health, sequencing has been used to **read the codes of viruses**—one of its first practical usages was in 2014, when scientists sequenced samples of **Ebola** from infected African patients to show how genomic data of viruses could reveal hidden pathways of transmission, which might then be halted, thus slowing or even preventing the infection's spread.
- Experts say that as sequencing gets cheaper, every human's genome may feasibly be sequenced as part of routine health care in the future, to **better understand personal molecular biology and health**.
- At the **population level** as well, genomics has several benefits. **Advanced analytics and AI** could be applied to essential datasets created by collecting genomic profiles across the population, allowing developing **greater understanding of causative factors and potential treatments of diseases**.
- This would be especially relevant for **rare genetic diseases**, which

require large datasets to find statistically important correlations.

### What is the significance of the Genome India project?

- India's 1.3 billion-strong population consists of over **4,600 population groups**, many of which are **endogamous**. Thus, the Indian population harbours **distinct variations**, with disease-causing mutations often amplified within some of these groups.
- Findings from population-based or disease-based human genetics research from other populations of the world **cannot be extrapolated to Indians**.
- But despite being a large population with diverse ethnic groups, **India lacks a comprehensive catalogue of genetic variations**.
- Creating a database of Indian genomes allows researchers to **learn about genetic variants unique to India's population groups and use that to customise drugs and therapies**.

## 2) Large Hadron Collider

### What's in the news?

- Engineers are warming up the Large Hadron Collider for its third season of operations, following upgrades that will have made the collider and its detectors more sensitive and accurate than before.

### What is the Large Hadron Collider?

- The Large Hadron Collider (LHC) is a **giant, complex machine built to study particles that are the smallest known building blocks of all things**.
- Built by the **European Organisation for Nuclear Research (CERN)**, LHC is the **world's largest and most powerful particle accelerator**.

- Structurally, it is a **27-km-long track-loop buried 100 metres underground on the Swiss-French border.**
- In its operational state, it **fires two beams of 'protons' almost at the speed of light in opposite directions inside a ring of superconducting electromagnets.**
  - *Protons are made up of quarks and gluons, which in turn are the building blocks of protons and neutrons.*
- The magnetic field created by the superconducting electromagnets keeps the protons in a tight beam and guides them along the way as they travel through beam pipes and **finally collide.**



- Just prior to collision, **another type of magnet** is used to **'squeeze' the particles closer together** to increase the chances of collisions. The particles are **so tiny** that the task of making them collide is akin to firing two needles 10 km apart with such precision that they meet halfway.
- Since the LHC's powerful electromagnets **carry almost as much current as a bolt of lightning**, they must be **kept chilled.** The LHC uses a **distribution system of liquid helium** to keep its critical components ultracold at **minus**

**271.3 degrees Celsius**, which is colder than interstellar space.

- Given these requirements, it is not easy to warm up or cool down the gigantic machine.

#### Previous runs & 'God Particle' discovery

- Eleven years ago, in 2012, scientists at CERN had announced to the world the **discovery of the Higgs boson or the 'God Particle'** during the LHC's first run. The discovery concluded the decades-long quest for the **'force-carrying' subatomic particle**, and proved the **existence of the Higgs mechanism**, a theory put forth in the mid-sixties.
- This led to Peter Higgs and his collaborator François Englert being awarded the **Nobel Prize for physics** in 2013. The Higgs boson and its related energy field are believed to have **played a vital role in the creation of the universe.**
- The LHC's second run (Run 2) began in **2015** and lasted till **2018.** The second season of data taking **produced five times more data** than Run 1.

#### 'New Physics'

- After the discovery of the Higgs boson, scientists have started using the data collected as a tool to **look beyond the Standard Model**, which is currently the best theory of the most elementary building blocks of the universe and their interactions.

### 3) National Quantum Mission

#### What is Quantum Technology?

- **Quantum technology** is a field of physics and engineering that **studies and applies the principles of quantum mechanics to the development of new technologies.**

- **Quantum mechanics** is the branch of physics that **describes the behavior of matter and energy at a microscopic scale, where the classical laws of physics do not apply.**
- Four domains of quantum technologies are:
  - **Quantum communication**
  - **Quantum simulation**
  - **Quantum computation**
  - **Quantum sensing and metrology.**
- While the **classical computer** is **transistor-based**, **quantum computers** are going to **work on atoms.**
- Quantum computers use **quantum bits (qubits)** instead of classical bits to perform calculations.
  - *Classical bits can take the value 0 or 1, allowing for a binary system to be set up and the lowest level of computer language is done manipulating these bits. A qubit on the other hand can exist as a **superposition of two states 0 and 1** (a state known as **quantum superposition**).*
  - *So if one has an n-qubit number, it can exist as a superposition of  $2^n$  states. This also allows for an **immense amount of parallel processing.***

#### Potential of Quantum Technology

- The advantage of quantum computing is that it can **solve problems much faster with more authenticity.**
- Quantum technology offers **unique security** when it comes to encryption, making quantum communication **hack-proof.**
- Quantum communication is one of the **safest ways of connecting two places** with high levels of code and

**quantum cryptography cannot be decrypted or broken** by an external entity. If a hacker tries to crack the message in quantum communication, it changes its form in such a manner that would alert the sender and would cause the message to be altered or deleted.

- Meanwhile, **quantum sensing** uses the principles of quantum mechanics to develop **new types of sensors with unprecedented sensitivity and accuracy.** These sensors can measure physical quantities, such as temperature, magnetic fields, and gravitational waves, with higher precision than classical sensors.
- This technology has vast utilisation in astronomy and astrophysics and in solving the riddles of the universe.

#### Why in News?

- The Union Cabinet has approved the National Quantum Mission (NQM) at a total cost of Rs.6000 crore from 2023-24 to 2030-31, aiming to **seed, nurture and scale up scientific and industrial R&D and create a vibrant & innovative ecosystem in Quantum Technology.**

#### Objectives

- The new mission, which will be spearheaded by the **Department of Science and Technology** targets developing **intermediate scale quantum computers with 50-1000 physical qubits in 8 years** in various platforms like superconducting and photonic technology.
- The mission will help develop **magnetometers with high sensitivity** in atomic systems and Atomic Clocks for precision timing, communications and navigation.
- It will also support **design and synthesis of quantum materials**

such as superconductors, novel semiconductor structures and topological materials for fabrication of quantum devices.

- **Single photon sources/detectors, entangled photon sources** will also be developed for quantum communications, sensing and metrological applications.
- **Four Thematic Hubs (T-Hubs)** will be set up in top academic and National R&D institutes on the domains - Quantum Computing, Quantum Communication, Quantum Sensing & Metrology and Quantum Materials & Devices.
- The hubs which will focus on generation of new knowledge through basic and applied research as well as promote R&D in areas that are mandated to them.

#### Significance

- The mission would greatly benefit **communication, health, financial and energy sectors as well as drug design, and space applications.**
- It will provide a huge boost to National priorities like digital India, Make in India, Skill India and Stand-up India, Start-up India, Self-reliant India and Sustainable Development Goals (SDG).

## 4) India's Space policy

#### Context

- The Government of India has approved the Indian Space Policy 2023.
- It aims to **increase India's share in the global space economy from less than 2% to 10%.**

#### What is the Indian Space Policy 2023?

- The Indian Space Policy 2023 is a comprehensive set of guidelines that **outlines the roles and responsibilities of different entities** in the Indian space sector.

- It aims to **encourage and institutionalize private sector participation** in India's space sector, with the **Indian Space Research Organisation (ISRO) primarily focusing on research and development** of advanced space technologies.
- It will provide the private sector with **greater access to ISRO's infrastructure, technology and expertise** to support their space-related activities.

#### Highlights of the Policy

- The Space Policy creates **four distinct, but related entities**, that will facilitate greater **private sector participation in activities** that have usually been the traditional domain of ISRO.

#### 1. InSPACe:

- **Indian National Space Promotion and Authorisation Centre (InSPACe)** will be a "single window" clearance and authorisation agency for space launches, establishing launch pads, buying and selling satellites, and disseminating high-resolution data among other things.
- It will also develop space industry standards, promote identified space activities and work with academia to widen the space ecosystem and enable industry-academia linkages.

#### 2. ISRO:

- ISRO, as the **National Space Agency**, will **focus primarily on research and development of new space technologies and applications**, and for **expanding the human understanding of outer space.**
- It will also **share technologies, products, processes and best practices with NGEs** (non-government entities) and government companies.

### 3. New Space India Limited:

- NSIL, as the **Public Sector Undertaking** under **Department of Space (DOS)**, will be responsible for **commercialising space technologies and platforms** created through public expenditure.
- NSIL will also be responsible for manufacture, lease, or procure space components, technologies, platforms and other assets from the private or public sector, on sound commercial principles.

### 4. Department of Space:

- Finally, the **Department of Space** will provide **overall policy guidelines** and be the “**nodal**” **department for implementation of the Indian Space Policy-2023**.
- It will also be responsible for **international cooperation and coordination** in the area of **global space governance and programmes** in consultation with the **Ministry of External Affairs**.
- It will also create an **appropriate mechanism to resolve disputes** arising out of space activity.

### Other Key Features

#### Private Sector Participation

- Another key feature of the Indian Space Policy 2023 is the **entry of the private sector into end-to-end space activities**.
- Private companies will be allowed to **build satellites, rockets, and launch vehicles, and engage in data collection and dissemination**.
- It encourages private companies to **invest in creating new infrastructure** for the space sector and **use ISRO facilities** for a small charge.

#### Space sector of India

- India's space sector is globally recognized for **cost-effective satellite building**, and it advocates

for **peaceful and civilian use of outer space**.

- ISRO has an **exceptional success rate** and is the **6th largest space agency globally**.
- ISRO also launched a **student outreach program** called **SAMVAD** to encourage space research among young minds.
- However, the space sector faces **major challenges** as well including a **lack of regulations** on commercialisation which could lead to **monopolisation, rising space debris** from increasing expeditions, **China's rapid growth** in the space industry and **potential weaponization**, and an increasing **global trust deficit** creating an environment of suspicion and potential conflict.

## 5) Malaria

### About Malaria

- Malaria is a life-threatening disease caused by ***Plasmodium* parasites**.
- There are **5 parasite species** that cause malaria in humans, and 2 of these species – ***P. falciparum*** and ***P. vivax*** – pose the greatest threat.
- The parasites are spread to people through the bites of infected **female *Anopheles* mosquitoes**.
- Children aged under 5 years are the most vulnerable group affected by malaria.
- **Symptoms:** Fever, tiredness, vomiting, headaches, seizures, chills, etc.
- **Diagnosis:** Examination of blood films or by antigen-based rapid diagnostic tests (RDT).
- **Prevention: Vector control** is the main way to prevent and reduce malaria transmission. Two forms of vector control – **insecticide-treated mosquito nets and indoor residual spraying** – are



effective in a wide range of circumstances.

- **Treatment:** Antimalarial medications depending on the type of malaria.
- **Vaccine:** RTS,S (trade name **Mosquirix**) is the world's first malaria vaccine shown to provide partial protection against malaria in young children. In 2021, WHO recommended widespread use of the RTS,S vaccine.

### Malaria in India

- According to the **WHO's World Malaria Report, 2020, 11 highest burden countries** - Burkina Faso, Cameroon, the Democratic Republic of the Congo, Ghana, **India**, Mali, Mozambique, Niger, Nigeria, Uganda and Tanzania - account for 70% of the global estimated case burden and 71% of global estimated deaths from malaria.
- The Government of India aims at **eliminating malaria from the country by 2030**.
- Efforts are being made by the government in the provision of **microscopes, rapid diagnostics Long Lasting Insecticidal Nets (LLINs)**. Sleeping under LLINs is a major control strategy. They are being supplied/distributed to high burden areas leading to reduction in endemicity in these otherwise very high endemic states.

### Why in News?

- Malaria is all set to become a **notifiable disease across India**, with Bihar, Andaman and Nicobar Islands and Meghalaya too in the process of putting this vector-borne disease in the category.
- Currently malaria is a notifiable disease in 33 States and Union Territories in India.
- This is part of India's vision to **eliminate the disease by 2030**.

### Decline in Cases

- **India** was the only high-burden, high-impact country in the South-East Asia region to report a **decline in malaria cases in 2020** as compared to 2019. India witnessed **85.1% decline in malaria cases** and **83.36% decline in deaths** during 2015-2022.

### What is a notifiable disease?

- A notifiable disease is any disease that is **required by law to be reported to government authorities**.
- This means every government hospital, private hospital, laboratories, and clinics will have to report cases of the disease to the government.
- The collation of information allows the authorities to monitor the disease, and provides early warning of possible outbreaks.

## 6) 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 world has been witnessing one of the worst-ever documented outbreaks of the highly pathogenic avian influenza H5N1 killing millions of birds.
- Since 2022, the virus has infected over 100 million birds across the globe, resulting in the deaths of over 50 million and culling of millions of poultry.
- Unlike previous outbreaks of highly pathogenic subtypes of avian influenza, H5N1 is heavily impacting **wild bird species**, including many which were on the verge of extinction.
- High mortality in wild birds due to the virus could lead to **significant ecological consequences**, including vulnerability of predators and alterations in species composition in affected ecosystems, and therefore a possible impact on biodiversity not just limited to avian species.
- It has raised concerns regarding the spread of the virus among **critically endangered avian populations**.

### Spread to animals

- The highly contagious H5N1 virus can also occasionally **spillover from birds to animals** through **direct or indirect contact with infected birds or their droppings**.

- Worryingly, there have been several reports on spillover of H5N1 to **mammals** during the current outbreak from different countries, infecting species such as sea lions, minks, foxes, wild bears, and skunks, apart from domestic animals such as dogs and cats.
- H5N1 has a **high mortality rate of over 60% in humans** and is **primarily transmitted to humans through close contact with infected birds or animals**, either through handling infected poultry or exposure to contaminated environments.
- In the recent months, a few **sporadic cases of human H5N1 infections** have also been reported from Ecuador, Cambodia, and more recently in Chile.
- However, since the virus does not yet transmit efficiently among humans, the **World Health Organization (WHO)** has **assessed the risk of H5N1 to humans to be low**.

## 7) ESA launches its JUICE Mission

### What's in the news?

- The European Space Agency (ESA) has launched its **Jupiter Icy Moons Explorer (JUICE) mission** from its spaceport in French Guiana on an **Ariane 5 launcher**.
- Planned to reach Jupiter in **2031**, the mission aims to carry out a detailed exploration of the Solar System's largest planet and its icy moons, which potentially have habitable environments.

### Mission Objectives

- JUICE will explore Jupiter's complex environment in depth, and study the wider Jupiter system as an archetype for gas giants across the Universe.
- The mission will make detailed observations of the giant gas planet

and its three large ocean-bearing moons – **Ganymede, Callisto and Europa** – with a suite of remote sensing, geophysical and in situ instruments.

- The probe could tell us **whether Jupiter's major moons have the conditions to support simple life.**
- **Mars** has been the focus for hosting life for a long time whereas Jupiter's icy moons have been ignored as potential candidates since they were first discovered by

astronomer **Galileo Galilei** more than 400 years ago.

- However, previous space probes suggested that deep below their icy shells, the moons have **oceans of liquid water.** Since then, **Ganymede and Europa** have been prime candidates for the search for life.
- Europa will also be probed by **Nasa's Europa Clipper mission**, which is scheduled to launch in 2024.

## Reports and Indices

### 1) State of World Population Report, 2023

#### About the State of World Population

- The State of World Population is an annual report published by the **United Nations Population Fund (UNFPA)**.
- Each edition covers and analyses developments and trends in world population and demographics, as well as shedding light on specific regions, countries and population groups and the unique challenges they face.

#### Why in News?

- The UN Population Fund (UNFPA) has released its State of World Population Report, 2023.
  - *UNFPA is the **United Nations sexual and reproductive health agency**.*
  - *Its goal is ending unmet need for family planning, preventable maternal death, and gender-based violence and harmful practices including child marriage and female genital mutilation by 2030.*

#### Highlights of the Report

- The latest report shows that **India is set to overtake China to become the world's most populous country by the middle of 2023.**
- India's population by mid-year is estimated at **142.86 crore**, against **142.57 crore** for China. This shows India will have 29 lakh more people than its Asian neighbour. The **United States** is a **distant third**, with an estimated population of 34 crore.
- The **world's population** hit the **800-crore mark** in November 2022.

- The report says that contrary to the alarm bells about exploding numbers, **population trends everywhere point to slower growth and ageing societies.**
- **Just eight countries will account for half the projected growth in global population by 2050** — the Democratic Republic of Congo, Egypt, Ethiopia, India, Nigeria, Pakistan, the Philippines and the United Republic of Tanzania — while **two-thirds of people now live in a country where lifetime fertility corresponds with zero growth.**
- **India's annual population growth has averaged 1.2% since 2011, down from 1.7% in the previous decade.**

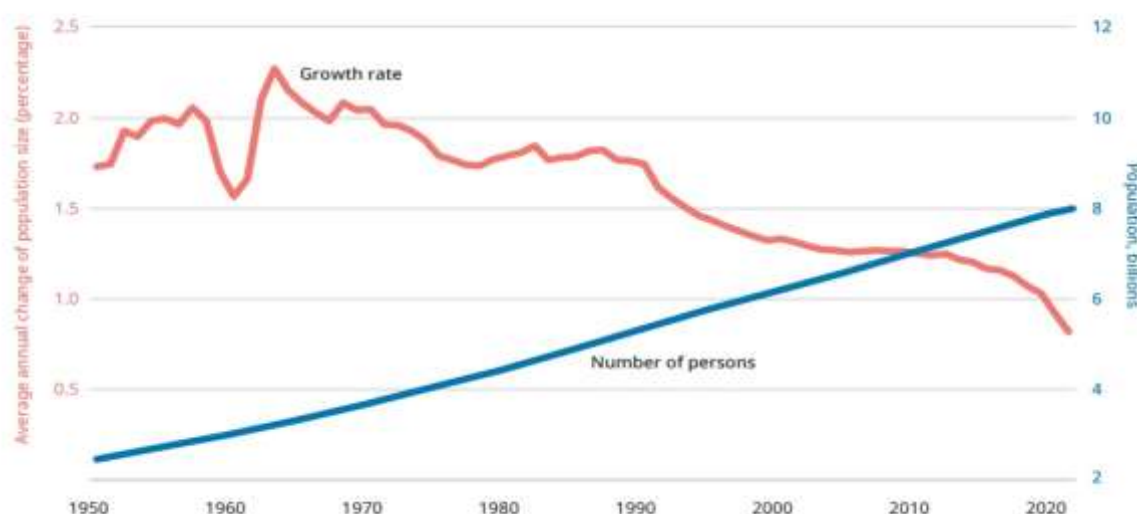
#### Population anxieties

- At a time when there have been increasing calls for imposing a two-child norm in India, the UN agency said its findings for India too had suggested that population anxieties have seeped into large portions of the general public.
- However, the report noted that **population numbers should not trigger anxiety or create alarm.** Instead, they should be **seen as a symbol of progress, development, and aspirations** if individual rights and choices are being upheld.
- It called for a **radical rethink on how countries address changing demographics** and **cautioned against use of family planning as a tool for achieving fertility targets.**
- It warned that global experience showed that **family planning targets can lead to gender-based discrimination and harmful practices** such as prenatal sex

determination leading to sex-

selective abortion.

**World population growth rate, 1950–2021**



### Recommendations

- The report noted that with **close to 50% of its population below the age of 25**, India has a time-bound opportunity to benefit from the **demographic dividend** and that it must convert this into “economic benefits through additional investments in health, education, and quality jobs for young people — including **targeted investments in women and girls**.”
- The report strongly recommended that governments introduce **policies with gender equality and rights at their heart**, such as parental leave programmes, child tax credits, **policies that promote gender equality** in the workplace, and **universal access to sexual and reproductive health and rights**.

## 2) National Health Accounts Estimates for India

### What's in the news?

- The Ministry of Health and Family Welfare has released the National Health Accounts Estimates for India (2019-20).

- National Health Accounts is a tool to describe **health expenditures** and the **flow of funds** in both Government and Private sector in the country.

### Highlights of the Report

#### Government Health Expenditure:

- The **share of Out-of-Pocket Expenditure (OOPE)** in Total Health Expenditure (THE) **declined** from 62.6% to **47.1%**.
- The **Government Health Expenditure (GHE)**, as a share of the total health expenditure, **increased** from 29 per cent in 2014-15 to **41.4 per cent** in 2019-20.
- Overall, the **government health expenditure increased** from 1.13 per cent of the GDP in 2014-15 to **1.35 per cent** in 2019-20. The government plans to increase this to **2.5 per cent of the GDP by 2025** as proposed by the **National Health policy 2017**.

#### Focus on Primary Healthcare

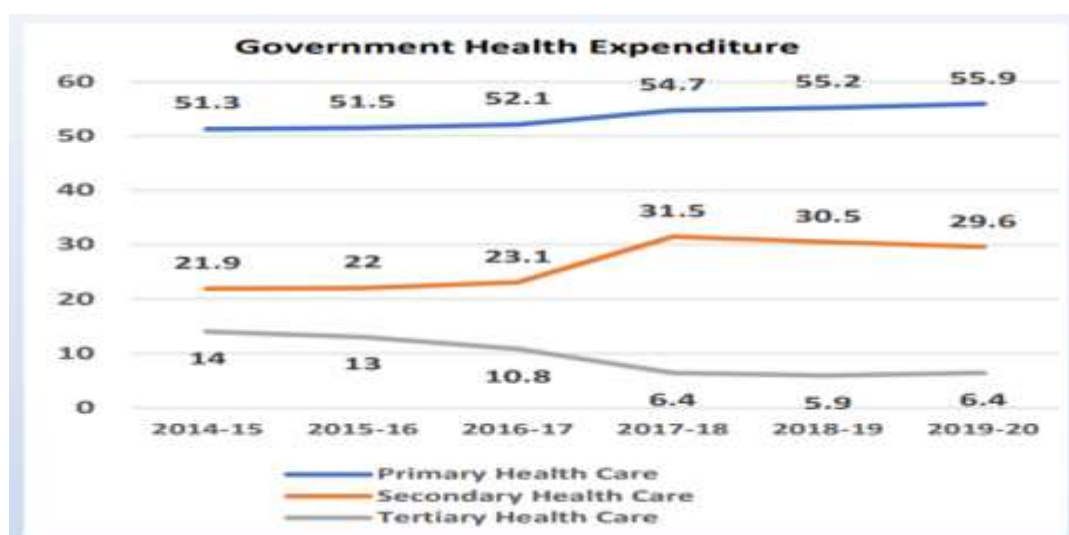
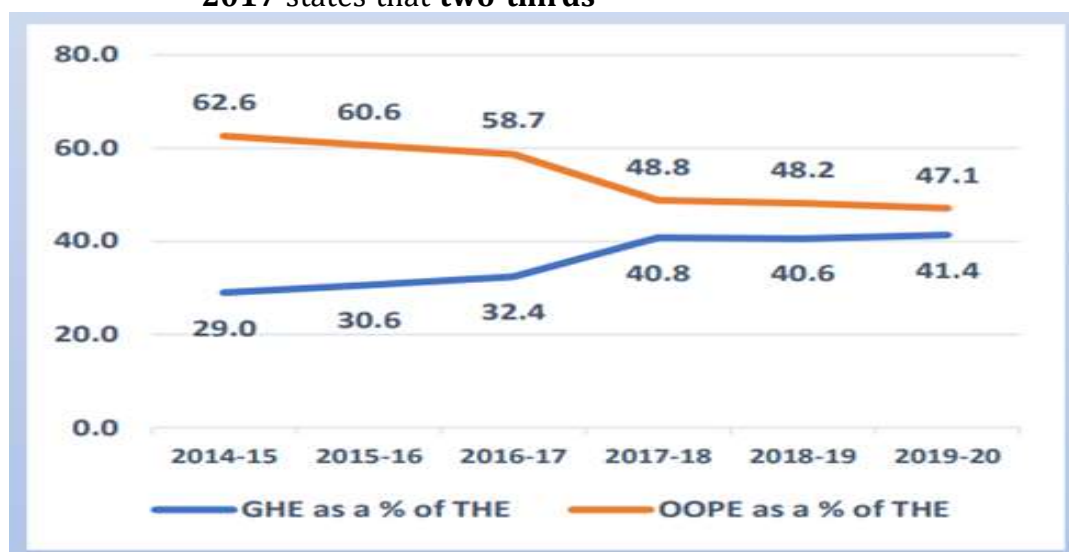
- A **majority of the government spend** is concentrated on the **primary care centres** — investment in the primary sector increased from 51 per cent of the



total government spend on health in 2014-15 to **56 per cent** in 2019-20.

- The **National Health policy 2017** states that **two-thirds**

**of public health spending must be in Primary Health systems.**



- **Expenditure on social security schemes** has increased from 5.7 per cent to **9.3 per cent** in this period.
- According to the report, **29.6 per cent** of the government's total health spend for 2019-20 went to **secondary care**, and **6.4 per cent** to **tertiary care**.

- The **spend on private health insurance** also **increased to 7.2 per cent** of the total health spend, up from 6.6 per cent in the previous report.

#### **Per Capita Spending**

- The **per capita spending on healthcare** increased from Rs 1,108 in 2014-15 to **Rs 2,014** in 2019-20.

### 3) Logistics Performance Index

#### About the Index

- The Logistics Performance Index (LPI) is an interactive benchmarking tool created to help countries identify the **challenges and opportunities they face in their performance on trade logistics** and what they can do to improve their performance.
- It is published by the **World Bank**.

#### What's in the news?

- The **World Bank** has released its 7th edition of Logistics Performance Index (LPI 2023).
- The LPI 2023 ranks 139 countries on **six dimensions of trade**:
  - **Customs**
  - **Infrastructure**
  - **International shipments**
  - **Logistics quality and competence**
  - **Tracking and tracing**
  - **Timeliness of shipments.**

#### Highlights of the Index

- **Singapore** has been ranked the world's leading logistic country according to LPI 2023.
- India has climbed **six places** on the LPI 2023, now ranking **38th in the 139 countries index**, as a result of significant investments in both infrastructure as well as technology.
- India was ranked 44th on the index in 2018 and has now climbed to 38th in the 2023 listing. India's performance has drastically improved from 2014, when it was ranked 54th on the LPI.
- The report quotes **modernisation and digitalisation** as a reason for emerging economies, like India, to leapfrog advanced countries.

#### Government Initiatives

##### PM GatiShakti

- In 2021, the Government of India launched the **PM GatiShakti National Master Plan (PMGS-**

**NMP)** towards a coordinated approach, leveraging technology, for infrastructure planning and development.

- PMGS envisages **breaking silos** among different Departments / Ministries in States / UTs by combining all relevant data on a National Master Plan and State Master Plans (portals) respectively.
- It is a **GIS based tool** which integrates existing and proposed infrastructure initiatives of different Central Ministries, to ensure first and last-mile connectivity, for seamless movement of people and goods.

##### National Logistics Policy

- In 2022, the Government of India launched the **National Logistics Policy (NLP)** which acts as a guiding document for States / UTs seeking to formulate logistics policy.
- The policy is centered around **upgradation and digitisation of logistics infrastructure & services**.
- NLP targets to **bring the logistics cost down to 8 per cent by 2030**.
- It also aims at **pushing up the share of railways from the current 28 per cent to 40 per cent**.

##### Other Initiatives

- At a sub-National level, the **Department for Promotion of Industry and Internal Trade (DPIIT)** has been conducting **LEADS (Logistics Ease Across Different States) study** since 2018 which helps to identify and resolve logistics inefficiencies and improve trade facilitation across supply chains.
- On a national level, India has notified **Productivity Linked Incentive (PLI) Scheme** for boost

to creating global champions in manufacturing, **PM Mitra Textile Parks**, **Bulk Drug Parks**, other areas of manufacturing and 43 **Towns of Export Excellence** meticulously focusing on specific sectors for exports and provision of related infrastructure.

- Further other initiatives like **Sagarmala** which aims to improve connectivity to ports and reduce cargo dwell time and **Bharatmala** which focussed on improving road connectivity of major corridors have played a pivotal role in improving India's logistics efficiency.

## Polity

### 1) What does national party status mean?

#### Context

- The Election Commission (EC) has recognised the **Aam Aadmi Party (AAP)** as a national party, while **revoking** that status of the **All India Trinamool Congress, Nationalist Congress Party (NCP)** and the **Communist Party of India (CPI)**.

#### How does a party get recognised as a national party?

- The **Election Commission** reviews the poll performance of recognised parties after every **State Assembly election** or **general election** to the **Lok Sabha**.
- The rules for recognition as a national party are specified by the Commission in the **Election Symbols (Reservation and Allotment) Order, 1968**.
- A party becomes eligible to be accorded **national status** if it fulfils **one of the following conditions**:
  - if it is **recognised as a State party** in at least **four States**,
  - if it **secures 6% of the total votes polled** in four States in the last Lok Sabha or Assembly elections, and in addition, **gets four of its members elected** to the Lok Sabha, or
  - if it wins **2% of seats** in the Lok Sabha from at least **three different States**.

#### Are there any other benefits of being recognised as a national party?

- Candidates from a national party require **only one proposer** to file their nominations and are **entitled to two sets of electoral rolls free of cost**.

- National parties get **dedicated broadcast slots** on public broadcasters **Doordarshan** and **All India Radio** during the general elections.
- Further, political parties are entitled to nominate 'star campaigners' during general elections. A national party can have a **maximum of 40 'star campaigners'** while a registered unrecognised party can nominate a maximum of 20 'star campaigners', whose **travel expenses are not accounted for** in the election expense accounts of candidates.

### 2) How can a juvenile be tried as an adult in Court?

#### What's in the news?

- The **National Commission for Protection of Children (NCPCR)** has recently issued guidelines for conducting a **preliminary assessment** by the **Juvenile Justice Board (JJB)** under Section 15 of the **Juvenile Justice (Care and Protection of Children) Act, 2015 (JJ Act, 2015)**.
- This preliminary assessment is to **ascertain whether a juvenile can be tried as an adult**.

#### How does a child get tried as an adult?

- Replacing the Juvenile Justice Act, 2000, the 2015 Act, for the first time, provided for **trying juveniles in the age group of 16-18 as adults** in cases of **heinous offences**.
- The Act has categorised the offences committed by children into three categories — **petty offences, serious offences, and heinous offences**.
- Section 15** of the JJ Act provides that in case of a **heinous offence** alleged to have been committed by

a child, who has **completed or is above the age of sixteen years**, the **Board shall conduct a preliminary assessment regarding his mental and physical capacity** to commit such offence, ability to understand the consequences of the offence and the circumstances in which he allegedly committed the offence.

- If the Board, after preliminary assessment passes an order that there is a need for trial of the said child as an **adult**, then the Board may order the **transfer of the case to the Children's Court** having jurisdiction to try such offences.
- Thus, the sole objective of having such a preliminary assessment is to determine whether a child within the age group of 16-18 years should be tried as an adult in case of heinous offences.

#### Role of NCPCR

- The NCPCR is under a **statutory obligation** under Section 109 of the JJ Act, 2015 to **monitor the proper implementation** of the provisions of the Act.
- The guidelines have been made to remove any ambiguity and to clarify the steps that need to be followed while conducting the preliminary assessment.
- However, the major issue remains the **implementation and absorption of these principles** in the system, particularly to be followed by the JJB and the Children's Court.
- A lot of principles which have been made a part of the Act have not been given due prominence by the Board as well as by the Children's Court.

#### Related Information

##### Other Key Provisions of the JJ Act, 2015

- In India, a juvenile is a **person less than 18 years of age**.

- The Act **addresses children in conflict with law and children in need of care and protection**.
- The Act **streamlined adoption procedures** for orphans, abandoned and surrendered children and the existing **Central Adoption Resource Authority (CARA)** has been given the **status of a statutory body** to enable it to perform its function more effectively.
- The Act **fulfils India's commitment as a signatory** to the **United Nations Convention on the rights of the child**, the **Hague Convention on Protection of Children and Co-operation in respect of Inter-country Adoption (1993)**, and other related international instruments.
- As a signatory, India is required to undertake all appropriate measures to ensure the rights of children with regard to juvenile justice, care and protection, and adoption.

#### Juvenile Justice (Care and Protection of Children) Amendment Act, 2021

- In 2021, the Parliament passed The Juvenile Justice (Care and Protection of Children) Amendment Act, 2021 which amended the Juvenile Justice Act, 2015.

#### Highlights of the Act

##### Adoption:

- Under the 2015 Act, once prospective adoptive parents accept a child, an adoption agency files an application in a **civil court** to obtain the adoption order. The adoption order issued by the court establishes that the child belongs to the adoptive parents.
- The amendment Act provides that instead of the court, the **district magistrate (including additional district magistrate)** will perform



these duties and issue all such orders. This provision has been included to expedite adoption proceedings.

#### Appeals:

- The amendment Act provides that any person aggrieved by an adoption order passed by the district magistrate may file an **appeal before the Divisional Commissioner**, within 30 days of such order. Such appeals should be disposed of within four weeks from the date of filing of the appeal.

#### Designated Court:

- The 2015 Act provides that offences against children that are punishable with **imprisonment of more than seven years**, will be tried in the **Children's Court** (equivalent to a Sessions Court). **Other offences** (punishable with imprisonment of less than seven years) will be tried by a **Judicial Magistrate**.
- Under the latest amendment, **all offences under the Act will be tried in the Children's Court**.

#### Offences against children:

- The 2015 Act provides that an offence under the Act, which is **punishable with imprisonment between three to seven years, will be cognizable** (where arrest is allowed without warrant) and **non-bailable**.
- The amendment act provides that **such offences will be non-cognizable and non-bailable**.

#### Child Welfare Committees (CWCs):

- The 2015 Act provides that states must constitute **one or more CWCs for each district for dealing with children in need of care and protection**. It provides certain criteria for the appointment of members to CWC. For instance, a member should be: (i) involved in health, education, or welfare of

children for at least seven years, or (ii) a practising professional with a degree in child psychology, psychiatry, law, or social work.

- The amendment act adds **certain criteria for a person to be ineligible to be a member of the CWC**. These include: (i) having any record of violation of human rights or child rights, or (ii) being a part of the management of a child care institution in a district.

#### 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.

# International Relations

Dear Aspirants,

In Pulse December @ A Glance 2022 edition, under **GAVI Alliance** topic (International Relations section), it is mentioned that the alliance was created in 2010. It is an error. GAVI was established in **2000**. We regret the error.

## 1) CPTPP

### About CPTPP

- The Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP) is a **free trade agreement (FTA) between 11 countries around the Pacific Rim: Canada, Mexico, Peru, Chile, New Zealand, Australia, Brunei, Singapore, Malaysia, Vietnam and Japan.**
- The CPTPP was launched to **remove trade barriers** among these 11 nations representing nearly 500 million consumers in the Asia-Pacific region in a bid to counter China's growing economic influence.
- The eleven signatories have combined economies representing 13.4 percent of global GDP, making the CPTPP one of the world's largest free-trade areas.

### When was the CPTPP negotiated?

- Negotiations for what was then simply the **Trans-Pacific Partnership (TPP)** began in 2010 and concluded in 2015.
- **The US** was party to those talks, but it **withdrew from the agreement** before ratification.
- The remaining 11 participants scrambled to amend the text of the agreement, and the newly renamed Comprehensive and Progressive Agreement for Trans-Pacific Partnership was signed in **2018**.

### Why in News?

- **The U.K.** has agreed to join the Comprehensive and Progressive Agreement for Trans-Pacific Partnership.
- Britain will become the **12th member**, and the **first to join the partnership since its inception**.

## 2) Five Eyes

### 'Five Eyes'

- The Five Eyes is an **intelligence alliance** consisting of **the US, Britain, Australia, Canada and New Zealand.**
- The alliance was created during the **Cold War** that was fought between the United States and the Soviet Union, as well as their respective allies.
- Throughout the Cold War, covert intelligence operations were commonplace, and often the main currency for the parties involved. As such, alliances needed to share sensitive information regarding their adversaries on all possible fronts available.
- The Five Eyes countries also frequently shared intelligence with other allied nations in Europe and Asia, also known as **"third parties"**, during the Cold War.

### Why in News?

- Australia has become the last of the "Five Eyes" security partners to ban the Chinese-owned video-sharing app TikTok from its federal government's devices.
- The Five Eyes intelligence-sharing partners -- the United States, Canada, Britain and New Zealand -- have taken similar steps.

## Art & Culture

### 1) Indian Council for Cultural Relations

#### About ICCR

- The Indian Council for Cultural Relations (ICCR) was founded in **1950** by **Maulana Abul Kalam Azad**, independent India's first Education Minister.
- Its objectives are to:
  - actively participate in the formulation and implementation of policies and programmes pertaining to **India's external cultural relations**;
  - to **foster and strengthen cultural relations and mutual understanding** between India and other countries;
  - to promote **cultural exchanges** with other countries and people, and
  - to **develop relations with nations**.
- The Council addresses its **mandate of cultural diplomacy** through a broad range of activities. In addition to organising cultural festivals in India and overseas, the ICCR financially supports a number of cultural institutions across India, and sponsors individual performers in dance, music, photography, theatre, and the visual arts.
- The ICCR Headquarter is situated in **New Delhi**.

#### Why in News?

- Looking to **expand its cultural footprint** in nations with whom it has **historical ties**, including those in its immediate neighbourhood, India is planning to create a **pool of experts in languages spoken in countries like Myanmar, Sri Lanka, Uzbekistan and Indonesia**

to facilitate better people-to-people exchanges.

- The Indian Council for Cultural Relations (ICCR) has envisaged a special project called '**The Language Friendship Bridge**', which plans to train five to 10 people in the official languages of each of these countries.

### 2) Basava Jayanthi

#### About Basavanna

- Basavanna was a **12th-century philosopher, statesman, and Kannada poet during the period of the Shiva-focused Bhakti movement**.
- Considered to be one of the many great social reformers, Basavanna stood for the **underprivileged classes and women's rights**.
- He spread social awareness through his poetry called **Vachanaas**.
- The renowned reformer **rejected all kinds of gender and social discrimination, superstitions, and rituals**.
- As the chief minister of his kingdom, he introduced new public institutions such as the **Anubhava Mantapa** (or, the "**hall of spiritual experience**"), which welcomed men and women from all socio-economic backgrounds to discuss spiritual and mundane questions of life.
- Basavanna is widely considered the **founder of the Lingayat sect**, which sought to promote equality and social justice.

#### Why in News?

- Basava Jayanthi was celebrated recently.

### 3) Char Dham Yatra



#### About the Yatra

- There are four Abodes in Himalayas collectively referred as "Char Dham Yatra" which includes four holy shrines of Hindus: **Badrinath, Kedarnath, Gangotri and Yamunotri.**
- All of these temples are situated within the **Garwhal region of Uttarakhand.**
- Among four sacred sites **Kedarnath is dedicated to Lord Shiva** while **Badrinath is dedicated to Lord Vishnu.** On the other hand, **Yamunotri and Gangotri** are dedicated to **Goddess Ganga and Yamuna** rivers respectively.
- The high-altitude shrines remain shut for around six months every year, **opening in summers (April or May) and closing with the onset of winter (October or November).**
- It is believed that one should complete the Char Dham Yatra in a

**clockwise direction.** Hence, the pilgrimage starts from Yamunotri, proceeds towards Gangotri, onto Kedarnath, and finally ends at Badrinath.

- Some devotees even do a **Do Dham Yatra** or a pilgrimage to two shrines - **Kedarnath and Badrinath.**

#### Why in News?

- The Char Dham pilgrimage of Uttarakhand has started recently.

### 4) Sri Ramanujacharya

#### About Ramanujacharya

- Born in 1017 CE in **Tamil Nadu**, Ramanujacharya is revered as a **Vedic philosopher and social reformer.** He travelled across India, **advocating equality and social justice.**
- Ramanuja **revived the Bhakti movement**, and his preachings inspired other Bhakti schools of thought. He is considered to be the inspiration for poets like



Annamacharya, Bhakt Ramdas, Thyagaraja, Kabir, and Meerabai.

- From the time he was a young budding philosopher, Ramanuja appealed for the **protection of nature and its resources** like air, water, and soil. He went on to write nine scriptures known as **the navaratnas** which included three important commentaries on the Vedartha-Sangraha, the Sribhasya, and the Bhagavadgita-bhasya, all of which attempted to provide a philosophical framework for devotional worship. He also composed numerous commentaries on Vedic scriptures.
- Ramanuja is also credited with **establishing the correct procedures for rituals performed in temples** throughout India, the most famous being Tirumala and Srirangam.
- He is known for his **Sri Vaishnavism ideology** and is the **main proponent of the Vishishtadvaita subschool of Vedanta**.
  - According to Vishishtadvaita philosophy (or **qualified monism**), **Brahman is eternal, but also includes elements of plurality**. The soul, or the Self, and the material world both exist only through Brahman. Unlike some Hindu philosophies, Vishishtadvaita doesn't see the world as simply an illusion, which would make it separate from Brahman. **The material world is a part of Brahman's nature.**

- Moksha, or spiritual liberation, is seen as the joy of contemplating Brahman (rather than release from the life-death-rebirth cycle), and that joy is the result of devotion, praise, worship and contemplating divine perfection.

### Advocate of Social Equality

- Ramanuja was an **advocate of social equality among all sections of people** centuries ago, and **encouraged temples to open their doors to everyone irrespective of caste or position** in society at a time when people of many castes were forbidden from entering them.
- He **took education to those who were deprived of it**. His greatest contribution is the **propagation of the concept of "vasudhaiva kutumbakam"**, which translates as "all the universe is one family".
- He travelled across India for several decades, propagating his ideas of social equality and universal brotherhood from temple podiums. He embraced the socially marginalised and condemned, and asked royal courts to treat them as equals.
- He spoke of **universal salvation** through devotion to God, compassion, humility, equality, and mutual respect, which is known as **Sri Vaishnavam Sampradaya**.

### Why in News?

- Prime Minister Narendra Modi paid tributes to Sri Ramanujacharya on his Jayanti.

## Miscellaneous

### 1) Operation Kaveri

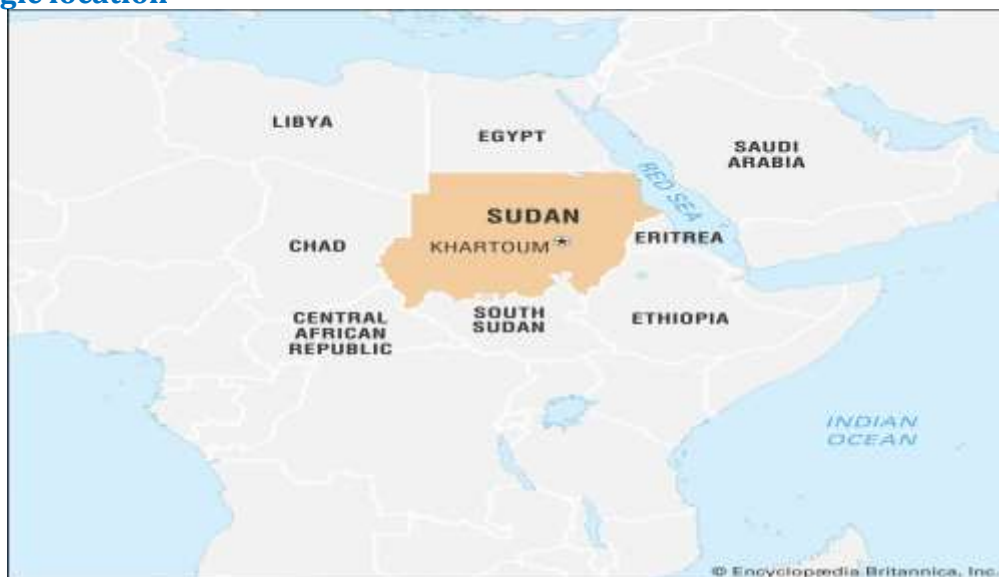
#### Context

- The Indian Government has launched Operation Kaveri to **evacuate its nationals from Sudan**, which has witnessed deadly fighting between the country's army and a paramilitary group.

#### What triggered the violence?

- Clashes erupted in Sudan after weeks of heightened tensions between the Rapid Support Forces (RSF), a paramilitary group led by Mohamed Hamdan Dagalo and the military, headed by Lt Gen Abdel Fattah al-Burhan.
- The long-running conflict had its origins in 2019, when the generals deposed Sudan's long-serving authoritarian President Omar al-Bashir after a nationwide revolt against him.
- Civilians persisted in their protests notwithstanding Bashir's overthrow in their demand for free elections and the establishment of a civilian government.
- The two generals disagree over the proposed transition to civilian rule in Sudan.

#### Strategic location



- Owing to its strategic location on the **Red Sea**, **access to the Nile River**, the **vast swath of gold reserves** and **agriculture potential**, the **third largest African nation** has long been coveted by outside powers, including its neighbours, the Gulf countries, Russia and the Western nations.
- Sudan's geographic location is crucial as it **borders seven countries** — **Egypt, Ethiopia, Libya, Chad, the Central African Republic, Eritrea and South Sudan**.
  - Until 2011, Sudan and South Sudan were one country. That year, following decades of civil war, the southern section seceded, becoming one of the world's newest nations.*
- Many analysts fear that the ongoing war between the military and RSF would spill over into neighbouring countries, which are already mired in their own internal conflicts, causing destabilisation of the entire region.