



# DAILY CURRENT AFFAIRS

**Time: 45 min**

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# India Ageing Report 2023

**Syllabus: GS1/Geography/Society**

## In News

- UNFPA (United Nations Population Fund) India, in collaboration with the International Institute for Population Sciences (IIPS), unveiled the "**India Ageing Report 2023.**"

## About

- This report sheds light on the **challenges, opportunities and institutional responses** surrounding elderly care in India, as India navigates a demographic shift towards an ageing population.
- It represents a thorough review of the living conditions and welfare of older individuals in India.

## Data on Ageing Population

- Population ageing is associated with a rise in the proportion of population termed as 'old', **usually at 60 or 65 years and above.**
- Three key demographic changes—**declining fertility, reduction in mortality and increasing survival at older ages—contribute to population ageing.**
- **Global:** There are 1.1 billion persons aged 60 years or above in 2022, comprising **13.9 percent of the total population.**
  - Asia is home to about **58 percent** of the global population of older persons.
- **India:** There are 149 million persons aged 60 years and above in 2022 comprising around **10.5 percent of the country's population.**

## Findings

- **Share of Aged Population:** The share of population over the age of 60 years is projected to **increase from 10.5 percent in 2022 to 20.8 percent in 2050.**
  - By the end of the century, the elderly will constitute over **36 percent of the total population of the country.**
- **80+Years Population:** The population of people aged 80+ years will grow at a rate of around **279% between 2022 and 2050**, with a predominance of widowed and highly dependent very old women.
- **Inherently gendered:** Poverty is inherently gendered in old age when older women are more likely to be widowed, living alone, with no income and with fewer assets of their own, and fully dependent on family for support.
- **Poor and No income:** More than 40% of the elderly in India are in the poorest wealth quintile, with about 18.7% of them living without an income.
- **Life expectancy:** Women, on average, had higher life expectancy at the age of 60 and at the 80, when compared to men — with variations across States and Union Territories.

- **Gap in States:** Most States in the southern region and select northern States such as Himachal Pradesh and Punjab reported a higher share of the elderly population than the national average in 2021, a gap that is expected to widen by 2036.
  - Compared with southern and western India, central and northeastern regions have the younger group of States.

### **Challenges of an Ageing Population**

- Three aspects of ageing that create significant challenges are:
  - Women living longer than men (feminization) resulting in higher levels of widowhood and associated socio-cultural and economic deprivations and dependencies;
  - High proportion of rural population among the elderly (ruralization); and
  - Ageing of the aged persons.

### **Suggestions/Recommendations**

- The enhancement of **geriatric care** to cater to the unique healthcare needs of seniors.
- The government must work on **increasing awareness** about schemes for older persons, bring all Old Age Homes under regulatory purview and focus on facilitating in-situ ageing to the extent possible.
- A **multitude of government schemes** and policies addressing the health, financial empowerment, and capacity building needs of the elderly population.
- **Community-based organizations** actively engaged in digital empowerment through computer and internet usage sessions.
- Ministerial committees dedicated to shaping policies for elderly welfare.
- Corporate efforts for joyful aging, social assistance, old age homes, and elder abuse awareness campaigns.

**Source:** [PIB](#)

## **Quantum Computers**

**Syllabus:** GS3/Science and Technology

**Context:**

- A researcher has shown the ‘**Quantum Complexity Theory**’ that one class of mathematical problems can be solved only by quantum computers, not classical computers.

**Quantum Complexity Theory:**

- There are **computational barriers** to classical computers in comparison to quantum computers.
- It challenges the **extended Church-Turing thesis**, which is the idea that classical computers can efficiently simulate any physical process.

### **Quantum Computing:**

- It promises more speed and more efficient problem-solving abilities, challenging the boundaries set by classical, conventional computing.
- A quantum computer has the ability to solve some problems much faster than a classical computer that establishes quantum computers as superior machines, i.e. Quantum supremacy.

### **Four domains of quantum technologies:**

1. Quantum communication;
2. Quantum simulation;
3. Quantum computation;
4. Quantum sensing and metrology

### **Significance of Quantum Computers:**

- **Entanglement:** It means **two qubits can be intrinsically linked regardless of their physical separation**, which allows quantum computers to tackle complex problems that may be out of reach of classical devices.
  - It seems to violate the notion that the speed of light is the universe's ultimate speed limit.
- **Superposition State:** It allows qubits **to carry more information**. This capacity for parallelism gives quantum computers an advantage over classical computers, allowing them **to perform a disproportionately greater number of operations**.

### **Do you know?**

- Quantum computers use **quantum bits (qubits)**, whereas classical computers use **binary bits (0 and 1)**.
  - **Qubits** are fundamentally different from classical bits as they can have the value 0 or 1, as a classical bit can, or a value that's a combination of 0 and 1, called a **superposition**.

- **Scalability:** Quantum computers defy **linearity**, as its computational power or certain tasks grows exponentially after addition of more qubits.
  - However, in **classical computers, the processing power grows linearly** with the number of bits added.

### **Problems with Quantum computing:**

- **Decoherence:** Qubits are extremely sensitive to their environment, and even small disturbances can cause them to lose their quantum properties.
  - It requires **advanced materials, computational techniques and deep exploration** of various quantum approaches to tackle Decoherence.
- **Complex Quantum algorithms;**
- **Hardware problems;**

### **Recent Developments:**

- **The ‘2022 Nobel Prize for Physics’** was awarded for the applications to the **contemporary importance of quantum computers.**
- **India** launched a **National Mission on Quantum Technologies and Applications (NMQTA)** in 2021, with an allocation of ₹8,000 crore; the army opened a **quantum research facility in Madhya Pradesh**; and the Department of Science and Technology co-launched another facility in Pune.
  - NMQTA aims to deliver **intermediate-scale quantum computers** with 50-1,000 physical qubits **by 2031** and make India one of the leading nations in the development of Quantum Technologies & Applications (QTA).
- **QuEST:** The Department of Science and Technology launched the Quantum-Enabled Science and Technology (QuEST) initiative to lay out **infrastructure and to facilitate research** in the field.
- **Quantum Computer Simulator (QSim) Toolkit:** It provides the first quantum development environment to academicians, industry professionals, students, and the scientific community in India.

### **Way Forward:**

- The Quantum computing technique has the enormous potential to revolutionise how real-world issues are tackled, there are still numerous difficult engineering challenges to overcome first, leaving companies without a timeframe for when it will be used in the workplace.

[Source: The Hindu](#)

## **Manipur extends AFSPA**

**Syllabus: GS3/Extremism, Challenges to Internal Security, Various Security Agencies; GS2/ Government Policies & Interventions.**

### **In News**

- Recently, the Manipur government extended the imposition of the Armed Forces (Special Powers) Act (AFSPA) in hill districts for 6 months.

### **More about the news**

- **Background & withdrawal of AFSPA:** Since 1981, AFSPA has been applicable in Manipur, a former Union Territory which attained Statehood in 1972.

- AFSPA also existed in the Naga-dominated areas of the erstwhile UT of Manipur since 1958.
- Since 2022, AFSPA has been gradually withdrawn from the valley districts, which are dominated by the Meitei community, due to a “significant improvement” in the security situation.
- **Rationale behind the extension:** The state government stated that **it opted for “status quo”** in the light of the prevailing law and order situation.
  - It is **applicable for six months**, following which **it can be periodically extended by the Union Ministry of Home Affairs (MHA)** after assessing the situation in Manipur.
- **‘One district, one force’:** The State government is now mulling a “one district, one force” deployment of security forces, for better operations.
  - Other than the State police, around 40,000 Central security forces, including the army, have been deployed in the State.

### Unrest in Manipur

- **Reasons of unrest:** Unrest has been brewing among the hill tribes of the state for a number of reasons.
  - A major reason for the discontent has been the state government’s notices since August 2022 claiming that 38 villages in the Churachandpur-Khoupum Protected Forest area (in Churachandpur and Noney districts) are “illegal settlements” and its residents are “encroachers”.
  - Following this, the government set out on an eviction drive which resulted in clashes.
  - At least 175 people have been killed since ethnic violence between the majority Meitei and the tribal Kuki people erupted in the State.
- **Tribal Solidarity March:** March was called **to oppose the longstanding demand that the Meitei community** be included in the list of the state’s Scheduled Tribes (ST), which received a boost from a recent order of the Manipur High Court.
- **Presence of Terror outfits:** The insurgent groups, mostly operating from Myanmar, advocate the secession of Manipur from India. They are trying to exploit the current ethnic unrest in the state.

### About the Armed Forces (Special) Powers Act (AFSPA)

- **Origin of AFSPA:** The Act in its original form was promulgated by the British in response to the Quit India movement in 1942.
  - The Armed Forces (Special Powers) Act, enacted in the year 1958, grants extraordinary powers and immunity to the armed forces to bring back order in the “disturbed areas”.
  - The Act came into force in the context of increasing violence in the Northeastern States decades ago, which the State governments found difficult to control.
- **Provisions:** Under the Act, the **Central Government or the Governor of the State or administrator** of the Union Territory can declare the whole or part of the State or Union Territory as a **disturbed area**.

- An area can be disturbed due to differences or disputes between members of different religious, racial, language or regional groups or castes or communities.
- The Act **gives the Army powers to search premises** and make **arrests without warrants**, to use force even to the extent of causing death, destroy arms/ammunition dumps, fortifications/shelters/hideouts and to stop, search and seize any vehicle.
  - It stipulates that arrested persons and the seized property are to be made over to the police with the least possible delay.
  - It offers protection of persons acting in good faith in their official capacity.
- The **prosecution is permitted only after the sanction** of the Central Government.

### **Rationale behind imposition of AFSPA**

- **Effective functioning of Security Forces:** Armed Forces are deployed in counter-insurgency / terrorist operations when all other forces available to the State have failed to bring the situation under control.
  - Armed forces operating in such an environment require certain special powers and protection in the form of an enabling law.
- **National Security:** The Act plays a crucial role in maintaining law and order in disturbed areas. Thus, protecting sovereignty and security of the nation.
- **Boosting morale of Forces:** AFSPA boosts the morale (mental well-being) of the armed forces for ensuring the public order in the disturbed areas as removal of the Act would lead to militants motivating locals to file lawsuits against the army.

### **Arguments against AFSPA**

- **Violation of the Human Rights:** The exercise of these extraordinary powers by armed forces has often led to allegations of fake encounters and other human rights violations by security forces in disturbed areas while questioning the indefinite imposition of AFSPA in certain states.
  - Human rights violations in AFSPA areas are not inquired into and followed by adequate action. Thus, it is against the principle of natural justice.
- **Violation of the right to remedy:** Section 6 of the Act “immediately takes away, abrogates, frustrates the right to constitutional remedy which has been given in article 32(1) of the Constitution.
  - AFSPA was outside the powers granted in the Constitution since it was declaring a state of emergency without following the Constitutional provisions for such a declaration.
- **Ineffectiveness of the Act:** Critics argue that this act has failed in its objective of restoring normalcy in disturbed areas although being in existence for about 50 years.

### **Way ahead**

- Issue of declaration of ‘disturbed area’ status is very sensitive and may likely attract public criticism and resistance if proper care is not taken while implementing it.

**Source:** [TH](#)

# Amnesty International and Financial Action Task Force

## **Syllabus: GS-2/International Relations**

### **Context:**

- **Amnesty International** has accused that Indian authorities are exploiting the recommendations of a global terrorism financing and money laundering watchdog to target civil society groups and activists

### **About:**

- The report named “***Weaponizing counter-terrorism: India’s exploitation of terrorism financing assessments to target civil society***” shows how the recommendations of the **Financial Action Task Force (FATF)** have been misused to bring terrorism related charges and prevent organizations and activists from accessing essential funds.

### **About Amnesty International**

- Amnesty means “**an official statement that allows people who have been imprisoned for crimes against the state to go free**”.
- It is a non-governmental organisation working for human rights on an international level and was awarded the **Nobel Prize in 1977** for recognising Human rights.
- **Aim:** Its aim is to ensure that every member of the world's population has access to their human rights as outlined in the Universal Declaration of Human Rights and other international human rights documents.
- **Headquarters: London, England.** In 1961, British attorney Peter Benenson and campaigner Eric Baker founded the group in the UK.
- **Working:** The organization's primary duties include the following:
  - It establishes, defends, and supports respect for the observance of each and every human right enshrined in the International Declaration of Human Rights.
  - It creates and disseminates reports on the **enforcement and violation of human rights**. It will also concentrate on the **bad behaviour of government officials**.
  - It encourages **fact-finding inquiry** and validates users' conclusions and reports.
  - By pressuring the government to take the necessary action to stop the **infringement of human rights**, it mobilises and organises the populace.
- **Amnesty International and India:**
  - Amnesty International has offices spread across a number of nations. The group recently, in 2020, suspended all of its operations in India as a result of the Indian government freezing its bank accounts.

### **About Financial Action Task Force (FATF)**

- It is an intergovernmental organization established in **1989**.



- It was formed by the **G7 countries** to combat **money laundering and terrorist financing** by setting global standards and monitoring their implementation.
- **Objective** :To develop and promote policies to protect the global financial system against money laundering, terrorist financing, and other related threats to the integrity of the financial system.
- Its headquarters are located in **Paris, France**, and it has **39** member countries, including the **United States, India, China, Saudi Arabia, and European countries such as Britain, Germany, and France**.
- Over the years, FATF has identified 40 recommendations that set out the basic framework for anti-money laundering (AML) and counter-terrorist financing (CFT) measures.
- FATF has the **authority to issue warnings and sanctions** against countries that fail to comply with its standards, such as suspension of membership and blacklisting.

#### FATF 'grey list' and 'blacklist'

- **Black List:** Countries known as **Non-Cooperative Countries or Territories (NCCTs)** are put on the blacklist. These countries support terror funding and money laundering activities. The FATF revises the blacklist regularly, adding or deleting entries.
- **Grey List:** Countries that are considered a safe haven for supporting terror funding and money laundering are put in the FATF grey list. This inclusion serves as a warning to the country that it may enter the blacklist.
  - As of 2022, FATF has **blacklisted North Korea and Iran** over terror financing and **12 countries are on the grey list**, namely: Bahamas, Botswana, Cambodia, Ethiopia, Ghana, Pakistan, Panama, Sri Lanka, Syria, Trinidad and Tobago, Tunisia and Yemen.

#### Consequences of being in the FATF grey list

- The countries in the grey list may face
  - Economic sanctions from IMF, World Bank, ADB.
  - The problem is getting loans from the IMF, World Bank, ADB and other countries.
  - Reduction in international trade.
  - International boycott.

Source: AI

## Green Ammonia

### **Syllabus: GS3/Conservation of Environment**

#### News

- Recently, **Chidambaranar Port Authority , Tamil Nadu** successfully handled 3x20 **ISO Green Ammonia** Containers, weighing 37.4 tons of Green Ammonia, from **Damietta Port, Egypt**.

#### What is green ammonia?

- Ammonia is a **pungent gas** that is widely used to make agricultural fertilisers. Green ammonia production is where the **process of making ammonia is 100% renewable and carbon-free**.

- It is most commonly made from methane, water and air, using **steam methane reforming (SMR)** (to produce the hydrogen) and the Haber process.
- The current way of making ammonia is **to strip hydrogen from natural gas using steam** (producing CO<sub>2</sub> as a by-product), and then **combine that hydrogen with nitrogen** from the air at high pressure and temperatures of hundreds of degrees Celsius.
  - This procedure, called the **Haber-Bosch process**, typically **releases nearly 2 tons of CO<sub>2</sub> into the atmosphere for every ton** of usable ammonia.
  - This process consumes a lot of energy and produces around **1.8% of global carbon dioxide emissions**.
- Green ammonia involves **slashing emissions from ammonia** production by taking natural gas out of the equation and instead **making hydrogen by splitting water with electricity sourced from renewables**.
  - The rest of the Haber-Bosch process remains the same, **powered by renewable electricity**.

### Decarbonisation of ammonia production

- Reducing the amount of carbon dioxide produced during the ammonia manufacturing process is critical **to achieve net-zero targets by 2050**.
- The best way to reduce carbon emissions when making ammonia is **to use low-carbon hydrogen** and the most likely short-term options for **creating carbon-free hydrogen at scale are blue hydrogen and green hydrogen**:
  - **Blue hydrogen** is where carbon emissions from the steam methane reforming (SMR) process are **captured and stored (CCS)**.
  - **Green hydrogen** is produced using **water electrolysis** to generate hydrogen and oxygen, using sustainable electricity in the process.

### Green H<sub>2</sub> Vs Green Ammonia:

- Pure hydrogen (H<sub>2</sub>) was once touted as the **fuel of the future**. But hydrogen has issues:
  - as a liquid **it needs cryogenic temperatures** of around -250 degrees C;
  - as a gas **it needs to be stored at high pressure**;
  - in the air, **it's explosive**.
- Ammonia (NH<sub>3</sub>), on the other hand, ticks all the boxes.
  - is **easy to store as a liquid**
  - **requires about half the energy density** of traditional fossil fuels.
  - although **ammonia is toxic**, the world already has a vast **system for making, storing, and transporting it**.

### Challenges associated:

- Once green ammonia has been made, **systems also need to be in place to use it** — to burn it in a combustion engine to power a ship or drive the turbines of a power plant.
- **Ammonia burns slower and is harder to ignite than fossil fuels**; most ammonia engines need a dose of diesel or hydrogen to get them going.
- **If engines leak unburned ammonia, that can be toxic**. And ammonia engines tend to produce **nitrogen oxide, also a potent greenhouse gas**.

### Way Ahead:

- Despite challenges therein, there is an expectation that the **green ammonia market will ramp up quickly.**
- The problem with green ammonia today is that green energy sources are still far more expensive than gas. So, **the price of renewable energy must decrease.**
- While ammonia surely won't be the best solution for everything, it **has a role to play in getting to net zero, alongside biofuels and hydrogen,** according to studies like the **IEA report.**
- As carbon prices go up, green ammonia will be in demand, and is **probably the future for liquid fuels.**

Source: [PIB](#)

## Facts In News

### Sarna Religious Code for Tribals

Syllabus: GS2/Polity and Governance

#### In News

- Jharkhand Chief Minister wrote a letter to Prime Minister Narendra Modi **seeking recognition of Sarna religious code for tribals.**

#### Sarna Religion for Tribals

- Followers of Sarna faith regard themselves as **belonging to a distinct religious group, and are nature worshippers.**
- The holy grail of the Sarna faith is “**Jal (water), Jungle (forest), Zameen (land)**” and its followers pray to the trees and hills while believing in protecting the forest areas.
- Believers of Sarna faith **do not practice idol worship, nor do they adhere to the concept of the Varna system, heaven-hell, etc.**
- The followers are largely concentrated in the **tribal belt states of Odisha, Jharkhand, Bihar, West Bengal, and Assam.**
- Seeking Sarna code as a separate religious code in the next Census **has been a long-standing demand of tribal groups.** In 2021, the Jharkhand Assembly had unanimously passed a resolution for ‘Sarna’ code.

#### Need for Recognition

- As per the state government, the tribal population in the state **had declined to 26 % from 38 % in the last eight decades.**
- The declining trend of tribal population was worrying as it would also **affect the development policy for the fifth and sixth schedule areas.**
- Tribal community that are on the verge of extinction, and if they are not protected on the principle of social justice, **their existence along with the language and culture will come to an end.**

#### How recognition will help?

- Recognition as a separate religious community will **enable better protection of their language and history.**
- In the absence of such a safeguard, many in the community have in recent times converted to Christianity to seek the benefits of reservation as a minority.

Source: [TH](#)

## Travel for LiFE

**Syllabus: GS3/Environment**

### In News

The Ministry of Tourism, unveiled an innovative initiative - **the Travel for LiFE**.

### About

- **The Travel for LiFE program** is a pivotal component of **Mission LiFE**, an ambitious mission aimed at steering our planet towards a sustainable future.
  - This initiative encourages **tourists to take simple yet impactful actions** that contribute to environmental conservation, protection of biodiversity, economic development in local communities, and the preservation of socio-cultural heritage.
- Travel for LiFE program has launched initiatives **for two different verticals viz. Travel for LiFE for Cleanliness –and Travel for LiFE for Rural Tourism**.
- **Travel for LiFE for Rural Tourism** encouraging tourists to explore the rural and lesser-known hinterland promoting sustainable rural tourism thereby empowering rural communities.
- **Travel for LiFE for Cleanliness:** This campaign, launched in sync with the ongoing [Swachhata Hi Sewa \(SHS\)](#).
  - **Objective:** To facilitate efficient garbage disposal, enhance sanitation facilities, and eliminate single-use plastics while encouraging the adoption of eco-friendly alternatives.
  - A nationwide cleanliness drive planned at **108 tourist destinations** across the country, with a focus on **eliminating single-use plastics and promoting eco-friendly alternatives**.
- A national Travel for LiFE competition titled as **‘Tourism for Tomorrow’** for case studies and best practices was also launched during the event, in alignment with the key priorities of Goa Roadmap.

**Source:** [PIB](#)

## PM Visit to Gujarat

**Syllabus:GS3/ Economy and Infrastructure**

### News

- The Prime Minister, Narendra Modi laid the foundation stone and dedicated to the nation, projects worth more than Rs 5200 crores in Bodeli, Chhotaudepur, Gujarat.

### List of Initiatives launched

- PM laid the foundation stone and dedication of multiple projects under the **‘Mission Schools of Excellence’** and **‘Vidya Samiksha Kendra 2.0’**.
- The Prime Minister dedicated to the nation multiple development projects including a **new bridge built across the Narmada river** on ‘Vadodara Dabhoi-Sinor-Malsar-Asa road’ in Taluka Sinor, Vadodara district; **Chab Talav re-development project** etc.
- The Prime Minister laid the foundation stone of the **water supply project in Chhotaudepur; a flyover bridge in Godhra, Panchmahal; and the FM Radio studio at Dahod**.

### Vidya Samiksha Kendra 2.0

- This project will be built upon the success of ‘**Vidya Samiksha Kendra**’ which has ensured continuous monitoring of schools and improvement in student learning outcomes in Gujarat.
- ‘Vidya Samiksha Kendra 2.0’ will lead to the establishment of Vidya Samiksha Kendras in all districts and blocks of Gujarat.

### Akashvani Dahod FM Relay Station Project

- This station will be set up to cover approximately a **55 km radius area**, encompassing approximately 75% of the tribal district of Dahod.
- In addition to this, Prasar Bharati is also working on the installation of FM transmitters in key locations.
- These projects are part of the **Broadcast Infrastructure Network Development Scheme** funded by the Ministry of Information and Broadcasting.

Source: [PIB](#)

## Bolson Tortoise

**Syllabus: GS-3/Environment, Species In News**

### In News:

- Biologists are in process to protect North America’s largest and rarest Bolson Tortoise species.

### About Bolson Tortoises:

- **Scientific Name:** *Gopherus flavomarginatus*
- It is also known as **Mexican Tortoise or yellow margined Tortoise.**
- It is the largest and rarest land reptile, as well as the rarest of the six Gopherus species native to North America.
- **Features:**
  - The Adult males are generally smaller than females in this species.
  - They are cold blooded and don’t hibernate but go into the sleepy state called **Brumation** during colder months.
    - **Brumation** is a state specific to reptiles and amphibians that enters deep sleep where they undergo the same process of inactivity and low body temperature, heart rate, metabolic rate and respiratory rate drops.
  - These species can go **upto a year without drinking water.** They use their bladder as a reservoir for freshwater.
- **Habitat and Distribution:**
  - They are exclusively found in the northern Mexican states of Chihuahua, Coahuila and Durango.
  - Their habitat is a semi-hot desert climate with winter temperatures around 2.8°C and summer temperatures ranging to 36.3°C.
  - The Bolson Tortoise inhabits a small area of **Bolsón de Mapimí in the Chihuahuan Desert of Mexico.** The Mapimí Biosphere Reserve was created to protect this species.
- **Threats :**

- Habitat destruction through activities like agriculture development, cattle grazing, plowing, etc.
- **Importance** : They play a significant role as ecosystem engineers by digging large burrows to thermoregulate through periods of extreme hot and cold.
  - In the summer they emerge out to eat and drink.
- **IUCN Status:** Critically Endangered

Source: [TH](#)

## Pterygotrigla Intermedica

**Syllabus: GS 3/Species in news**

### In News

- New fish species named as **Pterygotrigla Intermedica** discovered in West Bengal's Digha harbour.

### About the Pterygotrigla intermedica

- It is commonly known as gurnards or sea-robins, and belongs to the family **Triglidae**.
- It has characters quite similar to species like **Pterygotrigla hemisticta**.
- It is the **fourth species of Pterygotrigla genus** reported in India so far and there are a total 178 species of the Triglidae family worldwide.
- The specimens were found to be very distinct from other Gurnard species in various aspects like snout length, shape of the internuchal space and size of the cleithral spine.



Source: [DTE](#)

## Rhinoceroses

**Syllabus :GS 3/Species in news**

### In News

- World Rhino Day is celebrated on September 22 every year.

### Rhinoceroses

- Rhinoceroses are large, herbivorous mammals identified by their characteristic horned snouts.
- The word "**rhinoceros**" comes from the Greek "**rhino**" (**nose**) and "**ceros**" (**horn**).
- There are **five species** of rhino; some have **two horns, while others have one**.





- **Geographical Location:**
  - **White rhinos and black rhinos** live in the grasslands and floodplains of eastern and southern Africa.
  - **Greater one-horned rhinos** can be found in the swamps and rain forests of northern India and southern Nepal.
  - **Sumatran and Javan rhinos** are found only in small areas of Malaysian and Indonesian swamps and rainforests.
- **Threats:**
  - Habitat loss and fragmentation
  - Poaching (especially for their horns and hide)
  - Reducing population density
  - Decreasing genetic diversity
- **Conservation status of the five species are:**
  - Javan Rhinos: **Critically Endangered**
  - Sumatran rhinos : **Critically Endangered**
  - Black rhinos: **Critically Endangered**
  - White rhinos : **Near Threatened**
  - Greater One-Horned Rhinos : **Vulnerable**

## Balsams

**Syllabus :GS 3/Species in news**  
**In News**

- Balsams (genus Impatiens) are in full bloom in Munnar(Kerala).

**About Balsams ('jewel weeds' )**

- It is called Kasithumba and Onappovu locally.
- Balsams are also known as 'touch-me-not' because of the bursting of mature seeds and seed distribution.
- They belong to the family Balsaminaceae.
- **Distribution** : The plants are mainly distributed in tropical and subtropical regions and in the northern temperate regions.



- It is found in the Eastern Himalayas and the Western Ghats, Sri Lanka, South East Asia, Africa and Madagascar.
- Of the 220 balsam species in India, 135 are found in the southern Western Ghats.
  - Anamudi, the highest mountain in the Western Ghats, and the surrounding high ranges are known for the diversity of wild balsams
- The normal life cycle of balsams is from June to December.
- **Importance** : Balsams are a major indicator species of climate change. If climate change occurs in any area, it will reflect in the plant population.

### Batillipes kalami

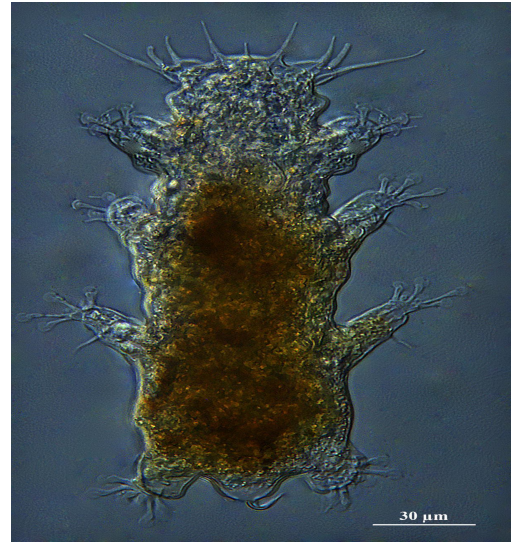
#### **Syllabus :GS 3/Species in news**

#### **In News**

- Researchers at the Cochin University of Science and Technology have identified a new species of marine tardigrade “ Batillipes kalami”

#### **About Batillipes kalami**

- It is discovered from Mandapam in south-east Tamil Nadu
- It belongs to the genus **Batillipes** and has been named Batillipes kalami.
  - It is the 37th species of the genus Batillipes.
- It is the **second marine** tardigrade to be discovered from Indian waters and the first one from the east coast.
- It is also the first taxonomically described species belonging to the genus Batillipes from India.
- It has a trapezoid-shaped head with sharp-tipped filament-like appendages (cirri) extending from it.
  - All four pairs of legs possess sensory spines of varying length.



#### **About Tardigrades**

- Tardigrades, often referred to as water bears, are eight-legged micro-animals found in the water.
- Tardigrades are extremely tiny animals whose size is measured in micrometres.
- They are known for their extraordinary resilience and survival instincts.
- In 2021 Researchers discovered the first marine tardigrade species from India in Kerala. They had named it Stygarctus keralensis.

### Milad-Un-Nabi

#### **Syllabus: Miscellaneous**

#### **Context:**

- The President of India greeted ‘**Milad-un-Nabi**’ to all the fellow citizens, especially our Muslim brothers and sisters.



### About Milad-un-Nabi:

- It is also called **Nabid and Mawlid in colloquial Arabic**, which commemorates **Prophet Muhammad's birth anniversary**.
- Muslims who follow the Sufi or Barelvi school of thought observe the feast in **Rabi' al-awwal, the third month of the Islamic calendar**.
  - According to Muslim tradition, the **Prophet was born in Mecca in 570 CE on the 12th day of Rabi'-ul-Awwal**.
- On the other hand, the **Shia community celebrates Eid-e-Milad on the 17th of the month**.
- The day is one of reflection, growing as people, following the Prophet's example, forgiving those who have wronged us, and being kind to others.

### Bidaah:

- Many different sections of the Muslim community like **Salafi and Wahhabi schools of thought** believe that the birthday celebrations of the Prophet have **no place in Islamic culture**.
- Since evidence found in the Holy Quran and Sunnah prove that **celebrating any event other than Eid al-Fitr and Eid-e-Adha is a kind of biddah or innovation** in religion.
- They believe that the observance of **Eid-e-Milad or Mawlid is an innovation or act of biddat** since it was not even celebrated during the era of Prophet Mohammad himself and his appointed successors.

[Source: PIB](#)

## Swavlamban 2.0

**Syllabus:** Prelims/Current Events of national importance

### News:

- The **Indian Navy** is about to release its updated indigenisation roadmap, named '**Swavlamban 2.0**'.

### About

- The roadmap **will provide an update on the achievement** of the Navy and the way forward.
- The Swavlamban roadmap **also aims to collaborate, coordinate, and develop new technologies** in partnership with other stakeholders.
- The Navy has **surpassed its target** set last year to develop **75 futuristic technologies** in partnership with domestic Micro, Small and Medium Enterprises (MSME) and startups.
  - These technologies and products are **built at world-class standard** but at a much more economical cost as they are built in India.
- Since the **NIIO** was set up, naval officers have filed for over 50 patents. Over 150 products are being developed through partnerships. One such product is a **fire-fighting suit**. Imported suits weigh about 18.5 kg, but a suit developed under the initiative **weighs under 2 kg**.

### **The Naval Innovation and Indigenisation Organisation (NIIO)**

- The NIIO was launched in August 2020 in line with ‘**Atmanirbhar Bharat**’ **vision**.
- NIIO has established a special structure that **allows end-users to interact with academia and industry** to boost innovation and indigenisation to achieve **national defence self-reliance**.
- NIIO is a **three-level organisation**,
  - **The Naval Technology Acceleration Committee (N-TAC)** combines two aspects of innovation and indigenisation and provides the highest-level directives.
  - **A working group** under the committee will implement these projects.
  - **A Technology Acceleration Acceleration Unit (TDAC)** was established to introduce breakthrough technologies in an accelerated time frame.
- The launch of the new centre comes **in consonance with the Draft Defense Acquisition Policy 2020 (DAP 20)**.

Source: [TH](#)