

# Factly Weekly

**Compilation**

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**For UPSC CSE Prelims  
Exam**

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## Chief Election Commissioner and Other Election Commissioners Act, 2023

**News:** The Supreme Court announced it would consider hearing petitions in February challenging the constitutional validity of the 2023 law on appointing the Chief Election Commissioner (CEC) and Election Commissioners (ECs).

### About Chief Election Commissioner and Other Election Commissioners Act, 2023

**Constitutional provisions for appointment of ECs-** Election Commissioners are appointed under *Article 324* of the Indian Constitution, which grants the Election Commission of India (ECI) the authority to supervise and control elections.

### Key features of the new act

- **Appointment-** The President appoints the CEC and ECs based on recommendations from a Selection Committee, which includes the Prime Minister, a Union Cabinet Minister, and the Leader of the Opposition.
- **A Search Committee,** led by the Law Minister, proposes a list of candidates to the Selection Committee.
- **Qualification of CEC and ECs:** Persons who are holding or have held posts equivalent to the rank of Secretary to the central government will be eligible to be appointed as CEC and ECs. Such people must have expertise in managing and conducting elections.
- **Salary-** The Bill provides that salary, allowance, and service conditions of the CEC and other ECs will be the same as that of the *Cabinet Secretary*.

## BHASHINI Initiative

**News:** The Union Minister of Labour and Employment has launched the Bhashini enabled e-shram portal in all 22 scheduled languages to benefit unorganised workers.

### About Bhashini Initiative



Source- PIB

- It is an **Artificial Intelligence (AI) driven tool** that aims to **transcend language barriers** by ensuring that every citizen has access to digital services in their own language.
- It provides **technology translation services** in 22 scheduled Indian languages.
- The initiative was launched in **July 2022** under the **National Language Technology Mission**.
- It has been developed by the **Ministry of Electronics and Information Technology**.
- **Salient Features:**
  - Development of a **national digital public platform for language** to provide universal access to content.
  - Make **Artificial Intelligence (AI) and Natural Language Processing (NLP)** resources available in the public domain to be used by Indian MSMEs, startups and individual innovators.
  - Promotes citizen engagement to build multilingual datasets through a crowd sourcing initiative called **Bhasha Daan**.
    - People can contribute to Bhashadaan through *Suno India, Likho India, Bolo India, Dekho India*.

### Kisan Pehchan Patra (Farmer ID)

**News:** The Union Ministry of Agriculture and Farmers' Welfare has made farmer ID mandatory for registering new beneficiaries under the Pradhan Mantri Kisan Samman Nidhi (PM-KISAN).

#### About Kisan Pehchan Patra

- It is a **unique Aadhaar-linked digital identity** that is dynamically connected to the state land records.
- It is also known as the **Farmer ID**.
- It will include key data such as **demographic details, crops cultivated and land ownership information**.
- The data collected through Farmer IDs will form the **Farmers' Registry**. This data will benefit farmers by improving access to crop insurance, loans, and other government schemes.
- The initiative aims to **improve productivity and sustainability** of the farming sector by streamlining access to services, improving data accuracy and enabling targeted interventions.

### INS Vaghsheer

**News:** Mumbai based Mazagon Dock Shipbuilders Limited (MDL) has delivered the sixth and final Scorpene class submarine INS Vaghsheer to the Indian Navy.

#### About INS Vaghsheer



Figure 1. Source- Financial Express

- It was **launched in April 2022** and has undergone extensive trials to test its combat efficiency.
- It portrays **India's growing self-reliance** in defence technology.
- It is **named after the sand fish**, a deep-sea predator of the Indian Ocean.
- **Capabilities:**

- **Versatile Nature:** It is designed for a wide range of missions like anti-submarine warfare and intelligence gathering.
- **Advanced Stealth Technologies:** Technologies like reduced radiated noise levels and sophisticated hydrodynamic design make it one of the quietest submarines in the world.
- **Indigenously designed systems:** These include air conditioning plant, Ku-Band SATCOM system, internal communication network.
- **Combat Capabilities:** It includes the use of precision-guided weapons such as torpedoes and tube-launched anti-ship missiles.
- It is the **sixth of the Kalvari class scorpion submarines**.
- The **other five submarines** of the Kalvari class are: Kalvari, Khanderi, Karanj, Vela, Vagir.

### Nag Mark 2: India's anti-tank missile

**News:** The Defence Research and Development Organisation (DRDO) has successfully conducted trials of India's indigenous Anti-Tank Missile- Nag Mark 2 at the Pokhran Field Range in Rajasthan.

#### About Nag Mark 2



Figure 2. Source- Indian Express

- It is an indigenously developed **third-generation fire and forget anti-tank guided missile**.
- It portrays India's growing self-reliance in defence technology.
- It has been developed by the **Defence Research and Development Organisation (DRDO)** under India's Integrated Guided Missile Development Programme (IGMDP).
- The missile system has **demonstrated its firing range** by destroying the targets, both within the maximum and minimum range.
  - It is expected to have a **range of 7 to 10 kilometers**.
- The **fire and forget technology** enables the operators to narrow down on targets before launch and strike with pinpoint accuracy.
- Nag Mark 2 is a **versatile weapon system** that is capable of neutralising modern armored threats, including those with explosive reactive armor (ERA).
- It is equipped with a **High Explosive Anti-Tank (HEAT) warhead** that adds to its capability of striking the vulnerable part of enemy's armored targets.

## Z-Morh Tunnel

**News:** Recently, Prime Minister has inaugurated the Z-Morh tunnel.

### About Z-Morh Tunnel



Source- The Indian Express

- It is a **6.5 kms two-lane road tunnel** that **connects Gagangir and Sonamarg** along the **NH-1 Srinagar Leh Highway**.
- The name Z-Moreh is derived from the **Z-shaped highway** that existed prior to the construction of the tunnel.
- The **National Highways and Infrastructure Development Corporation Limited (NHIDCL)** has overseen the construction of the Z-Morh Tunnel.
- The tunnel is strategically situated at an **altitude exceeding 8,650 feet** and provides safe access to Ladakh region.
- **Advanced construction techniques** have been employed to ensure stability and durability. Its design facilitates efficient traffic flows, minimising environmental impacts.
- It is equipped with **advanced safety features**, including emergency exits, ventilation systems and fire safety measures.
- Its construction will **strengthen defence logistics** and **promote economic growth** in Jammu and Kashmir and Ladakh.

## National Turmeric Board

**News:** Union Minister of Commerce and Industry has inaugurated the National Turmeric Board.

### About National Turmeric Board



Figure 3. Source- PM India

- The National Turmeric Board has been set up to focus on the **overall development and growth of the turmeric sector** in the country.
- **Headquarters:** Nizamabad, Telangana.
- The board will function under the **Ministry of Commerce and Industry**.
- **Functions:**
  - Focussing on the **welfare of the turmeric farmers** spread across 20 states, including Maharashtra, Tamil Nadu, Andhra Pradesh, Madhya Pradesh, Meghalaya and others.
  - Promoting **research and development** of new turmeric products and investigating the value addition of turmeric related products for marketing abroad.
  - **Creating awareness** on the essential and medical properties of turmeric
  - **Ensuring quality and safety standards** of turmeric production and exports.
  - **Facilitating coordination** with other Government Departments/Agencies in matters pertaining to the turmeric sector.
- Making efforts for **increasing trade of turmeric** and its products, especially given the health and wellness benefits of turmeric.

### About Turmeric Sector in India

- Turmeric is also known as the Golden Spice.
- India is the largest producer, consumer and exporter of turmeric in the world.
- During 2023-24, India was responsible for over 70% of global turmeric production.
- There are 30 varieties of turmeric produced in India.

## INS Surat, INS Nilgiri, and INS Vaghsheer

**News:** Three frontline combatants, INS Surat, INS Nilgiri, and INS Vaghsheer were commissioned into the Indian Navy for the first time.

### INS Surat



Source: Orbitshub

- INS Surat is a **stealth-guided missile destroyer** and the **fourth and final vessel under Project 15B**.
- It is also known as the **Visakhapatnam class**.
- It is **India's first warship** to be equipped with **artificial intelligence (AI) solutions**.

### Capabilities

- It has a **displacement of 7,400 tonnes** and a **length of 164 meters**.
- It is **powered by a Combined Gas and Gas (COGAG) propulsion system**, comprising four gas turbines.
- It can **achieve speeds of over 30 knots** (56 km/h).
- It is armed with **state-of-the-art surface-to-air missiles, anti-ship missiles, and torpedoes**.
- It is also equipped with **advanced sensors and network-centric warfare capabilities**.
- It is **designed for offensive naval operations** having high speed, maneuverability, and superior strike power.

### INS Nilgiri





Figure 4.Source: Wikipedia

- INS Nilgiri is the **lead ship of the Project 17A** stealth frigate class.
- The ship was **launched in September 2019**. It was commissioned into the Navy in 2025.
- **Built by:** Mazagon Dock Shipbuilders Limited (MDL) in Mumbai and Garden Reach Shipbuilders and Engineers (GRSE) in Kolkata
- It is the **first of seven frigates** being constructed under this project, using an

integrated construction methodology to reduce build time.

### Capabilities

- The ship is **designed to operate in blue-water environments**. It can address **both conventional and non-conventional threats**.
- It is equipped with **supersonic surface-to-surface missiles and medium-range surface-to-air Missiles (MRSAM)**.
- It also has a **76-mm upgraded gun and rapid-fire close-in weapon systems**.
- It is **designed for multi-mission operations**, including anti-surface, anti-air, and anti-submarine warfare.

### INS Vaghsheer



Figure 5.Source: India TV News

- INS Vaghsheer is the **sixth and final submarine of the Kalvari-class**.
- It is a **diesel-electric attack submarine** based on the Scorpene-class design.
- It is named after a type of sandfish found in the Indian Ocean.
- **Developed by:** It has been developed by the **French Naval Group**.

### Specification

- It is **equipped with wire-guided torpedoes, anti-ship missiles, and advanced sonar systems**, making it one of the quietest submarines in its class.
- It also **features a modular design that allows for future upgrades**, such as the integration of Air Independent Propulsion (AIP) systems, expected from 2026 onward.

- It can **perform diverse missions**, including anti-surface warfare, anti-submarine warfare, intelligence gathering, area surveillance, and special operations.

### Shared Significance

- They highlight India's **increasing self-reliance in defense manufacturing**.
- These combatants are also **emphasizing strategic and economic significance** and reinforcing India's role as a security provider in the region.

### Key Facts about Burkina Faso

**News:** Burkina Faso, a landlocked country in West Africa, was once a French colony and now faces political instability, poverty, and growing insecurity.

### About Burkina Faso



Figure 6. Source- BBC

- **Capital–** Ouagadougou: The largest city and administrative center
- **Geography:**
  - **Location:** West Africa, landlocked.
  - **Bordering countries:** Mali (northwest), Niger (northeast), Benin (southeast), Togo and Ghana (south), and Ivory Coast (southwest).
  - **Terrain:** Dominated by a savanna plateau with fields, scattered trees, and brush.
- **Highest Point:** Ténakourou (749 meters).
- **Rivers:** Includes the Mouhoun (Black Volta), Nakambe (White Volta), and Nazinon (Red Volta).
- **Climate:** Ranges from semi-arid in the north (Sahel region) to tropical in the south.
- **History and Name:**
  - **Colonial Past:** Formerly a French colony known as Upper Volta.
  - **Renaming:** Became Burkina Faso in 1984 under President Thomas Sankara
- **People and Culture:**
  - **Languages:** Official language is French, with about 70 languages spoken, including Moore, Dioula, and Fula.
  - **Ethnic Groups:** Mossi is the largest ethnic group.

### Gulf of Mexico

**News:** The US President-elect recently announced plans to rename the Gulf of Mexico to the “Gulf of America.”

## About Gulf of Mexico



Source- World Atlas

- **Location:** The Gulf of Mexico is a large body of water bordered by the southeastern United States, Mexico, and Cuba.
- **Connections:**
  - Connected to the Atlantic Ocean via the Straits of Florida
  - Connected to the Caribbean Sea through the Yucatán Channel
- **Size:** It is the largest gulf in the world and a marginal sea of the Atlantic Ocean.
- **Formation:** Formed around 300 million years ago due to seafloor subsidence caused by tectonic movements.
- **Geography**
  - **Depth:** The Gulf has an average depth of 1,615 meters, with shallow areas along the continental shelf.
  - **Coastal Areas:** The Gulf is bordered by the U.S. states of Florida, Alabama, Mississippi, Louisiana, and Texas, and Mexico's eastern coast, including the Yucatán Peninsula.

- **Climate**
  - **Type:** Ranges from *tropical to subtropical*.
  - **Severe Weather:** The region is known for hurricanes, tornadoes, and thunderstorms.
- **Rivers-** The *Mississippi River* and the *Rio Grande* are the two major rivers that drain into the Gulf.

## Key facts about Chad

**News:** Many people were killed during the attack on the presidential complex in Chad.

## About Chad



- Chad is a **land locked country** located at the junction of North and Central Africa.
- Its **capital** is N'Djamena.
- Chad shares its **land borders with six countries:** Libya to the north, Sudan to the east, Central African Republic to the south, Cameroon to the southwest, Nigeria to the southwest, and Niger to the west.
- Several **regions** of Chad:
  - *Sahara Desert* in the north
  - *Sahel region* in the centre
  - *Sudanian Savanna zone* in the south

- The country is named after the **Chad Lake**, which is the second largest wetland in Africa.
- It is the **fifth largest country in Africa**.
- The **major rivers** in Chad are Chari River and Logone River.

### Miyawaki Technique

**News:** Prayagraj Municipal Corporation has employed the Japanese Miyawaki technique to create around 56,000 sq. Meters of dense forests in Prayagraj.

#### About Miyawaki Technique



Source- The Indian Express

- The technique was developed by **Japanese botanist Akira Miyawaki** in the 1970s to create dense forests in limited spaces.
- It is an **afforestation technique** for cultivating fast growing groves of native plants to create a natural forest.
- It is also referred to as **pot plantation method** as it involves planting trees and shrubs close to each other to accelerate their growth.
- **Benefits:**
  - Natural forests created using this technique *absorb more carbon, grow faster and support richer biodiversity* as compared to traditional forests. Infact, plants grow 10 times faster with this technique.
  - It has the potential to transform polluted, barren lands into *green ecosystems*.
  - It is an effective tool of environmental restoration as it *curbs air and water pollution, prevents soil erosion and promotes ecological balance*.

## Sada of Konkan

**News:** The *sada* in the Konkan region are increasingly at risk due to changing land-use patterns, mining, and misclassification as 'wasteland' in the Wasteland Atlas.

### About Sada of Konkan

The *sada* refers to **large flat-topped areas formed by centuries of erosion.**

- It is located in the **Konkan region between the Arabian Sea and the Western Ghats.**
- They are **typically barren for most of the year** but transform during the monsoon, much like the **pathar plateaux** in the Satara district of Maharashtra (e.g., Kaas Plateau).
- The *sada* supports a **rich biodiversity, especially during the monsoon.**

### Significance of the Sada

- Small patches of *sada* are **used for cultivating rice and millets (e.g., nanchani/ Eleusine coracana)** using traditional, eco-friendly practices without pesticides or chemical fertilizers.
- The *sada's* **geology** plays a key role in freshwater availability.
- Its **weathered lateritic soil** acts as a rainwater catchment and recharges groundwater.
- Villages in these areas have access to perennial freshwater through **step wells, dug wells, springs, and streams.**
- The water bodies support **freshwater turtles** like the vulnerable **Indian flapshell turtle (Lissemys punctata)** and act as water sources for wildlife such as **leopards, jackals, hyenas, barking deer, and migratory birds.**
- The *sada* hosts **10,000-year-old geoglyphs**, which are significant works of ancient art.
- **Community rituals** often involve the **conservation of water sources and hygiene practices.**

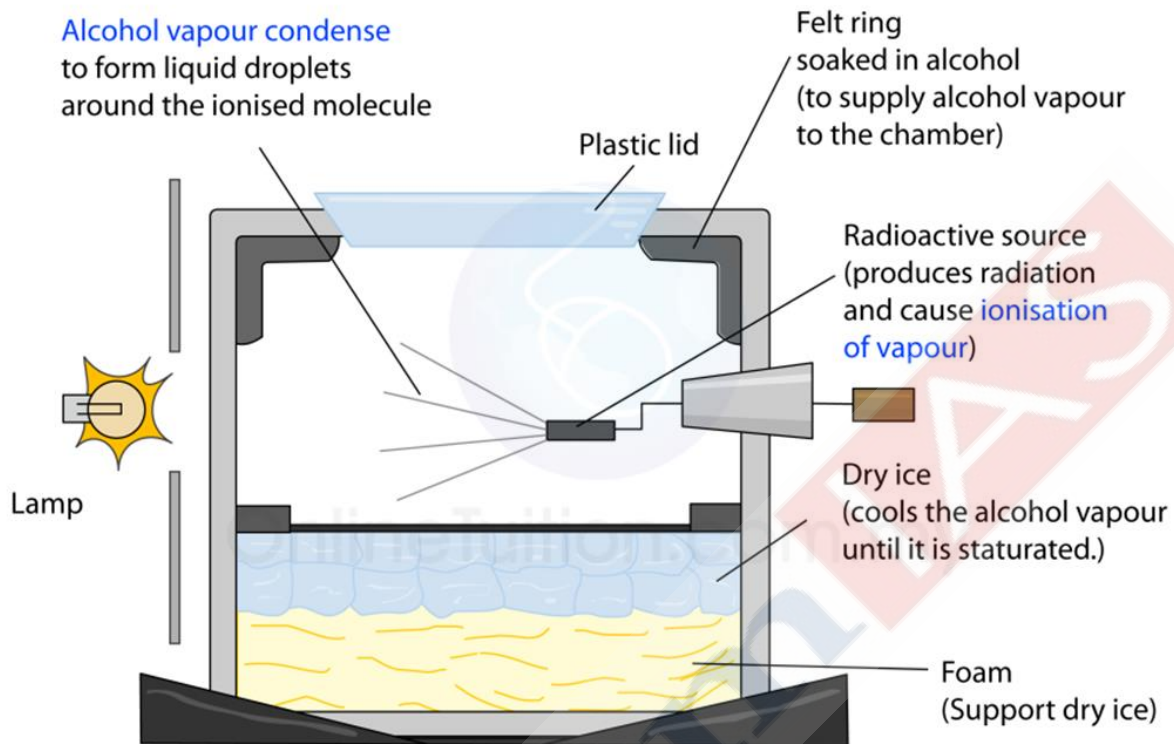
### Threats to the Sada

- **Changing land-use patterns:** Conversion of open land and croplands into **orchards and residential areas.** Also, developmental projects are encroaching on these habitats.
- **Mining activities:** **Laterite stone mining** is a growing concern.
- **Classification as wasteland:** The **Wasteland Atlas** categorizes *sada* as 'wasteland,' further undermining its ecological and cultural significance.

## Mission Mausam

**News:** Mission Mausam was launched by Prime Minister Modi on January 14, 2025, to commemorate the 150th anniversary of the India Meteorological Department (IMD).

### About Mission Mausam



Source: SPM Physics

- Mission Mausam is an **initiative launched by the Ministry of Earth Sciences (MoES)** to position India as a global leader in weather and climate sciences.
- **Overseen by:** The mission will be led by three institutions **funded by the Ministry of Earth Sciences:**
  - **India Meteorological Department (IMD)**
  - **Indian Institute of Tropical Meteorology (IITM), Pune**
  - **National Centre for Medium-Range Weather Forecasting (Noida)**
- **Aim:** It aims to
  - help India become **“weather-ready”** and **“climate-smart”** by improving meteorological services, which are crucial for disaster management.
  - improve India’s **weather forecasting, modeling, and dissemination capabilities.**
- **Focuses on:**
  - **Forecasting and Modelling:** The mission focuses on upgrading weather surveillance and forecasting capabilities.
  - **Weather Management:** It will enable India to manage certain weather events such as rainfall, hail, fog, and lightning, adjusting their intensity on demand.
  - **Cloud Physics Research:** A significant area of focus is enhancing **research in cloud physics.**

#### About cloud chambers

- India is developing a **first-of-its-kind cloud chamber** at IITM in Pune, which is designed to simulate the conditions needed for cloud formation.

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- A cloud chamber is a **sealed cylindrical or tubular drum**, where water vapor, aerosols, and other substances are introduced. With the right humidity and temperature conditions within the chamber, a cloud can form.
- This chamber will **help study the particles** that form cloud droplets or ice particles, focusing on the unique behavior of monsoon clouds.
- Unlike basic cloud chambers used globally, this one will have convection properties to simulate the specific conditions required to study Indian monsoon clouds.

### Need of Mission Mausam:

- **Agrarian Economy:** Climate change has disrupted rainfall patterns, making farmers more vulnerable. Accurate monsoon forecasts are crucial for optimizing sowing times, planning irrigation, and predicting crop yields.
- **Disaster Preparedness:** India frequently experiences extreme weather events like cyclones, floods, and droughts. Enhanced forecasting capabilities can save lives and minimize economic damage.
- **Rural Development:** Better weather services can assist rural communities by improving water resource management, protecting livestock, and aiding infrastructure planning.

### Pravasi Bharatiya Divas (PBD)

**News:** The 18th Pravasi Bharatiya Divas (PBD) Convention is taking place in Bhubaneswar from January 8 to 10, 2025, to honor the remarkable contributions of Non-Resident Indians (NRIs) and the global Indian diaspora to India's progress.

### About Pravasi Bharatiya Divas (PBD)



Figure 7. Source- DD news

- Pravasi Bharatiya Divas (PBD), or Non-Resident Indian (NRI) Day, celebrates the achievements and contributions of the Indian diaspora to India's development.
- It is *observed on January 9*, commemorating *Mahatma Gandhi's return from South Africa to India in 1915*, which marked the beginning of India's freedom struggle.
- **Inception:**
  - The first PBD was celebrated in 2003.
- It is the flagship event of the *Ministry of External Affairs (MEA)*.
- **Frequency:** Initially an annual event, PBD has been celebrated *biennially* since 2015.
- **Objective:**
  - To connect the Indian diaspora with their roots.

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- To encourage their engagement in India's socio-economic and cultural development.
- **Themes:**
  - Each PBD focuses on a specific theme highlighting diaspora contributions.
  - The 2025 theme is "*Diaspora's Contribution to a Viksit Bharat*" (Developed India).
- **Host Cities:**
  - PBD is hosted in different Indian cities to showcase the regional diversity and opportunities for investment and collaboration.
- **Recent Conventions:**
  - **17th PBD:** Held in Indore, Madhya Pradesh, in 2023 with participation from over 70 countries.
  - **18th PBD:** Scheduled in Bhubaneswar, Odisha, from January 8 to 10, 2025.

### Pravasi Bharatiya Samman Awards (PBSA):

- The PBSA is the highest honor for NRIs, Persons of Indian Origin (PIOs), and diaspora organizations.
- It recognizes exceptional contributions in fields such as philanthropy, development, and enhancing India's image globally.

### Kumbh Mela

News: Maha Kumbh Mela is being held in Prayagraj, Uttar Pradesh. It is a celebration of spirituality, religion and equality.

#### About Kumbh Mela



Figure 8. Source- The Hindu

- The word Kumbh is derived from **Sanskrit word Kumbh** which **means pitcher or pot**.
- It is believed that during the **Samudra manthan event**, churning of the ocean, a pot (Kumbh) of Amrit was brought forth.
- When the pot of Amrit was being taken away from the Asuras, the drops spilled in 4 different locations around India.
- These 4 locations- **Haridwar, Prayagraj, Ujjain, and Nashik-Trimbakeshwar**- became the places where Kumbh Mela takes place.
- These holy places are located on the **banks of rivers**
  - Haridwar- Ganga River
  - Prayagraj- Sangam of Ganga, Yamuna, and mythical Saraswati
  - Ujjain- Kshipra River
  - Nashik-Trimbakeshwar- Godavari River
- The location of Kumbh Mela is decided based on the **relative positions of the Sun, the Moon and Jupiter**.



- **Types of Kumbh:**

- **Magh Mela:** It is an annual fair that attracts people from all over India.
- **Ardh Kumbh:** It comes once every 6 years.
- **Purna Kumbh:** It comes once every 12 years.
- **Mahakumbh:** It is believed to come only once every 144 years, and after the completion of 12 Purna Kumbhs.

