

NEWS TODAY

Earthquake Measuring 4.0 in Richter Scale Shakes Delhi-National Capital Region (NCR)

Unlike Himalayan quakes caused by plate tectonics, this earthquake was an intra-plate event, resulting from "in situ material heterogeneity".

- ▶ Tremors were more intense due to the **epicentre (point on the Earth's surface directly above the focus of an earthquake)** located within Delhi and the earthquake's **shallow depth of 5 km (See box)**.

Earthquakes Due to In-Situ Material Heterogeneity

- ▶ **Definition:** It refers to seismic activity caused by the inherent variability in the **physical properties of the Earth's crust**. E.g., Rock type, presence of fluids in rock pores, etc.
- ▶ **Formation:** Variations in physical properties (heterogeneities) can cause **stress concentration**, which eventually increases the likelihood of earthquakes.
- ▶ **Influence on Faults:** 'In-situ heterogeneity' **creates stress buildup in fault zones**, increasing the chances of earthquakes.
 - ⊕ Delhi is placed in **seismic zone IV** in the **seismic zoning map of India**, the **second highest in the country**.

Why is Delhi Earthquake Prone?

- ▶ **Delhi is near the Indian-Eurasian Plate collision zone**, with the Indian Plate moving northward at 5 cm/year, creating stress along fault lines.
- ▶ **Fault Systems:** **Delhi-Haridwar Ridge** is an extension of the Indian Plate; **Aravalli Fault System** is a deep-seated geological structure, **both contributing to intra-plate tremors**.
- ▶ **Indo-Gangetic Plain:** Delhi-NCR sits on soft alluvial soil, amplifying seismic waves.

About Shallow Earthquake

- ▶ An earthquake is a **sudden, rapid shaking of the ground** caused by the shifting of rocks deep underneath the earth's surface.
 - ⊕ **A shallow earthquake** occurs at a **relatively shallow depth (0 to 70 km)** within the Earth's crust.
 - ⊕ Whereas, **intermediate earthquakes** occur in between **70 to 300 km** and **deep earthquakes** occur in between **300 to 700 km**.
- ▶ **Impact:** Shallow earthquakes tend to **cause more damage** due to their proximity to the surface.





Government Approves Integrated Pradhan Mantri Annadata Aay Sanrakshan Abhiyan (PM-AASHA) Scheme Till 2025-26

The integrated PM-AASHA Scheme, launched in 2018, is administered to bring-in **more effectiveness in the implementation of procurement operations**.

Key highlights of PM-AASHA Scheme

- ▶ **Ministry:** Ministry of Agriculture & Farmers Welfare.
- ▶ **Purpose:** Provides **price assurance** to farmers and help **control price volatility** of essential commodities.
- ▶ **Crops Coverage:** Pulses, Oilseeds and Copra

Key Components of the Scheme

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|  <p>Price Support Scheme (PSS)</p> | <ul style="list-style-type: none"> ● Crops Covered: Pulses, Oilseeds, and Copra (meeting Fair Average Quality standards). ● Procurement Agencies: <ul style="list-style-type: none"> ○ National Agricultural Cooperative Marketing Federation of India (NAFED) ○ Food Corporation of India (FCI) ● Beneficiaries: Pre-registered farmers sell directly at Minimum Support Price (MSP) through state agencies. ● Key Update for 2024-25: Government has allowed the procurement of Tur, Urad and Masur under PSS equivalent to 100% of the production of the State. |
|  <p>Price Deficiency Payment Scheme (PDPS)</p> | <ul style="list-style-type: none"> ● Covers all oilseeds for which MSP is notified. ● Direct Payment to Farmers: Envisages direct payment of the difference between the MSP and the selling/modal price (up to 15% of MSP value) to farmers. ● Flexibility for States/UTs: They can choose PSS or PDPS for oilseeds each year/season. |
|  <p>Market Intervention Scheme (MIS)</p> | <ul style="list-style-type: none"> ● For procurement of perishable commodities not covered under MSP, such as tomato, onion and potato etc. ● Implemented on state/UT request when market prices fall by at least 10% from the previous season. |

However, the scheme's impact is limited due to **low crop coverage** and **inadequate storage and logistics**, making large-scale implementation challenging.

Union Finance and Corporate Affairs Minister launches Mutual Credit Guarantee Scheme (MCGS) for MSMEs

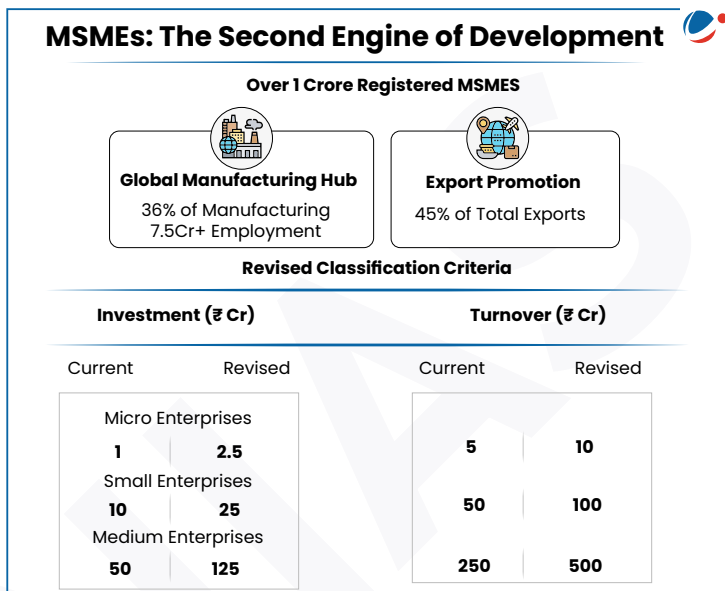
MCGS-MSME is a Scheme that enables term loans up to Rs.100 crore to Micro, Small, and Medium Enterprises (MSMEs) from Eligible Lending Institutions.

Other Salient Features of MCGS-MSME

- **Trust /Fund:** Mutual Credit Guarantee Fund-MSME (MCGF-MSME) is created to manage the Scheme.
 - ⊕ Formed by **Department of Financial Services (DFS), Ministry of Finance &** managed by **National Credit Guarantee Trustee Company Limited (NCGTC)**, a wholly owned company of DFS.
- **Guarantee Coverage:** Offers **60% guarantee coverage** by NCGTC to MLIs for loans sanctioned under MCGS-MSME.
 - ⊕ **Member Lending Institutions (MLIs):** They are Financial Institutions such as Commercial Banks, NBFCs registered with NCGTC under the Scheme.
- **Eligible Borrower:** MSME with valid Udyam Registration; Not a Non-Performing Asset with any lender; **Minimum 75% of project cost** for equipment/machinery.
- **Duration of the Scheme:** Available for **4 years or until Rs 7 lakh crore** in guarantees are issued, whichever comes first.

Impact of MCGS-MSME

- **Boost to Manufacturing:** Enhances credit access for MSMEs to expand and upgrade equipment.
- **Support for Make in India:** Strengthens domestic manufacturing, increasing its GDP share towards 25%.
- **Global Competitiveness:** Helps MSMEs scale up, positioning India as a key global supply chain player.



President Appoints Gyanesh Kumar as the New Chief Election Commissioner (CEC)

This is the **first appointment** of the CEC under the **Chief Election Commissioner and Other Election Commissioner Act, 2023** (refer to the infographic).

- The 2023 Act **replaces the 1991 Act** and facilitates more autonomy to the ECI.

About the Election Commission of India (ECI)

- A **constitutional body** under **Articles 324-329** (Part XV).
 - ⊕ **National Voters' Day** celebrated on **January 25** since 2011 to mark ECI's foundation.
- **Since 1993**, it has one CEC and **two Election Commissioners (ECs)**.
- It ensures **free and fair elections** for:

- ⊕ **Lok Sabha & Rajya Sabha**
- ⊕ **State Legislative Assemblies**
- ⊕ **President & Vice President**

- The 2023 Act **provides more autonomy to the ECI as under the Act:**

- ⊕ **CEC and ECs** enjoy **Supreme Court judge-level salary & benefits**.
- ⊕ Granted immunity from **civil/criminal proceedings** for official duties.
- ⊕ **Search & selection committees** for appointments.
- ⊕ Fixed tenure for **CEC & ECs**.

Issues Faced by ECI

- **Questionable Autonomy**
 - ⊕ **Selection Process:** The search and selection committee have a **majority of government representatives**, raising concerns about independence.
 - ⊕ **Removal of ECs:** Unlike the CEC, the ECs can be removed based on the CEC's recommendation.
- **Limited Powers:** ECI **cannot de-register** political parties, even for serious violations.
- **Lack of Independent Staff:** ECI **relies on government employees** instead of having its own dedicated workforce, affecting its autonomy.

Key Provisions of the 2023 Election Commission Act



Qualifications

- **Secretary-level Position:** Must hold/have held post equivalent to Secretary to Government of India
- **Experience & Integrity:** Must possess expertise in managing and conducting elections



Search Committee

- **Leadership:** Headed by Minister of Law and Justice
- **Composition:**
 - Two members (Secretary rank or higher)
 - Prepares panel of 5 candidates



Select Committee

- **Committee Members:**
 - Prime Minister (Chairperson)
 - Leader of Opposition (Member)
 - Union Cabinet Minister nominated by PM
 - Recommends candidates to President



Resignation and Removal

- **Resignation Process:** CEC or EC can resign by writing to President
- **Removal Conditions:**
 - CEC: Like Supreme Court Judge
 - ECs: Requires CEC recommendation



Term of Office

- **Duration:** 6 years or until 65 years of age, whichever earlier
- **Terms and Conditions:**
 - If an EC becomes the CEC, combined tenure cannot exceed 6 years
 - No reappointment allowed

The Supreme Court (SC) sets aside death sentence for lack of Fair Trial

The Court noted several lapses in the trial, including the failure to ensure competent legal representation, which resulted in the denial of a fair trial to the appellant.

- Citing **Anokhilal v. State of M.P. (2019)**, SC stressed that legal aid must be "effective and meaningful," and not merely appointed, as guaranteed under **Article 21** of the Constitution.

What is Fair Trial?

- A fair trial is a fundamental human right ensuring that individuals are treated justly within the legal system.
- A fair trial protects against unlawful deprivation of human rights and safeguards fundamental freedoms for all individuals.

Principles of Fair Trial

- **Presumption of Innocence (State of U.P. v. Naresh)**: Every accused is presumed innocent until proven guilty, and the burden of proof lies on the prosecution.
- **Independent Judiciary (Shyam Singh v. State of Rajasthan; Article 50)**: Judges to be free from executive influence, ensuring judicial impartiality.
- **Speedy Trial (Hussainara Khatoon v. State of Bihar; Article 21)**: Delay in trial proceedings violates the right to life and liberty.
- **Protection Against Double Jeopardy {Article 20(2)}**: No person can be tried or punished twice for the same offense, ensuring legal certainty and protection against repeated prosecution.

Right to a fair trial in international human rights law

- **Equality Before Tribunal (Universal Declaration of Human Rights, Article 10)**: Everyone has the right to a fair, public hearing by an independent and impartial tribunal.
- **Right to Appeal (International Covenant on Civil and Political Rights Article 14)**: Convicted individuals have the right to seek a higher court's review of their conviction.
- **Rome Statute (2002)**: Ensures that those accused of the gravest crimes against humanity are entitled to basic legal protections.

Ministry of Rural Development to Launch Pilot Project "National Geospatial Knowledge-based Land Survey of Urban Habitations (NAKSHA)"

About NAKSHA

- **Background**: Announced in 2024 as part of **Digital India Land Records Modernization Programme (DILRMP)**.
- **Aim**: To create and update land records in urban areas to ensure reliable documentation of land ownership.
- **Coverage**: 1-year pilot programme in **152 Urban Local Bodies across 26 States and 3 UTs**.
 - ⊕ Nationwide rollout after the success of the pilot programme.
- **Technical Partner**: **Survey of India** (conducting aerial surveys and providing orthorectified imagery).
 - ⊕ End-to-end web-GIS platform will be developed by the **Madhya Pradesh State Electronic Development Corporation (MPSEDC)**.
- **Coordination**: A State Level Committee (SLC) under the Chief Secretary.

Significance of Digitizing Land Records

- **Empower Citizens**: Provides legal land ownership documents.
- **Reduces Disputes**: Legal documentation minimises conflicts thus reducing judicial burden.
- **Enhances Governance**: Digital documentation ensures transparency & efficiency while also facilitating **Urban Planning**.
- **Boosts Investment**: Facilitates ease of doing business and make cities as growth centres.

About DILRMP

- **Launched**: In 2016, the National Land Record Modernization Programme was revamped as DILRMP
- **Type**: **Central Sector Scheme with 100% Centre funding**.
- **Key Components**: Land & registration computerization, Revenue Court digitization, Aadhaar integration (voluntary), etc.
- **Tenure**: 2021-26 (extended for five years).
- **Key Initiatives**: Unique Land Parcel Identification Number (ULPIN) or Bhu-Aadhar, BHOOMI SAMMAN, etc.
- **Achievements**:
 - ⊕ 95% of **Records of Rights (RoR)** digitized.
 - ⊕ 68% of **cadastral maps** digitized.
 - ⊕ 95% of **registrations** computerized.

Also In News



Copenhagen Framework on Citizen Data

Ministry of Statistics and Programme Implementation is exploring relevance of Copenhagen Framework on Citizen Data and its integration with India's statistical system.

About the Framework

- **Need**: Citizen data, encompassing citizen-generated data, community-driven data, and citizen science data, typically fall outside of official statistics, despite being part of the national data ecosystem.
- **Genesis**: Developed by **UN Statistics Division (UNSD)** in 2023.
- **Key provisions**:
 - ⊕ Defines the possible types of citizen data and offers a common understanding of relevant concepts and their definitions as a solid foundation for citizen data.
 - ⊕ Provides a scope that helps conceptualize and agree on the different ways citizens can play a role in data.



NDS-OM

RBI announced that transactions between a **Primary Member (PM)**; e.g., bank that has direct access to government securities markets.) and its **Gilt Account Holder (GAH)** can now be matched on **NDS-OM**.

- **GAH**: A client (like mutual funds) who holds government securities through a PM instead of directly with the RBI.

About NDS-OM

- **Type**: It is a **screen based electronic anonymous order matching system for secondary market trading in Government securities**.
- **Owned by**: The RBI.
- **Members**: Banks, Primary Dealers, Insurance Companies, Mutual Funds etc.
- **Tradable Instruments**: All central government securities, state government securities and treasury bills are tradable on the NDS-OM.



Samudrayaan Project

Wet testing of the 4th Generation deep-ocean human scientific submersible 'Matsya-6000' is successfully completed.

About Samudrayaan Project

- Launched under the **Deep Ocean Mission (DOM)** of the **Ministry of Earth Sciences**.
- **DOM** is a **Central Sector Scheme** to support **Blue Economy** Initiatives like **Deep Ocean Survey and Exploration, Deep Sea Mining** etc.
- **Aim:** Sending **three personnel to 6000-metre depth** in a vehicle called 'MATSYA 6000' for the **exploration of deep sea resources like minerals**.
- **Tenure:** 5 years (2020-2021 to 2025-2026)



Anticyclone

Experts believe that the presence of anticyclone over the sea is causing a rise in temperature in Mumbai.

What is an Anticyclone?

- Opposite to a cyclone, it is an **area of sinking air** (diverging air) which results in high pressure.

Characteristics:

- Small pressure gradients (compared to cyclones) make the winds gentle, leading to settled and calm conditions, lasting many days or weeks.
- As the air sinks, it **warms up**, leading to **warm and dry weather**.
 - ⊕ The **slowly developing mid-tropospheric anticyclone** is the **main component** of the **heat wave** over India.
- **Wind Direction:** Northern Hemisphere-**Clockwise** direction; Southern Hemisphere-**Anticlockwise** direction.



White-winged Duck

A rare pair of the **White-winged duck** was spotted in the **Dihing Patkai National Park (Assam)**.

About White-winged Duck (Asarcornis scutulata)

- **Nature:** Elusive forest-dwelling duck is found in lowland evergreen forests and wetlands.
- **Location:** Endemic to the Indo-Malayan biogeographical realm.
- **Phenotype:** Well-known for its conspicuous white patches on the wings and distinctive ghostly calls.
- **Others:** it's a State bird of Assam and called 'Deo Hanh' (spirit duck) in Assamese.
- **Protection:** **Schedule I** under Wildlife (Protection) Act, 1972; **White-winged Duck Conservation Strategy and Action Plan 2022**, formulated by the Assam government and Wildlife Trust of India; **IUCN Red List:** Critically Endangered.



'AI for Entrepreneurship' Micro-learning Module

Ministry of Skill Development and Entrepreneurship launched the 'AI for Entrepreneurship' micro-learning module.

'AI for Entrepreneurship' Micro-learning Module

- Launched in collaboration with **National Skill Development Corporation (NSDC)** and **Intel India**.
- **Purpose:** To simplify **AI concepts** and **encourage entrepreneurial thinking** among young innovators across India.
- **Target:** To **empower 1 lakh youth by 2025** by equipping them with **essential skills** to thrive in a technology-driven economy.



Flightless Antarctic midge (Belgica antarctica)

Antarctica's only known native insect species **Flightless Antarctic midge (Belgica antarctica)** was in the news recently.

- It is also known as an **extremophile insect** for its ability to **survive in extreme weather conditions**.

2-Stage Survival strategies adopted by insect (during two-year life cycle)

- **Quiescence** (in year one), an immediate form of dormancy for swift transition.
- **Obligate diapause** (in year two), a scheduled dormancy by accumulating energy.

Other types of dormancies:

- **Hibernation:** Long-term winter dormancy with reduced metabolism (e.g., bears, ground squirrels).
- **Aestivation:** Summer dormancy to escape heat/drought (e.g., lungfish, snails).
- **Brumation:** Cold-induced dormancy in reptiles (e.g., snakes, turtles).



TrailGuard AI

TrailGuard AI has aided in reducing poaching in Simlipal Tiger Reserve in Odisha.

About TrailGuard AI

- It is an **end-to-end, camera-based alert system** designed for enhancing wildlife conservation and promoting human-wildlife coexistence in remote areas.
- **Advantages**
 - ⊕ **Autonomous detection of target objects.** E.g. poachers, wildlife entering agricultural lands etc.
 - ⊕ **Real-time alert transmission:** via GSM, Long-Range Radio, or satellite, promoting rapid-response.
 - ⊕ **Its small size** prevents vandalism and theft.

Simlipal Tiger Reserve

- Declared as a **biosphere reserve in 1994**. **UNESCO** added it to the list of **Biosphere Reserves in 2009**.
- **Prominent Rivers:** Salandi, Kahairi and Deo.

Place in News



Ukraine (Capital: Kyiv)

U.K. to send peacekeeping troops to Ukraine if needed.

Political Features

- **Location:** Located in eastern Europe, Ukraine is the second-largest European country after Russia.
- **Bordering Countries:** Belarus, Hungary, Moldova, Poland, Romania, Russia, and Slovakia.
- **Bordering Water Bodies:** Black Sea and the Sea of Azov

Geographical Features

- **Mountain Ranges:** Carpathians, Crimean Mountains, etc.
- **Rivers:** Dnieper (Ukraine's longest river), Danube, Dniester

Economy:

- Known as "**breadbasket of Europe**" and is one of the largest grain exporters in the world.
- World's **largest producer of sunflower seeds** (sunflower is the country's national flower.)

Other

- **Major disaster:** Chernobyl nuclear accident of 1986
- **World Heritage Site:** Saint-Sophia Cathedral in Kyiv



AHMEDABAD



BENGALURU



BHOPAL



CHANDIGARH



DELHI



GUWAHATI



HYDERABAD



JAIPUR



JODHPUR



LUCKNOW



PRAYAGRAJ



PUNE



RANCHI