

November - 05

TNPSC BITS

- ❖ The Unified Payments Interface (UPI) has reported 16.58 billion transactions in October 2024 worth Rs 23.5 lakh crore, up 45% year-on-year.
- ❖ The Outgoing Director General of the International Crops Research Institute for the Semi-Arid Tropics (ICRISAT), Dr Jacqueline d'Arros Hughes, was appointed as Secretary General of the World Agriculture Forum (WAF).
- ❖ The 15th edition of Exercise Vajra Prahar 2024, a joint military exercise between the Indian Army and the US Army Special Forces, was held in USA.
- ❖ The Indian Army and Indonesia Army take part in the 9th edition of India-Indonesia Joint Special Forces Exercise GARUD SHAKTI 24 in Jakarta.
- ❖ Actress Rashmika Mandana has been appointed as the 'National Ambassador for Promoting Cyber Safety'.
- ❖ The Indian Coast Guard (ICG) simultaneously launched two Fast Patrol Vessels (FPVs) 'Adamyra' and 'Akshar', with over 60% indigenous content.
- ❖ Ravindra Jadeja becomes fifth-highest wicket-taker (314) for India in Test cricket.

NATIONAL

Census 2025

Counting India's population

COUNTING: Details of all buildings are noted in the first phase. Population is counted in the second phase with enumerators filling out details on exhaustive manuals

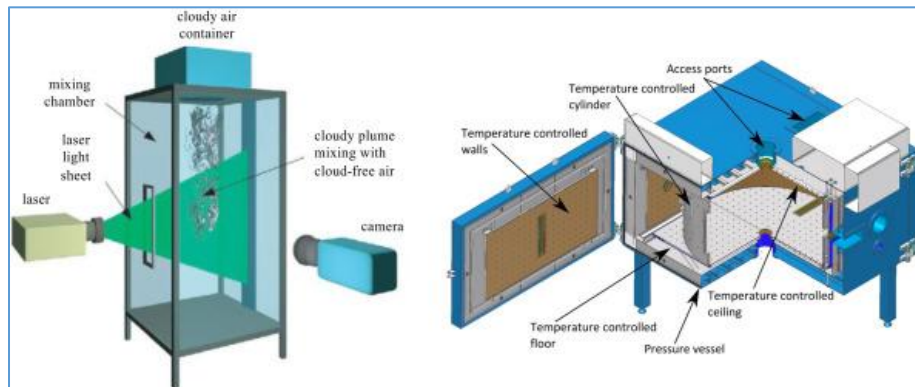
FIRST DIGITAL CENSUS: A mobile app for collection of data and census portal has been developed

2011 The last census held	2025 Census 2021 likely to begin	2026 Data likely to be released
-------------------------------------	--	---

- ❖ The much-delayed decadal census exercise and the work to update the National Population Register (NPR) are likely to begin early 2025.

- ❖ The data will be declared by 2026.
- ❖ The country's population count has been conducted every 10 years since 1951.
- ❖ But the census work in 2021 could not be carried out due to the COVID-19 pandemic.
- ❖ With this, the census cycle is likely to be changed.
- ❖ So, it will be 2025-2035 and then 2035-2045 and so on in future.
- ❖ 31 questions are to be asked to the citizens during the census exercise.
- ❖ The census of India is recorded every decade, with the first one being held in 1872.
- ❖ The first census post-Independence was recorded in 1951 and the last one in 2011.
- ❖ According to the 2011 data, India's total population was 121 crore, sex ratio was 940 females per 1,000 males, literacy rate was 74.04%.
- ❖ The population growth was 17.64% from 2001 to 2011.

Cloud chamber



- ❖ The Mission Mausam, launched by the government last month, aims to not just improve weather forecasting in the country.
- ❖ India is also establishing a first-of-its-kind cloud chamber at the Indian Institute of Tropical Meteorology (IITM), Pune.
- ❖ A cloud chamber resembles a closed cylindrical or tubular drum, inside which water vapour, aerosols, etc. are injected.
- ❖ Under the desired humidity and temperature inside this chamber, a cloud can develop.
- ❖ This facility will allow scientists to study the seed particles that form cloud droplets or ice particles in a sustained manner.

- ❖ India is building a cloud chamber with convection properties, as required to study Indian monsoon clouds.

Expansion of Indian Sign Language

Indian Sign Language Research and Training Centre
Department of Empowerment of Persons with Disabilities (Divyangjan)
Ministry of Social Justice & Empowerment, Govt. of India

Event Highlights:

- 2500 new sign words for ISL Dictionary
- 100 concept videos in ISL
- ISL Dictionary in 10 different languages
- Deaf Role Model Videos
- 25 NIs and CRCs of DEPwD Websites
- Accessible Educational Stories in ISL for kids of all ages

• Group Song by DISLI Students

• Group Dance by DISLI and DTISL Students

• Mime performance by DTISL students

• 7th Prize Distribution to the Winners of the Indian Sign Language Competition, 2024.

- ❖ Some 2,500 new terms including words in English and Hindi were added to the Indian Sign Language (ISL) dictionary.
- ❖ This Expansion has facilitated the deaf community's engagement particularly in scientific, cultural, and internet related contexts.
- ❖ It was spearheaded by the Indian Sign Language Research and Training Centre (ISLRTC).

TB Report 2024 – WHO

TB CASES IN INDIA OVER THE YEARS			
	India TB Report 2020	2023	2024
Estimated TB cases	26.9 lakh	27.4 lakh	27.8 lakh
Number of cases reported	24.04 lakh	24.2 lakh	25.5 lakh
Reporting from private sector	6.8 lakh	7.3 lakh	8.4 lakh
% cases from private sector	28.20%	30%	32.90%
Estimated mortality	4.36 lakh	3.2 lakh	3.2 lakh

- ❖ India has recorded a 17.7 per cent decline in tuberculosis incidence from 237 per lakh population in 2015 to 195 in 2023.
- ❖ It is more than double the global decline of 8.3 per cent.

- ❖ In 2023, India is estimated to have had 27 lakh TB cases, of which 25.1 lakh were diagnosed and put on treatment.

INTERNATIONAL

Typhoon Kong-rey



- ❖ Typhoon Kong-rey has made landfall on the Taiwan eastern coast.
- ❖ It is the biggest typhoon to directly hit Taiwan in nearly 30 years.
- ❖ Taiwan's typhoon season generally falls between July and September.
- ❖ But this year two huge storms have hit Taiwan in October — the other being super typhoon Krathon
- ❖ The deadliest storm to hit Taiwan in recent decades was Typhoon Morakot in August 2009.

SCIENCE AND TECHNOLOGY

First Black Hole Triple System

- ❖ Physicists have observed a “black hole triple” for the first time.
- ❖ It features a central black hole, a star spiralling closely around it, and a more distant star.
- ❖ This star orbits the black hole every 6.5 days.
- ❖ A second and more distant star takes around 70,000 years to complete its orbit.
- ❖ It is located in the constellation Cygnus.

- ❖ The system is located approximately 8,000 light years from Earth.
- ❖ The central black hole, V404 Cygni, is about nine times the mass of our Sun.



ENVIRONMENT

Tigers at Mhadei Wildlife Sanctuary



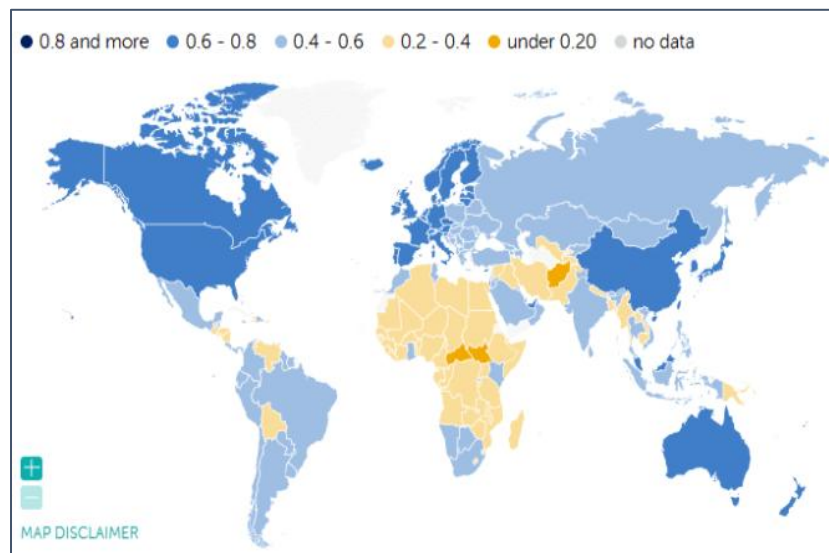
- ❖ An adult tigress and three cubs have been spotted in the Mhadei wildlife sanctuary in Goa.

- ❖ It is marking the first time evidence of the species has been recorded in the forests.
- ❖ This reserve is bordering the states of Maharashtra and Karnataka since 2020.
- ❖ The Mhadei wildlife sanctuary in Goa notified as the 55th tiger reserve of India in 2023.
- ❖ The Mhadei River flows through this sanctuary.

REPORTS AND INDICES

AI Preparedness Index 2023-24 - IMF

- ❖ The global AI market size is projected to grow at a compound annual growth rate (CAGR) of 36.6% from 2024 to 2030.
- ❖ Singapore stands out as the country most prepared for seamless AI adoption.
- ❖ Denmark (#2), the Netherlands (#4), Estonia (#5), Finland (#6), and Sweden (#10), have been among the early adopters of national AI initiatives.
- ❖ India ranked 72 in a total of 174 countries.
- ❖ Bangladesh placed on 113, Sri Lanka at 92, and China ranked as 31st.



STATES

Solar Telescope Project – Ladakh

- ❖ To track the Sun, India seeks to set up the National Large Solar Telescope (NLST) in Ladakh.

- ❖ The National Large Solar Telescope will be a two-metre class optical and near infra-red (IR) observational facility.
- ❖ The telescope is to be installed on the banks of the Pangong Tso Lake in Merak, Ladakh, at an altitude of around 4,200 metres.



IMPORTANT DAYS

International Day for Biosphere Reserves 2024 - November 03



- ❖ It aims to highlight the importance of biosphere reserves in protecting the environment and raising awareness about sustainable development.
- ❖ It was proclaimed by the UNESCO General Conference in its 41st session.
- ❖ Biosphere reserves contribute to helping achieve the targets set by states upon the adoption of the Kunming-Montreal Global Biodiversity Framework in 2022 December.

- ❖ The Biosphere Reserves now totals 759 sites in 136 countries.
- ❖ India has 18 notified biosphere reserves.
- ❖ These reserves consist of core, buffer, and transition zones, each playing a different role in conservation and development.

MISCELLANEOUS

Simhachalam Temple - Telugu inscription

- ❖ The Archaeological Survey of India (ASI) has uncovered a Telugu inscription on the wall above the statue of Lord Hanuman at the 13th-century Simhachalam temple.
- ❖ The inscription is dating back to the 16th century CE.
- ❖ It has the details the construction of the Hanuman temple by a Kurma Mudali, son of Tammu Mudali, under the guidance of Lord Jagannath of Puri.
- ❖ Most inscriptions at Simhachalam are in Odiya, reflecting the temple's historical ties to the Eastern Ganga dynasty
- ❖ Simhachalam is one of 32 Narasimha temples in Andhra Pradesh.



Lost Mayan City

- ❖ A huge Maya city has been discovered centuries after it disappeared under jungle canopy in Mexico.
- ❖ Archaeologists found pyramids, sports fields, causeways connecting districts and amphitheatres in the southeastern state of Campeche.
- ❖ LiDAR, or Light Detection and Ranging, a remote sensing technology has been used to rebuild this.

- ❖ They have named this area as Valeriana after a nearby lagoon.
- ❖ In total, the researchers identified 6,764 structures in Valeriana and in other rural and urban settlements of varying sizes.
- ❖ The Mayan civilization area may span in current Belize, El Salvador, Guatemala and southeastern Mexico, and inhabited from about 1000 BC to AD 1500.



★ ★ ★ ★ ★ ★ ★ ★ ★ ★