



November - 24

TNPSC BITS

- ❖ The Tamil Nadu government sanctioned ₹261 crore to establish a Global Sports City in Semmancheri, Chennai.
- ❖ The Indian Army and Jammu & Kashmir Police have jointly launched Operation Chhatru in Kishtwar, to target renewed militant infiltration.
- ❖ India Post inaugurated its first Gen Z-themed Campus Post Office at IIT Delhi as part of the Ministry of Communications' modernization plan.
- ❖ India won the WFDF World Beach Ultimate Championship, organized by World Flying Disc Federation, in Portimão, Portugal, by defeating Germany.
- ❖ India was unanimously re-elected to the Executive Committee of the Codex Alimentarius Commission (CCEXEC) at 48th session of the Codex Alimentarius Commission (CAC48).
- ❖ India and Nepal have signed a Letter of Exchange amending the Protocol to the India-Nepal Treaty of Transit to liberalize and expand rail-based freight movement, especially through the Jogbani-Biratnagar corridor.
- ❖ The Oman Society of Astronomy and Space has successfully tracked and photographed Comet SWAN (Comet C/2025 R2 SWAN) across the country.
- ❖ Tesla, the US electric vehicle company, will open its first full-scale India centre in Gurugram, Haryana.
- ❖ Southern Railway launched the 'Coast-to-Coast' Parcel Express Train, a time-tabled intra-zonal logistics service across Tamil Nadu and Kerala.
 - The train provides fast, reliable, and cost-effective parcel movement, being the first-of-its-kind service in Indian Railways.
- ❖ Women's Entrepreneurship Day is observed globally on 19 November to encourage equal access to resources, funding, mentorship, and opportunities for women entrepreneurs.

TAMIL NADU NEWS

Ilakkiya Maamani Awards 2025

- ❖ Tamil Nadu Chief Minister presented the Ilakkiya Maamani Award to three scholars.
- ❖ The awardees are T. Gnanasundaram (Traditional Tamil), R. Kamarasu (Research Tamil), and K. Somasundaram "Kalapriya" (Creative Tamil).

- ❖ Each scholar received Rs 5 lakh, a gold medal, and a citation.
- ❖ The Ilakkiya Maamani Award was instituted in 2021 by the Tamil Development Department to honour leading Tamil scholars.



Paddy Procurement Norms

Union Govt Refuses Paddy Norm Relaxation

The Union government has refused to relax paddy procurement norms by declining Tamil Nadu's request to raise the permissible moisture content from 17% to 22% after heavy rains. CM M.K. Stalin condemned the decision as "another betrayal," questioning why the Prime Minister ignored farmers' distress despite earlier relaxations granted to the State. He urged the BJP-led Centre to reconsider, noting that three Central teams had already inspected rain-affected regions and collected paddy samples in October.

- ❖ The Union government rejected Tamil Nadu's request to increase permissible moisture content for paddy procurement from 17% to 22%.
- ❖ The request was made after heavy rains affected various parts of Tamil Nadu.
- ❖ Similar requests from Tamil Nadu for higher moisture content were accepted in the past by the Union government.
- ❖ The Central teams visited Tamil Nadu and collected paddy samples in late October before the request.

- ❖ The Tamil Nadu government requested reconsideration to provide relief to farmers affected by heavy rains.

NATIONAL NEWS

CAG Audit Excellence Hub

- ❖ The Comptroller and Auditor General (CAG) of India will set up a Centre of Excellence for Financial Audit in Hyderabad.
- ❖ The centre will focus on research, training, and professional development in financial auditing.
- ❖ It aims to modernise public auditing using advanced technology, artificial intelligence (AI), and data-driven approaches.
- ❖ The initiative will help standardise processes, harmonise audit functions, and enhance coordination between audit and accounts departments.



Two New Consulates in Russia

- ❖ India inaugurated two new Consulates General in Yekaterinburg and Kazan, Russia.
- ❖ The consulates aim to boost trade, tourism, economic, scientific, technological, academic, and cultural ties.
- ❖ Yekaterinburg is an industrial hub known for heavy engineering, gem cutting, defence manufacturing, metallurgy, nuclear fuel, chemicals, and medical equipment.
- ❖ Kazan is known for oil production, fertilisers, automobiles, defence manufacturing, pharmaceuticals, and electrical equipment.

- ❖ Around 7,000 Indians live in Kazan and 3,000 in Yekaterinburg under the consulate jurisdictions.



IPR for New Digital-Print Combat Coat

NIFT INNOVATION: INDIAN ARMY SECURES IPR FOR NEW DIGITAL-PRINT COMBAT COAT

The New Coat Combat ensemble includes:

- ✓ **Outer Layer:** Digitally printed camouflage coat designed for operational durability and concealment in varied terrains
- ✓ **Inner Jacket:** Insulated mid-layer using lightweight, breathable materials providing warmth without restricting movement.
- ✓ **Thermal Layer:** Base layer ensuring optimal thermal regulation and moisture control in extreme weather.



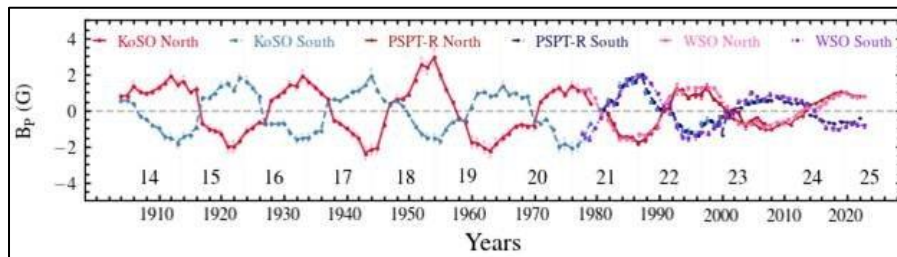
- ❖ The Indian Army introduced the New Coat Combat (Digital Print).
- ❖ The coat was designed by the National Institute of Fashion Technology (NIFT), New Delhi, under the Army Design Bureau consultancy project.
- ❖ It has a three-layered design with advanced technical textiles for comfort, mobility, and operational efficiency.
- ❖ The coat includes a durable digitally printed outer coat, an insulated inner jacket, and a thermal base layer for moisture and temperature regulation.

- ❖ The Army registered the design with the Controller General of Patents, Designs and Trademarks (CGPDTM), Kolkata.
- ❖ The registration gives the Army exclusive intellectual property rights (IPR) over the coat's design and camouflage pattern.

SCIENCE AND TECHNOLOGY NEWS

Solar Cycle Insights

- ❖ Researchers reconstructed the Sun's polar magnetic fields using 100+ years of historical images from Kodaikanal Solar Observatory (KoSO).
- ❖ The study was led by ARIES with collaborators from India, the USA, Germany, and Italy.
- ❖ KoSO observations in the Ca II K wavelength since 1904 capture chromospheric activity, including bright patches called plages and networks.
- ❖ AI/ML (Artificial Intelligence / Machine Learning) algorithms identified polar network features as a proxy for polar field strength over the last century.
- ❖ The reconstruction helps predict solar activity, including Solar Cycle 25, and potential solar storms affecting satellites, GPS, and power grids.

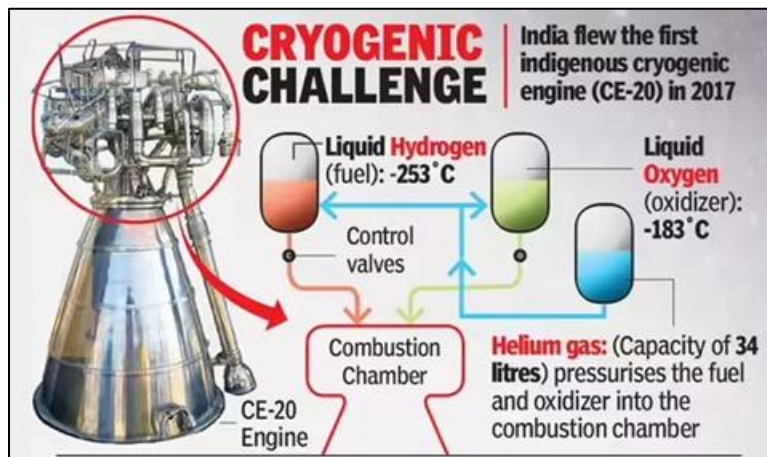


BIRSA 101

- ❖ India launched its first indigenous CRISPR-based gene therapy for Sickle Cell Disease named BIRSA 101.
- ❖ The therapy is dedicated to Bhagwan Birsa Munda, marking his 150th anniversary.
- ❖ Sickle Cell Disease primarily affects tribal populations in central and eastern India.
- ❖ Sickle Cell Disease (SCD) is a genetic blood disorder.
- ❖ The red blood cells become crescent-shaped, causing reduced oxygen transport, severe anaemia, pain, and organ damage.



CE20 Boot-Strap Mode



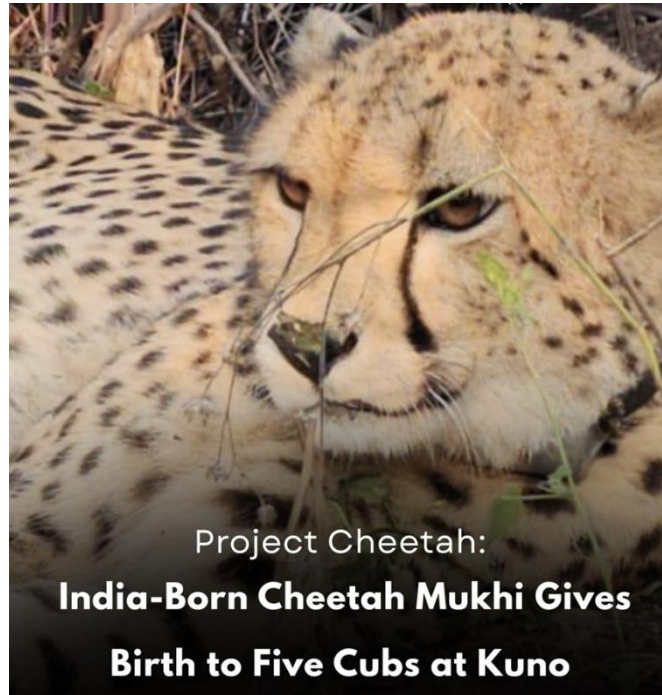
- ❖ ISRO successfully tested the boot-strap mode start on the CE20 cryogenic engine.
- ❖ The test was conducted under vacuum conditions at the High-Altitude Test (HAT) facility in Mahendragiri.
- ❖ The CE20 engine powers the upper stage of the Launch Vehicle Mark-3 (LVM3).
- ❖ The engine achieved steady operation without using any external start-up systems.
- ❖ This test enhances the restart capability and mission flexibility of future LVM3 flights.

ENVIRONMENT NEWS

First Indian-Born Cheetah Cubs

- ❖ Mukhi, India's first Indian-born female cheetah, has given birth to five healthy cubs.

- ❖ This is the first successful birth of an Indian-born cheetah in India.
- ❖ Project Cheetah was launched to reintroduce African cheetahs into India, where cheetahs had become extinct in 1952.
- ❖ The primary reintroduction site is Kuno National Park, Madhya Pradesh, selected for its suitable grassland-savanna habitat and prey base.
- ❖ Under the “Action Plan for Reintroduction of Cheetah in India”, 50 cheetahs will be brought in over five years from Namibia and South Africa.



Threats to Dugong in India

- ❖ A new IUCN report highlights threats to dugongs (Sea cows) in India.
- ❖ Major Indian habitats include the Gulf of Kutch (Gujarat), the Gulf of Mannar-Palk Bay (Tamil Nadu/Sri Lanka), and the Andaman & Nicobar Islands.
- ❖ Dugongs are marine mammals related to manatees, with a dolphin-like tail.
- ❖ Listed as Vulnerable in IUCN Red List and under Wildlife (Protection) Act, 1972 (India) got Schedule I status – highest legal protection.
- ❖ Dugongs feed on 30–40 kg of seagrass daily, maintaining seagrass health and supporting marine biodiversity.
- ❖ Population estimates: Gulf of Mannar-Palk Bay 150–200, Andaman & Nicobar Islands <50, Gulf of Kutch <20 individuals.
- ❖ Threats include fisheries bycatch, habitat loss, coastal pollution, high turbidity, and heavy metals (arsenic, cadmium, chromium, mercury, lead).

Critically Endangered Species of India



DUGONGS **(DUGONG DUGON)**

Dugongs are marine mammal and commonly known as 'sea cow'

Around 200 individuals in India

Is the only existing species of herbivorous mammal that lives exclusively in the sea including in India

Protected in India and found in Gulf of Mannar, Palk Bay, Gulf of Kutch and Andaman and Nicobar islands

Major Big Cats in Gujarat

Tiger Returns: Gujarat Rejoins the Big Cat Club After Decades



Gujarat, India

- ❖ A wild tiger has permanently settled in Ratanmahal Wildlife Sanctuary, Gujarat, for nine continuous months.

- ❖ Gujarat now hosts all three big cats: the Asiatic lion, Indian leopard, and tiger within the same landscape.
- ❖ And Gujarat has now become the only place in India where all three big cats live together in the same natural landscape.
- ❖ Ratanmahal Wildlife Sanctuary is in Dahod district, Central Gujarat, along the Gujarat–Madhya Pradesh border.
- ❖ The sanctuary was declared in March 1982, covering 65 sq km of reserve forests across 11 villages, with 41 surrounding villages in the interaction zone.
- ❖ It has diverse forests, dense sloth bear populations, and habitats for leopard, palm civet, four-horned antelope, langurs, and more.
- ❖ The sanctuary forms the catchment of the Panam River and has conditions suitable for tiger habitation, showing ecosystem recovery.

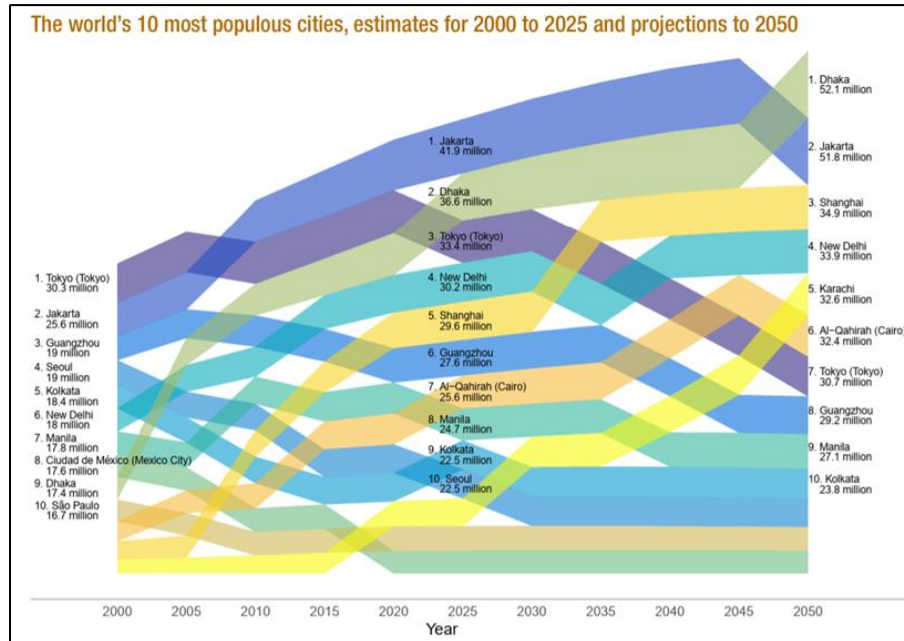
REPORTS AND INDICES

Water Budget Report

- ❖ NITI Aayog released a report on Water Budgeting in Aspirational Blocks.
- ❖ Water Budgeting provides a structured approach to estimate water demand for humans, livestock, agriculture, and industry.
- ❖ The study assessed 18 aspirational blocks across 11 States and 8 agro-climatic zones.
- ❖ The web-based platform Varuni supports block-level water security planning and integrated water management.
- ❖ The report offers customised recommendations to improve drinking water sustainability and ensure equitable distribution.



World Urbanization Prospects report 2025



- ❖ The World Urbanization Prospects 2025 report was released by the United Nations Department of Economic and Social Affairs (UN DESA).
- ❖ The report states that 45% of the world's 8.2 billion people now live in cities.
- ❖ Two-thirds of global population growth between 2025 and 2050 will occur in cities.
- ❖ India is one of seven countries expected to drive global city population growth between 2025 and 2050.
- ❖ India, Nigeria, Pakistan, Democratic Republic of the Congo, Egypt, Bangladesh, and Ethiopia will add over 500 million new urban residents.
- ❖ India and China together account for nearly 1.2 billion city residents.
- ❖ Megacities with over 10 million people increased from 8 in 1975 to 33 in 2025.
- ❖ Highest in Jakarta (42 million), Dhaka (40 million), and Tokyo (33 million), and may rise to 37 by 2050.
- ❖ Bengaluru is listed among the world's top 10 most densely populated cities.
- ❖ It has a population density exceeding 20,000 people per sq km.
- ❖ Bengaluru is also one of India's five megacities in the report, along with Delhi, Mumbai, Kolkata, and Chennai.
- ❖ Out of the world's 50 most crowded cities, 12 are in India.
- ❖ The total number of cities worldwide doubled between 1975 and 2025 and may cross 15,000 by 2050 due to rapid growth in Africa and Asia.

- ❖ Many cities are shrinking even when national populations rise, particularly in China and India, where over one-third of shrinking cities have fewer than 250,000 people.
- ❖ The report highlights that sustainable urban planning is essential for future development and climate goals.

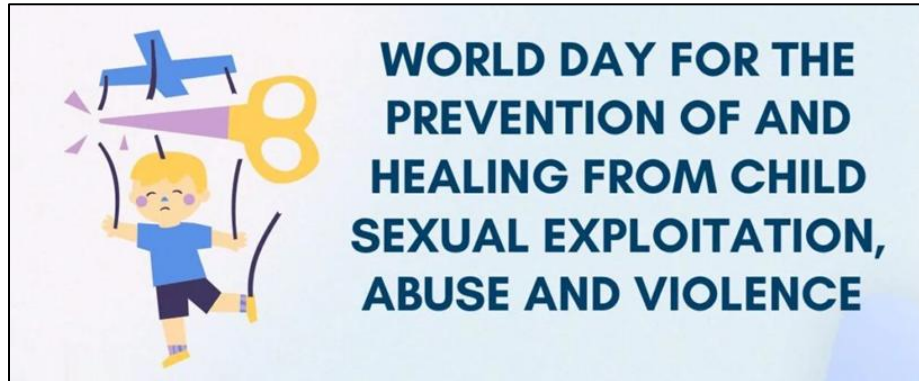
IMPORTANT DAYS

World AMR Awareness Week (WAAW) 2025 – November 18/24

- ❖ The aim is to raise awareness and increase understanding of World Antimicrobial Resistance (AMR).
- ❖ It was first endorsed by the World Health Assembly as an official global health campaign.
- ❖ AMR occurs when bacteria, viruses, fungi, and parasites no longer respond to antimicrobial agents.
- ❖ Infections caused by AMR are harder or impossible to treat, increasing the risk of severe illness and death.
- ❖ The theme for 2025 is “Act Now: Protect Our Present, Secure Our Future.”



World Day for the Prevention of and Healing from Child Sexual Exploitation, Abuse and Violence 2025 – 18 November



- ❖ The aim is to prevent child sexual exploitation, abuse, and violence, and support the healing of victims.
- ❖ It was first proclaimed by the United Nations General Assembly in 2022.
- ❖ Worldwide, about 120 million girls under 20 have experienced forced sexual contact; boys are also affected, with prevalence from 3% to 17% in some countries.
- ❖ The 2025 theme is "Strengthening the protection of children against sexual exploitation and sexual abuse through evidence-based policy making".

