

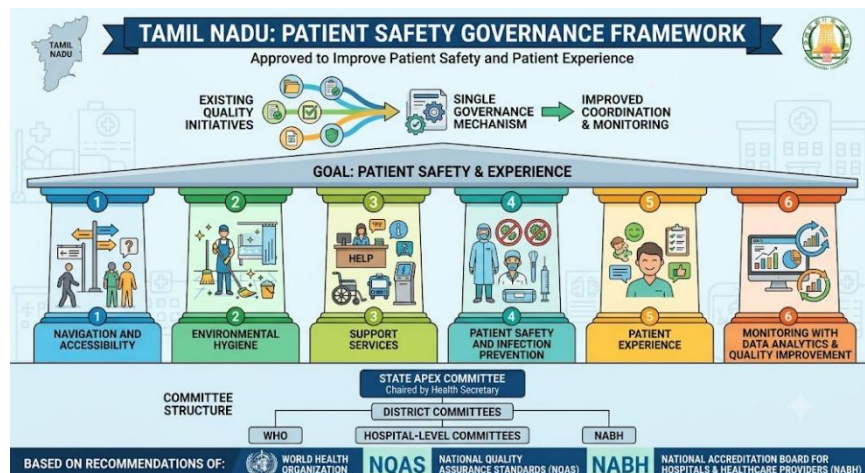
August - 01

TNPSC BITS

- ❖ India's Murali Sree shankar won the silver medal in the men's long jump at the 2026 Commonwealth Games in Glasgow, Scotland.
- ❖ Dr. Gunther von Hagens, the inventor of plastination and creator of BODY WORLDS exhibitions, passed away at the age of 81 on 24 July 2026.
 - Plastination replaces body fluids and fats with polymers, helping preserve anatomical specimens for long-term study.
- ❖ The United States (US) deployed the Dark Eagle Hypersonic Missile system in Guam for the first time.
 - The Dark Eagle, also known as Long Range Hypersonic Weapon (LRHW), is a non-nuclear, ground-launched hypersonic missile system developed for the US Army.
- ❖ The Indian Association for the Cultivation of Science (IACS) completed 150 years of its establishment on July 29, 2026.
 - IACS was established in 1876 by Mahendralal Sircar in Kolkata as India's first national institution dedicated to scientific research by Indians.

TAMIL NADU NEWS

Patient Safety Governance Framework



- ❖ Tamil Nadu has approved a comprehensive governance framework to improve patient safety and patient experience in government health facilities.

- ❖ The framework integrates existing quality initiatives under a single governance mechanism to improve coordination and monitoring.
- ❖ It is based on recommendations of the World Health Organization (WHO), National Quality Assurance Standards (NQAS) and the National Accreditation Board for Hospitals and Healthcare Providers (NABH).
- ❖ The framework is built on six pillars: Navigation and Accessibility, Environmental Hygiene, Support Services, Patient Safety and Infection Prevention, Patient Experience, and Monitoring with Data Analytics and Quality Improvement.
- ❖ The government will establish State, District and Hospital-level committees, including a State Apex Committee chaired by the Health Secretary.

Expert Advisory Committee on El Niño



TN constitutes expert panel to assess El Niño impact, strengthen disaster preparedness

The Tamil Nadu government has constituted a seven-member Expert Advisory Committee, with experts from IIT Madras, Anna University, WRI India and other institutions, to assess the potential impact of La Niña and recommend measures to mitigate drought and flood risks across the State through scientific monitoring and policy recommendations.

- ❖ Tamil Nadu has formed an Expert Advisory Committee to monitor and assess the possible impact of the El Niño weather phenomenon during 2026–27 and 2027–28.
- ❖ The committee will scientifically assess the impact of El Niño and recommend preparedness and disaster mitigation measures.
- ❖ It will monitor rainfall and drought conditions, identify vulnerable areas, and support early warning systems.

- ❖ The committee will advise the Tamil Nadu Disaster Risk Reduction Agency (TNDRRA) on drought and flood preparedness.
- ❖ It is chaired by the Additional Chief Secretary and Commissioner of Revenue Administration and includes experts from Anna University, Indian Institute of Technology (IIT) Madras, World Resources Institute (WRI) India, and other institutions.

Tamil Nadu Kuruvai Paddy Area Declines

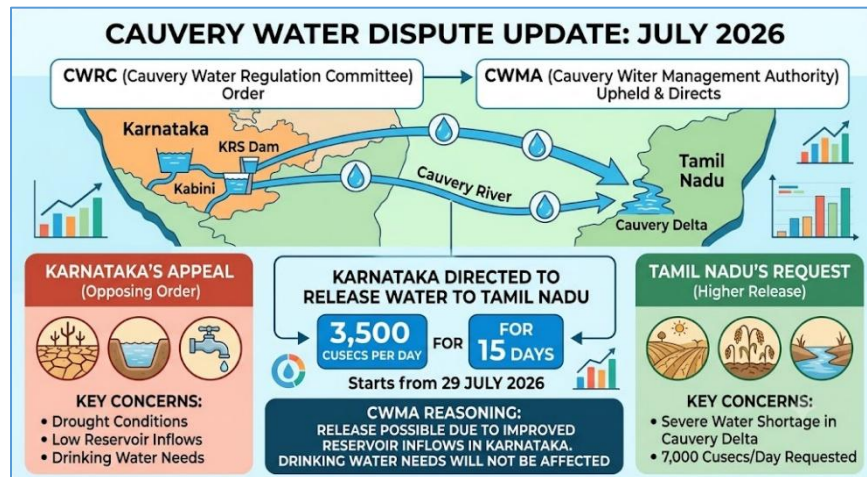
- ❖ Kuruvai paddy cultivation in Tamil Nadu's Cauvery delta has declined by over one lakh acres due to a shortage of Cauvery River water.
- ❖ As of 27 July 2026, Kuruvai cultivation covered 3.87 lakh acres, compared with 5.05 lakh acres during the same period in 2025.
- ❖ Thanjavur recorded the highest cultivation area (1.29 lakh acres), followed by Mayiladuthurai (97,000 acres) and Tiruvarur (88,700 acres).
- ❖ Tamil Nadu received only 3.57 thousand million cubic feet (tmc ft) of Cauvery water from 1 June to 28 July, resulting in a shortfall of about 34 tmc ft.
- ❖ If water inflow does not improve, Samba-Thaladi paddy cultivation may cover less than half of the normal 12 lakh acres.



Cauvery Water Dispute Update

- ❖ The Cauvery Water Management Authority (CWMA) upheld the Cauvery Water Regulation Committee (CWRC) order directing Karnataka to release Cauvery water to Tamil Nadu.

- ❖ Karnataka has been directed to release 3,500 cusecs of water per day for 15 days from 29 July 2026.
- ❖ Karnataka appealed against the order, citing drought, low reservoir inflows, and concerns over drinking water needs.
- ❖ Tamil Nadu requested a higher release of 7,000 cusecs per day, citing severe water shortage in the Cauvery delta.
- ❖ The CWMA stated that improved inflows into Karnataka's reservoirs would allow the release without affecting its drinking water requirements.



NATIONAL NEWS

Western Ghats Eco-Sensitive Zone Notification



- ❖ The Central Government has reissued the draft notification for the Western Ghats Ecologically Sensitive Area (ESA) after the previous draft expired without a final decision.
- ❖ The proposed Ecologically Sensitive Area (ESA) covers 56,825.7 square kilometres across Gujarat, Maharashtra, Goa, Karnataka, Kerala, and Tamil Nadu.

- ❖ The draft will remain open for public objections for 60 days before the Centre considers issuing the final notification.
- ❖ If notified, it will prohibit mining, quarrying, sand mining, new thermal power plants, certain industries, and large construction projects within the ESA.
- ❖ The proposal has remained pending since 2011 due to differences with the six States over the areas to be included and concerns about farming, infrastructure, and development activities.

Anti-Paper Leak Bill

The Union Cabinet on Friday approved a draft bill to ensure stricter punishments for paper leaks, hours after Prime Minister Narendra Modi made an announcement. The Centre had brought out a new law in 2024 as well when it was faced with raging paper leak controversies.

**Action Within 3 Months,
10-Year Jail, Rs 10 Crore Fine:
Centre's Plan Against Paper Leaks**

PM Modi had on Thursday said that he has directed the setting up of fast-track courts for paper leak cases.

CENTRE'S PLAN – KEY POINTS

-  **FAST-TRACK COURTS**
Fast-track courts will be set up to try paper leak cases.
Timeline: Cases to be disposed of and punishment announced within **3 months**.
-  **HIGHER JAIL TERM**
Those involved in paper leaks will face up to **10 years** of imprisonment.
-  **HIGHER FINE**
Fine of up to **₹10 crore** for those involved in paper leaks.
-  **AMENDMENT BILL**
The Public Examinations (Prevention of Unfair Means) Act, 2024 is being amended to give more teeth to the law.
-  **BILL IN PARLIAMENT**
Amendment Bill likely to be introduced in Lok Sabha on Monday.

- ❖ The Union Cabinet, headed by the Prime Minister, approved a draft legislation that seeks to significantly tighten punishment for paper leak offences.
- ❖ Under the proposed amendments, individuals found guilty of paper leaks could face a minimum prison term of five years along with a financial penalty.
- ❖ Cases involving organized paper leak rackets would attract a maximum punishment of 10 years in jail and fines of up to Rs 10 crore.
- ❖ The draft legislation also introduces provisions for time-bound investigations and mandatory fast-track court trials.

- ❖ As per the proposal, investigations into paper leak cases must be completed within three months.
- ❖ The existing law prescribes imprisonment of three to five years for individuals involved in paper leaks.
- ❖ Organised offences currently carry jail terms ranging from five to 10 years, along with a minimum fine of Rs 1 crore.
- ❖ The amendments are intended to deter organised criminal networks and institutions that profit from examination fraud, while ensuring that candidates are not penalised under the law.
- ❖ It aims to amend the Public Examinations (Prevention of Unfair Means) Act, 2024, strengthening the legal framework against examination fraud.
- ❖ The 2024 Act covers recruitment examinations conducted by agencies such as the UPSC and SSC, as well as major entrance examinations including NEET, JEE and CUET.
- ❖ The Public Examinations (Prevention of Unfair Means) Act, 2024 was the first central law specifically enacted to address paper leaks and organised examination malpractice after widespread concern over repeated exam irregularities.

INTERNATIONAL NEWS

Southeast Asia Blue Economy Crisis



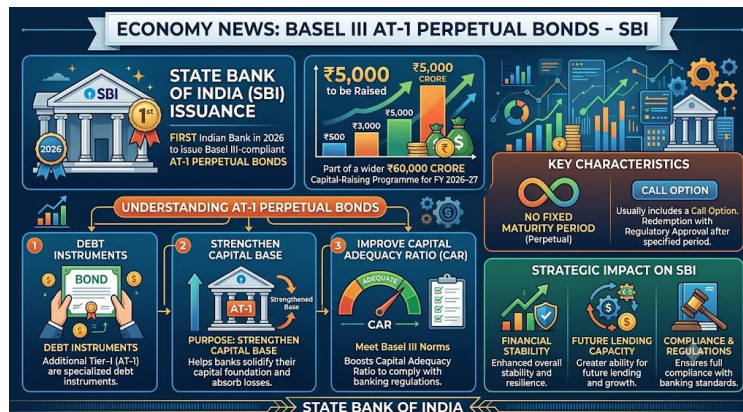
- ❖ A report by the Organisation for Economic Co-operation and Development (OECD) warned that Southeast Asia's blue economy is facing challenges due to funding shortages and environmental degradation.
- ❖ The region's ocean-based economy supports livelihoods through fisheries, aquaculture, shipping, tourism, and marine conservation activities.

- ❖ Overfishing, habitat destruction, pollution, and climate change are damaging marine ecosystems such as mangroves, coral reefs, and seagrass beds.
- ❖ Southeast Asia faces a financing gap of nearly \$2.1 trillion by 2030 for sustainable ocean management and climate adaptation.
- ❖ OECD recommended expanding blended finance, including blue bonds, blue carbon markets, debt-for-nature swaps, and sustainability-linked loans to support the blue economy.

ECONOMY NEWS

Basel III AT-1 Perpetual Bonds - SBI

- ❖ State Bank of India (SBI) is set to become the first Indian bank in 2026 to issue Basel III-compliant Additional Tier-I (AT-1) Perpetual Bonds.
- ❖ SBI plans to raise ₹5,000 crore through these bonds as part of its ₹60,000 crore capital-raising programme for Financial Year (FY) 2026–27.
- ❖ AT-1 Perpetual Bonds are debt instruments that help banks strengthen their capital base, improve Capital Adequacy Ratio (CAR), and meet Basel III norms.
- ❖ These bonds do not have a fixed maturity period but usually include a call option, allowing redemption after a specified period with regulatory approval.
- ❖ The issuance will support SBI's financial stability, future lending capacity, and compliance with banking regulations.

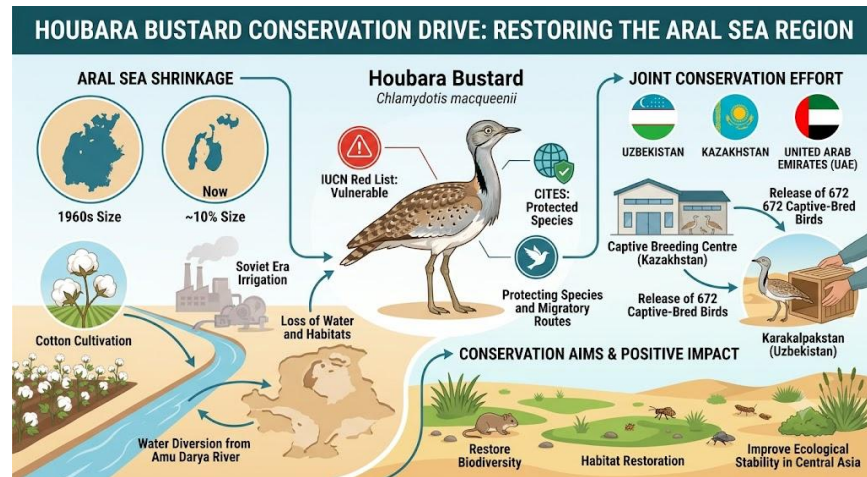


ENVIRONMENT NEWS

Houbara Bustard Conservation Drive

- ❖ Uzbekistan released 672 Houbara bustards (*Chlamydotis macqueenii*) in Karakalpakstan to restore biodiversity in the Aral Sea region.

- ❖ The Houbara bustard is classified as Vulnerable under the IUCN Red List and is protected under the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES).
- ❖ The birds were captive-bred at a specialised centre in Kazakhstan and released under a joint conservation effort by Uzbekistan, Kazakhstan and the United Arab Emirates (UAE).
- ❖ The Aral Sea has reduced to around 10% of its 1960s size due to diversion of water from the Amu Darya River for Soviet-era cotton cultivation.
- ❖ The conservation programme aims to restore habitats, protect migratory species and improve ecological stability in Central Asia.



Tigers Outside Tiger Reserves Initiative

- ❖ The Ministry of Environment, Forest and Climate Change (MoEFCC) has launched the Tigers Outside Tiger Reserves (TOTR) initiative to conserve tigers living outside protected areas and reduce human-tiger conflict.
- ❖ According to the National Tiger Conservation Authority (NTCA), 35–40% of India's tiger population now lives outside designated Tiger Reserves, making landscape-level conservation essential.
- ❖ The first phase will cover 40 forest divisions across nine States: Uttarakhand, Uttar Pradesh, Rajasthan, Madhya Pradesh, Maharashtra, Karnataka, Tamil Nadu, Telangana, and Assam.
- ❖ The initiative will strengthen early warning systems, rapid response teams, rescue infrastructure, camera traps, drones, Artificial Intelligence (AI), Global Positioning System (GPS)-based monitoring, community participation, and timely compensation.

- ❖ India has 58 Tiger Reserves covering 84,488 square kilometres, and the All-India Tiger Estimation (2022) recorded 3,682 tigers, accounting for over 70% of the world's wild tiger population.



Kawal Tiger Reserve



- ❖ The National Tiger Conservation Authority (NTCA) identified the Kawal Tiger Reserve in Telangana as a priority recipient site for tiger recovery.
- ❖ It currently lacks a resident breeding population despite having suitable dry deciduous forest habitat.
- ❖ Kawal has recorded no resident tiger in the All-India Tiger Estimation (AITE).
- ❖ Kawal Tiger Reserve connects the Central Indian Tiger Landscape with the Tadoba-Andhari (Maharashtra) and Indravati (Chhattisgarh) reserves.
- ❖ It is situated in northern Telangana along the Godavari and Kadam river basins.
- ❖ The recommendation is part of the 'Roadmap for Active Management of Tigers in India', released jointly by the NTCA and the Wildlife Institute of India.
- ❖ Kawal comprises tropical dry deciduous forests, teak-dominated woodlands, bamboo patches and riverine habitats.
- ❖ It occupies a strategic location between tiger populations in Central India and the Eastern Ghats.

World's top methane hotspots



- ❖ Greenhouse gas (GHG) emissions from paddy fields worldwide have doubled since the 1960s.
- ❖ The paddy fields around the world produced around 1.1 billion tonnes of carbon dioxide-equivalent (CO₂-e) emissions every year — a 90.4% increase from the annual emissions between 1961 and 1980.
- ❖ India's rice fields now rank among the world's top methane hotspots.
- ❖ It was exceeding Germany's total yearly methane emissions.
- ❖ And paddy fields in eastern India were among the global methane hotspots.

- ❖ Apart from soil organic carbon, methane from paddy fields was also a significant driver of emissions.
- ❖ Flooded fields develop low-oxygen conditions where methane-producing microbes thrive.
- ❖ India tops the list of countries on rice production, delivering 154 million tonnes in 2025-26.
- ❖ The area under paddy cultivation has also increased by around 25% since the 1970s, and currently covers 55% of India's rainfed harvested area.

PERSONALITIES, AWARDS, AND EVENTS

Fields Medal 2026



- ❖ The Fields Medal 2026, the highest honour in mathematics, was announced at the International Congress of Mathematicians (ICM) 2026 in Philadelphia, USA.
- ❖ The medal was awarded to Yu Deng (China), John Pardon (USA), Hong Wang (China), and Jacob Tsimerman (Canada) for major contributions to modern mathematics.
- ❖ Awarded every four years by the International Mathematical Union (IMU), it recognises mathematicians below 40 years of age.

- ❖ Hong Wang became the third woman to receive the Fields Medal after Maryam Mirzakhani (2014) and Maryna Viazovska (2022).
- ❖ The Fields Medal is popularly known as the “Nobel Prize of Mathematics” and carries a prize of 15,000 Canadian Dollars (CAD).

MISCELLANEOUS NEWS

Europe Wildfire Crisis



- ❖ France and Spain are facing one of their worst wildfire emergencies in decades, with more than 325,000 people evacuated from affected areas.
- ❖ The wildfires have been intensified by extreme heatwaves, prolonged dry weather, strong winds, and the effects of climate change, which have lengthened the wildfire season.
- ❖ Since January 2026, around 69,500 hectares of land have burned in France and nearly 150,000 hectares in Spain, including protected forests and nature reserves.
- ❖ The fires have destroyed forests, homes, transport infrastructure, and threatened vineyards and wildlife habitats, while causing deaths, injuries, and large-scale evacuations.
- ❖ The wildfire crisis has also spread to Italy, Scotland, and other Mediterranean countries, highlighting the increasing frequency and intensity of climate-related disasters in Europe.

