



December - 20

TNPSC BITS

- **❖** Tamil Nadu CM has unveiled the foundation stone for a non-leather footwear and athletic footwear products unit of Hong Fu Group in Ranipet district with an investment of ₹1,500 crore.
- Tamil Nadu Planning Commission's executive vice chairperson J. Jeyaranjan has submitted draft policies and reports prepared by the Commission to Chief Minister.
- ❖ The ICMR in collaboration with the Madras Diabetes Research Foundation (MDRF) has set up the country's first diabetes biobank in Chennai.
- ❖ The Republic of Moldova becomes the 121st member of the International Solar Alliance.
- ❖ Britain has officially become the First European Member and 12th member of Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP).
- ❖ The 22nd Divya Kala Mela under the theme 'Empowered Divyangjan' will be held at India Gate, Delhi.
- ❖ NHAI has launched a new Route Patrolling Vehicles (RPVs) named 'Rajmarg Saathi' to capture and identify cracks and potholes as well as other elements including vehicles, pedestrians, road signs, and other infrastructure assets.
- ❖ Uttarakhand is set to become a global yoga hub with India's first dedicated Yoga Policy.

TAMIL NADU

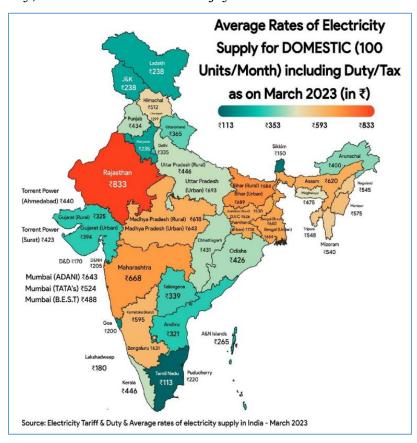
Lowest Domestic Electricity

- ❖ The average cost of electricity in Tamil Nadu, as of March 2023, stands at Rs 113 for 100 units.
- ❖ In comparison, the cost is much higher in other states Rs 643 in Maharashtra, Rs 833 in Rajasthan, Rs 618 in Madhya Pradesh, Rs 689 in Uttar Pradesh, Rs 654 in West Bengal, and Rs 426 in Odisha.
- ❖ Farmers in Tamil Nadu receive free electricity, including 2 lakhs agricultural pumpsets which are fully subsidised.
- ❖ The Powerloom weavers benefit from 1,000 free units of power, while handloom weavers are provided 300 free units every two months.





❖ Additionally, domestic consumers enjoy 100 free units of electricity.



Annual income for welfare schemes in 2024

நலத்திட்டங்களுக்கான ஆண்டு வருமான உச்சவரம்பு உயர்வு! பெண்கள், பெண் குழந்தைகளுக்காக செயல்படுத்தப்படும் நலத்திட்டங்களுக்கான குடும்ப ஆண்டு வருமான உச்சவரம்பு ரூ.72,000-லிருந்து ரூ.1,20,000ஆக உயர்வு. - தமிழ்நாடு அரசு அரசாணை வெளியீடு!

❖ The Department of Social Welfare and Women Empowerment of Tamilnadu has officially increased the annual income ceiling of families from Rs 72,000 to Rs 1.20 lakh.





- ❖ Due to the change in economic status, the per capita income and standard of living in Tamil Nadu have registered a rise.
- ❖ There will be an overall surge in beneficiaries for these schemes as the income ceiling has been revised.
- ❖ The department constantly revised the annual income ceiling from Rs 12,000 in 1993 to Rs 24,000 in 2008.
- ❖ Further, in 2012, the ceiling was revised from Rs 24,000 to Rs 40,000 in rural areas and to Rs 60,000 in urban regions.
- ❖ However, the last revision of the income ceiling was made in 2014, raising it to Rs 72,000.

NATIONAL

India's Water Resources Assessment 2024



- ❖ The Central Water Commission (CWC) has released its study titled 'Assessment of Water Resources of India 2024'.
- ❖ It has estimated that India's average annual water availability, between 1985 and 2023, stood at 2,115.95 billion cubic meters (BCM).
- ❖ Brahmaputra (592.32 BCM), Ganga (581.75 BCM), and Godavari (129.17 BCM) were the top three basins with the highest water availability across the country.





- ❖ Sabarmati (9.87 BCM), Pennar (10.42 BCM), and Mahi (13.03 BCM) were bottom three basins in terms of water availability.
- ❖ The average annual per capita water availability for the year 2024 is 1,513 cubic meters.

India's Atomic Power Capacity 2024

- ❖ India's nuclear power generation capacity has nearly doubled in the last 10 years from 4,780 MW in 2014 to 8,180 MW in 2024.
- ❖ The capacity is projected to triple to 22,480 MW by 2031-32.
- ❖ The revision of India's power distribution framework has increased the home state's share of electricity from atomic plants to 50 per cent.
- ❖ 35 per cent is given to neighbouring states, and 15 per cent to the national grid.



INTERNATIONAL

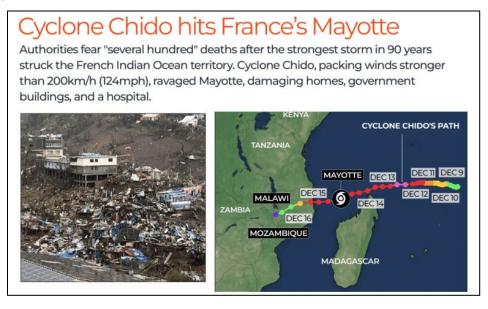
Cyclone Chido

- ❖ The most powerful cyclone in nearly a century has hit the French Indian Ocean archipelago of Mayotte.
- ❖ France colonised Mayotte in 1843 and annexed the whole archipelago, including Comoros, in 1904.





- ❖ In a 1974 referendum, 95% backed separation but 63% on Mayotte voted to stay French.
- ❖ Grande Comore, Anjouan and Moheli declared independence in 1975.
- ❖ Mayotte is still ruled from Paris.



Visa-Free Travel for Indian Tourists



- ❖ By March 2025, Indian tourists may be able to explore Russia without needing a visa.
- ❖ Both held talks about a bilateral agreement to ease visa rules, aiming to introduce visa-free group tourist exchanges.

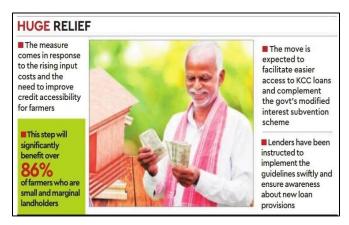




- ❖ In August 2023, Indian travellers became eligible for e-visas to Russia, which are typically processed within four days.
- ❖ In 2023, India was one of the top five countries receiving e-visas, with around 9,500 issued to Indian citizens, making up 6% of the total.
- ❖ In 2023, over 60,000 Indians visited Moscow, a 26% increase from 2022.
- ❖ By early 2024, India was ranked at third among non-CIS countries for business tourism, with nearly 1,700 e-visas issued in the first quarter alone.
- Currently, Russia allows citizens from China and Iran to enter without a visa as part of a visa-free tourist exchange program.
- ❖ Indian passport holders currently have visa-free access to 62 countries.

ECONOMY

Collateral-Free Loan Limit for Farmers



- RBI instructs banks nationwide to waive collateral and margin requirements for agricultural and allied activity loans up to ₹2 lakh per borrower.
- ❖ The existing loan limit of ₹1.6 lakh per borrower has been raised to ₹2 lakh, effective from January 1, 2025.
- ❖ This measure will significantly benefit over 86% of the farmers who are small and marginal landholders.

SCIENCE AND TECHNOLOGY

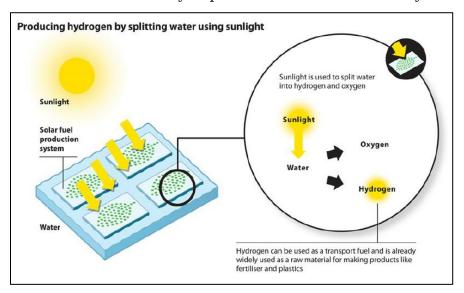
Hydrogen Fuel Production Using Water and Sunlight

- ❖ Japan Researchers utilizes water and sunlight and employs a special reactor with photocatalytic sheets, to split water molecules into hydrogen and oxygen.
- ❖ It aims to create renewable hydrogen fuel without releasing greenhouse gases.





- ❖ This method currently operates at only 1% efficiency.
- ❖ This is below the 5% efficiency required for commercial viability.



ENVIRONMENT

Outcomes of UNCCD COP 16

- ❖ The UN Convention to Combat the Desertification (UNCCD)'s COP16 summit was concluded without an agreement to tackle drought in Riyadh, Saudi Arabia.
- ❖ It was the first time a UNCCD COP was held in the Middle East and North Africa (MENA) region.
- ❖ More than \$12 billion were pledged to tackle the desertification, land degradation and drought around the world, especially in the most vulnerable countries.
- ❖ A prototype of the International Drought Resilience Observatory was launched.
- ❖ It is the first ever global AI-driven platform to help countries assess and enhance their capacity to cope with harsher droughts.
- ❖ The Riyadh Global Drought Resilience Partnership has attracted \$12.15 billion to support 80 of the world's most vulnerable countries in building their resilience to drought.
- ❖ African-led Great Green Wall (GGW) initiative to restore 100 million hectares of degraded land mobilised mass funds from various countries.
- ❖ The US and other partner countries and organisations have announced a total investment of nearly \$70 million to advance the Vision for Adapted Crops and Soils (VACS).





- ❖ The UNCCD was adopted in Paris on June 17, 1994 and entered into force on December 26, 1996.
- ❖ It is the only legally binding framework set up to address desertification and the effects of drought.
- ❖ There are 197 Parties to the Convention, including 196 country Parties and the European Union.



World's Most Toxic Plant



❖ The Gympie-Gympie, scientifically known as the Dendrocnide moroides, has been considered the most toxic plant globally.





- ❖ It is primarily found in the rainforest areas of Australasia, the Moluccas, and Indonesia.
- It has a leafy bush with a heart-shaped foliage.
- ❖ The plant has hair-like needles all over its body, filled with powerful neurotoxin.

REPORTS AND INDICES

UN Report on Land Degradation 2024

LAND DEGRADATION IN NUMBERS		
60%: Remaining global forest cover — well below the safe	expansion and poorly planned afforestation.	since 2015 attributed to climate change
boundary of 75%.	46%: Global land area classified as drylands,	25%: Share of biodi- versity found in soil
15 MN SQ KM: Degraded land area, more	home to a third of humanity	50%+: World's major
than the size of Ant-		rivers disrupted by
arctica, expanding by 1 mn sq km annually.	90%: Share of recent deforestation directly	dam construction
20%: Earth's land	caused by agriculture.	47%: Aquifers being depleted faster than
surface covered by the savanna, now under	20%: Decline in trees' and soil's CO2	they are replenished
threat from cropland	absorption capacity	Source: UNCCD report

- ❖ 77.6 per cent of the Earth's land likely became permanently drier in the three decades leading up to 2020, compared to the previous 30-year period (1961-1990).
- ❖ Drylands are expanded by about 4.3 million km2 an area nearly a third larger than India, and now cover 40.6% of all land on Earth (excluding Antarctica).
- ❖ Currently, 2.3 billion people inhabit the drylands, this number could rise to five billion by 2100.
- ❖ Asia is home to 1.35 billion dryland inhabitants, more than half the global total.
- China, India and Pakistan together account for about 50 per cent of the global dryland population.
- ❖ Meanwhile, nearly half of Africa's population (620 million people) also lives in these arid regions.





- ❖ Between 1990 and 2015, African nations recorded a 12 per cent decline in gross domestic product (GDP) due to aridity.
- ❖ Among Asian nations, aridification was considered responsible for a 2.7 per cent GDP drop over the same period.

STATES

Birhor tribe against child marriage



- ❖ The Birhor tribe, a PVTG in Jharkhand, have joined a movement against child marriage in Giridih for the first time.
- ❖ Birhor people are forest-dependent, belong to a semi-nomadic tribal community and are economically and socially much behind others.
- Children's rights protection body Just Rights for Children Alliance (JRC), NGO coordinating these activities.

