

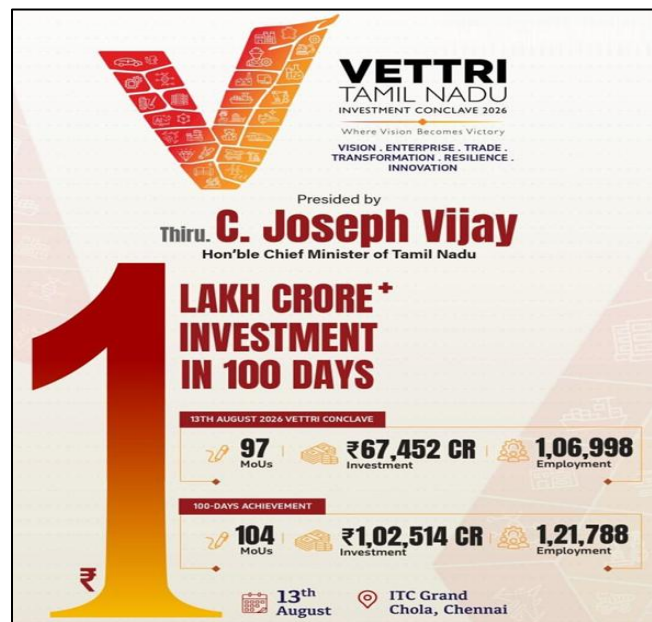
August - 16

TNPSC BITS

- ❖ CSIR-IICT (Council of Scientific and Industrial Research–Indian Institute of Chemical Technology), Hyderabad, developed a plant-based Investigational New Drug (IND)-ready candidate using *Gymnema sylvestre* for diabetic foot ulcers.
- ❖ K. Jayalakshmi, a 58-year-old woman from Chennai, became the first woman with a disability from Tamil Nadu to reach the Mount Everest Base Camp.
- ❖ The Perseid meteor shower peaked around 12 August 2026, with the new moon providing dark skies for better visibility; it is caused by debris from Comet 109P/Swift-Tuttle and appears to radiate from the Perseus constellation.
- ❖ International Left-Handers Day is observed every year on August 13 to celebrate left-handed people and raise awareness of the challenges they face.
- ❖ World Organ Donation Day is observed every year on August 13 to raise awareness about the importance of organ donation, clear misconceptions and encourage people to donate organs to help save lives.

TAMIL NADU NEWS

Tamil Nadu Investment Conclave 2026



- ❖ Tamil Nadu signed 97 Memoranda of Understanding (MoUs) worth over ₹67,542 crore at the State's first major investment conclave.

- ❖ The projects are expected to be implemented within six months to one year and are expected to generate investment and employment across the State.
- ❖ Titan will invest ₹1,000 crore in Hosur to expand watch, jewellery and electronics automation facilities, creating about 1,200 jobs.
- ❖ Hinduja Group will invest ₹2,500 crore, including a 200-megawatt renewable energy project using solar, wind and battery technologies.
- ❖ Saint-Gobain will invest ₹2,000 crore in a new plant in Krishnagiri and expand its facility in Kancheepuram.
- ❖ Agnikul Cosmos and Skyroot Aerospace will invest ₹400 crore and ₹250 crore, respectively, in space-sector facilities in Thoothukudi.

NATIONAL NEWS

Mines and Minerals Amendment Bill 2026

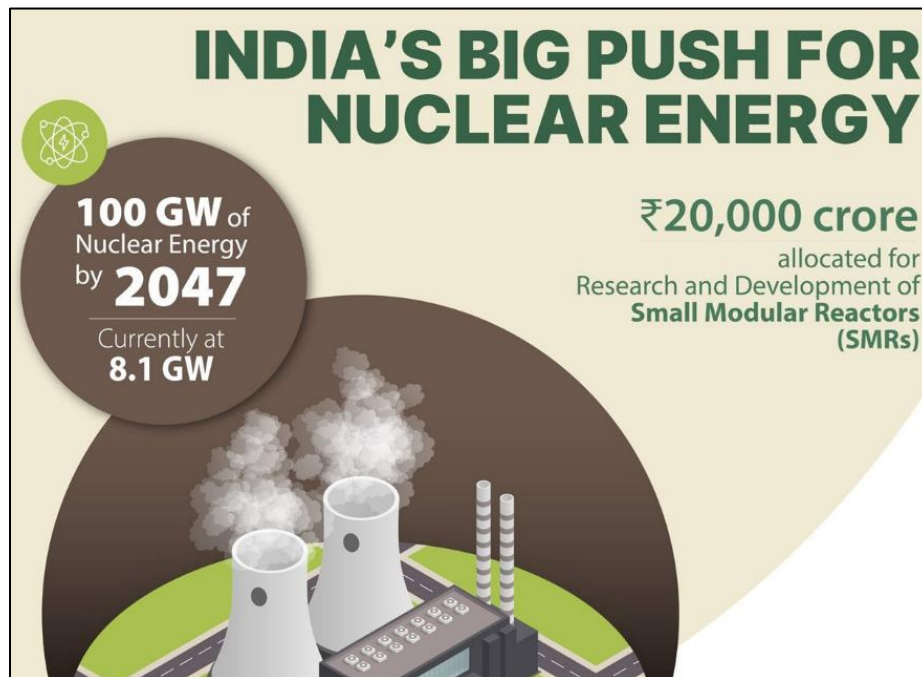
Parliament has passed the Mines and Minerals Amendment Bill, 2026, changing how states can tax mineral rights and mineral-bearing land. Under the new framework, states cannot impose new taxes, cesses, other levies on minerals freely. Such charges will now have to follow conditions or restrictions set by the Central government.



- ❖ Parliament passed the Mines and Minerals (Development and Regulation) Amendment Bill, 2026, which restricts States' powers to levy taxes on mineral rights and mineral-rich lands.
- ❖ The Lok Sabha passed the Bill on August 12, while the Rajya Sabha cleared it on August 13, 2026; the government rejected demands to refer it to a Parliamentary Committee.

- ❖ The Bill seeks to regulate major minerals such as coal, limestone, iron ore, copper and manganese, while States will continue to have powers over 49 minor minerals.
- ❖ The Centre said the move aims to ensure uniform mineral rates across India and maintain central control over key minerals needed for industries.
- ❖ According to the government, States' share of overall mineral revenue has increased from 65% in 2014–15 to 85%, while their share of coal revenue rose from 51% to 96%.
- ❖ The government stated that the Centre receives about 11% of mineral revenue, while around 88% goes to States, and claimed that no State would suffer revenue loss due to the amendment.

India's Nuclear Energy Roadmap



- ❖ India aims to achieve 100 GWe (Gigawatt electric) nuclear capacity by 2047 under the Nuclear Energy Mission.
- ❖ The government plans to develop at least five indigenous Small Modular Reactors (SMRs) by 2033, supported by ₹20,000 crore.
- ❖ The Bhabha Atomic Research Centre (BARC) is developing indigenous reactors, including the 220 MWe (Megawatt electric) Bharat SMR and 55 MWe SMR-55.
- ❖ The SHANTI Act (Sustainable Harnessing and Advancement of Nuclear Energy for Transforming India Act) provides the legal framework for private participation and up to 49% foreign direct investment.



- ❖ BARC is transferring SMR technology to Indian industries to support domestic manufacturing.

FCRA Bill Under JPC Review

- ❖ The Foreign Contribution (Regulation) Amendment Bill, 2026 was referred to a Joint Parliamentary Committee (JPC) by the Lok Sabha on August 12, 2026.
- ❖ A JPC includes members from both the Lok Sabha and Rajya Sabha and examines a specific Bill or issue in detail.
- ❖ It can call witnesses, examine documents and suggest changes, but its recommendations are not binding on the government.
- ❖ Parliamentary committees help examine complex legislation through detailed scrutiny and stakeholder consultation.
- ❖ About 60% of Bills were referred to committees in the 14th Lok Sabha (2004–09), but this fell to about 16% in the 17th Lok Sabha (2019–24).

FCRA Bill sent to Joint Parliamentary Committee amid Opposition protest

The motion to refer the Foreign Contribution (Regulation) Amendment Bill, 2026 to a JPC was moved by Union Minister of State for Home Affairs Nityanand Rai.

India's Lead in Coal Pipeline

- ❖ Global coal mine proposals increased 11% to 2,521 million tonnes per annum (Mtpa) in 2025, according to the Global Coal Mine Tracker (GCMT) by Global Energy Monitor (GEM).
- ❖ India nearly doubled its proposed capacity from 329 Mtpa to 638 Mtpa, while China remained the largest with 1,321 Mtpa.
- ❖ China, India, Australia, Russia and South Africa together account for about 92% of the proposed global coal mining capacity.
- ❖ About 70% of proposed capacity is still at the pre-construction or approved-but-not-started stage, while only 113 Mtpa of new capacity became operational in 2025.

- ❖ India's proposed capacity is dominated by thermal coal, with about 603 Mtpa, accounting for 94% of its domestic pipeline.



India's largest supplier of LPG in 2026



- ❖ U.S. accounts for 67% of India's LPG imports.
- ❖ The shift follows an earlier government decision to source roughly 10% of India's LPG requirements from the U.S. as part of a broader effort to diversify energy supplies.
- ❖ Before the conflict broke out in West Asia, India imported nearly 60% of its requirement of the bottled hydrocarbon gas, of which approximately 90% came via the Strait of Hormuz.

- ❖ India has also increased domestic LPG production to offset lower imports from Gulf suppliers.
- ❖ India also expanded its crude supply sources from 27 to 41 countries.
- ❖ The government has also recently approved Rs 84,000 crore Samudra Manthan programme aimed at supporting deepwater oil and gas exploration.

National security guidelines



- ❖ The Ministry of Home Affairs (MHA) has issued new national security guidelines.
- ❖ It was introducing a blanket ban on projects like solar, wind and hybrid renewable energy projects within 1 km of the international border and mandating security clearance for projects located up to 50 km away.
- ❖ The border areas include Line of Control (LoC), Line of Actual Control (LAC) and the International Border (IB).
- ❖ Projects proposed within 20 km of the LoC, LAC and IB will also require a separate No Objection Certificate (NOC) from the Ministry of Defence.
- ❖ Applications for all renewable energy projects will be submitted only to the Ministry of New and Renewable Energy (MNRE).
- ❖ The guidelines impose restrictions on foreign participation and staffing.
- ❖ It was stating that the applicants should not engage engineers, staff, employees, labour from Pakistan, Bangladesh and China without the MHA's permission.

- ❖ Existing renewable energy projects near the LAC are mostly small-scale in nature, while those near the IB in Rajasthan and Gujarat are relatively large.
- ❖ In Jammu and Kashmir, along the LoC, most projects are solar rooftop installations, while Kargil and Ladakh have solar photovoltaic projects.

INTERNATIONAL NEWS

First Indian Gasoline Shipment – Russia

- ❖ Russia has imported gasoline from India for the first time as Ukrainian strikes on Russian oil refineries have reduced domestic fuel production.
- ❖ Ukrainian strikes have reduced Russia's refining capacity, forcing it to restrict fuel exports and seek gasoline from countries including India and Belarus.
- ❖ The first shipment of around 42,000 tonnes of gasoline was supplied by Nayara Energy from its Vadinar refinery in Gujarat and reached Russia.
- ❖ The fuel was transferred between tankers at Damietta, Egypt, before being transported to Russia.
- ❖ Russia's crude processing fell to about 3.6 million barrels per day in July, around one-third below its normal seasonal level.

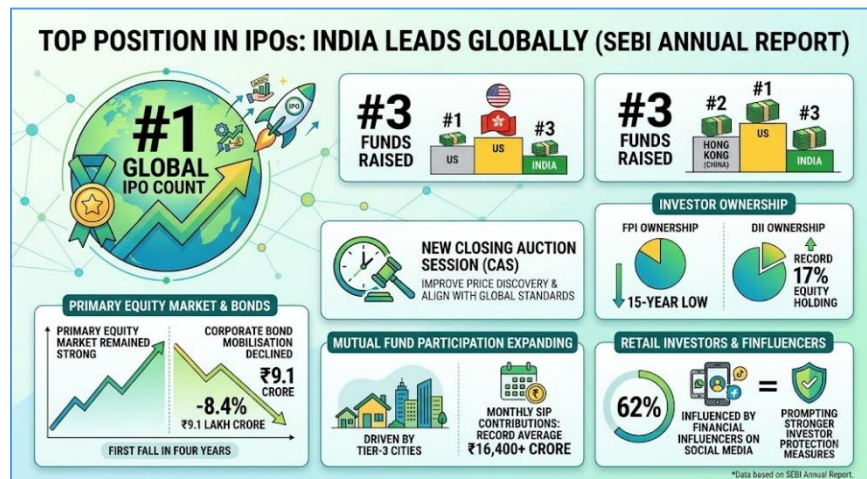


ECONOMY NEWS

Top position in IPOs

- ❖ India is retaining the top position globally in the number of Initial Public Offerings (IPO).

- ❖ It is also ranking third in funds raised after major primary markets of United States and Hong Kong (China).
- ❖ According to SEBI's Annual Report, the primary equity market remained strong even as corporate bond mobilisation declined by 8.4 per cent to ₹9.1 lakh crore rupees, marking the first fall in four years.
- ❖ SEBI also introduced a new Closing Auction Session (CAS) to improve price discovery and align India's markets with global standards.
- ❖ The report noted that foreign portfolio investor (FPI) ownership fell to a 15-year low, while domestic institutional investors (DII) reached a record 17 per cent equity holding by March 2026.
- ❖ Mutual fund participation continued to expand, driven largely by Tier-3 cities, with monthly SIP contributions touching a record average of over 16,400 crore rupees.
- ❖ It also said, 62 per cent of retail investors are influenced by financial influencers on social media, prompting stronger investor protection measures.

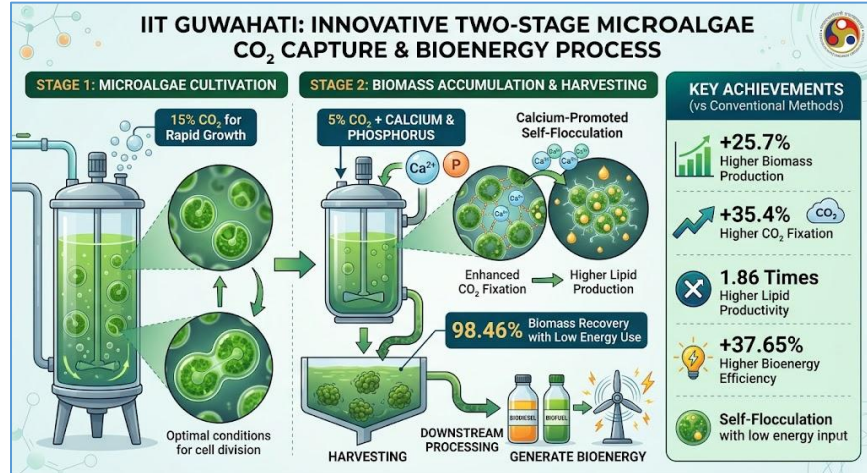


SCIENCE AND TECHNOLOGY NEWS

CO₂ Capture Process - IIT Guwahati

- ❖ IIT Guwahati has developed a two-stage microalgae process to capture carbon dioxide (CO₂), produce biomass and generate bioenergy.
- ❖ The first stage uses 15% CO₂ for rapid microalgal growth, while the second uses 5% CO₂ with calcium and phosphorus.
- ❖ The process achieved 25.7% higher biomass production and 35.4% higher CO₂ fixation than conventional methods.

- ❖ It also recorded 1.86 times higher lipid productivity and 37.65% higher bioenergy efficiency.
- ❖ Calcium promoted self-flocculation, helping recover 98.46% of the microalgal biomass with low energy use.



ENVIRONMENT NEWS

Kaziranga ESZ Reduction



- ❖ The Assam government plans to reduce the Eco-Sensitive Zone (ESZ) around Kaziranga National Park and Tiger Reserve (KNPTR) from 10 km to 1 km, in line with Supreme Court guidelines.
- ❖ The Supreme Court (SC) had ordered in June 2022 that an ESZ of at least 1 km should be declared around protected forests, national parks and wildlife sanctuaries.

- ❖ In April 2023, the SC modified the order, saying a uniform 1-km rule could affect local activities and increase human-wildlife conflict, but mining within 1 km of protected areas remained prohibited.
- ❖ The proposed reduction is intended to facilitate development activities around Kaziranga, including construction projects.
- ❖ Kaziranga National Park is a UNESCO World Heritage Site and an important habitat of the endangered one-horned rhinoceros.
- ❖ The Assam government will send a proposal to the Central Government for reducing the ESZ to 1 km.

CBD SBI-7 Meeting

- ❖ The 7th meeting of the Subsidiary Body on Implementation (SBI 7) of the Convention on Biological Diversity (CBD) was held in Nairobi, Kenya, from 4–12 August 2026.
- ❖ SBI reviews progress in implementing the Convention on Biological Diversity (CBD), its protocols and the Kunming-Montreal Global Biodiversity Framework (GBF).
- ❖ The meeting considered the global midterm review of the GBF and prepared recommendations for the 17th Conference of the Parties (COP17).
- ❖ Key issues included resource mobilisation, capacity-building, synthetic biology, protected areas and participation of subnational governments.
- ❖ Its recommendations will help shape biodiversity negotiations at CBD COP17 in Yerevan, Armenia, in October 2026.



India's First High-Altitude Wildlife Safari

- ❖ Ladakh has announced India's first-ever Altitude Wildlife Safari in the region.

- ❖ The Snow Leopard and High-Altitude Nature (SHAN) Conservation Society, chaired by the lieutenant governor, is figuring out possible safari routes in the region.
- ❖ Hemis National Park, Changthang Valley, and Karakoram wildlife sanctuaries and landscapes such as Drass, Nubra, and Sham are included in the list.
- ❖ SHAN, formed on 16 June, is encouraging responsible and plastic-free tourism across Ladakh.
- ❖ With this step, the Ladakh government seeks to curb off roading incidents and disturbance to wildlife.
- ❖ It is the First govt model where local communities will be made equal partners in protecting and promoting Ladakh's wildlife and benefiting economically.
- ❖ India is home to 718 snow leopards, spread across the Himalayas.
- ❖ The mountains of Ladakh are home to 477 of them, followed by Uttarakhand (124) and Himachal Pradesh (51).



Notified Natural Calamities update

- ❖ India has added heatwaves and lightning to its list of notified natural disasters.
- ❖ The Union Ministry of Home Affairs issued operational guidelines for the administration of the State Disaster Response Fund (SDRF) and the National Disaster Response Fund (NDRF) for 2026-31.



- ❖ Thus, India officially recognizes 14 national disasters as notified.
- ❖ It is making states eligible for financial assistance under the Disaster Management Act, 2005.
- ❖ The decision follows recommendations by the 16th Finance Commission and comes amid rising concern over extreme weather linked to climate change.
- ❖ States can now draw on State Disaster Response Fund and mitigation funds for heatwave and lightning-related relief, with the National Disaster Response Fund available when state funds are inadequate.
- ❖ Until now, heatwaves were excluded from the Disaster Management Act's notified disaster list.
- ❖ That covered only 12 categories: cyclone, drought, earthquake, fire, flood, tsunami, hailstorm, landslide, avalanche, cloudburst, pest attack, and frost/cold wave.
- ❖ Earlier, states had to notify heatwaves at the state level and could spend only up to 10 per cent of their annual SDRF allocation for heatwave relief.
- ❖ Now, with the new notification, states can draw on the full state disaster response and mitigation funds and the national fund also becomes available when state funds are inadequate to deal with a disaster.
- ❖ The Ministry of Health and Family Welfare (MoHFW) is implementing heat-health interventions through the National Programme on Climate Change & Human Health (NPCCHH) in accordance with the National Action Plan on Heat-Related Illness (NAPHRI).
- ❖ Additionally, the National Heat-Related Illness and Death Surveillance (NHRIDS) has been activated for over 51,000 reporting units across the country, which includes all Primary Health Centres (PHCs) and higher-level hospitals.
- ❖ SDRF - States use the State Disaster Response Fund for fast, local help.
- ❖ NDRF - The central government gives extra money from the National Disaster Response Fund if local funds are not enough.
- ❖ Both are established under the Disaster Management Act, 2005, replacing the old National Calamity Contingency Fund in 2010.
- ❖ It is financed entirely by the Central Government, primarily through specific cesses and duties.
- ❖ It is kept in the Public Account of India under non-interest-bearing reserve funds, allowing quick access without extra parliamentary approval.
- ❖ The State Disaster Response Fund (SDRF) is the primary fund available with State Governments for responses to notified disasters.

- ❖ The Central Government contributes 75% of SDRF allocation for general category States/UTs and 90% for special category States/UTs (NE States, Sikkim, Uttarakhand, Himachal Pradesh, Jammu and Kashmir).
- ❖ SDRF shall be used only for meeting the expenditure for providing immediate relief to the victims
- ❖ It does not act as property or crop loss compensation.
- ❖ The National Disaster Response Fund (NDRF) supplements SDRF of a State, in case of a disaster of severe nature, provided adequate funds are not available in SDRF.

Heatwaves are now a notified natural disaster in India

World's first-ever release of captive-bred slender-billed vultures



- ❖ Assam records world's first-ever release of captive-bred slender-billed vultures (*Gyps tenuirostris*).



- ❖ Five slender-billed vultures bred in captivity at the Bombay Natural History Society (BNHS)'s conservation facility in Assam.
- ❖ These were released at the Jatayu Soft Release Centre in the Biswanath Division of Kaziranga National Park and Tiger Reserve.
- ❖ The population of Gyps vultures in India has declined by 99% over the last 20 years due to the use of veterinary painkillers.
- ❖ Although the Centre banned four such drugs—diclofenac, aceclofenac, ketoprofen, and nimesulide—pesticide poisoning remains a threat to vultures in Assam.
- ❖ The slender-billed vulture is an Old-World vulture species native to sub-Himalayan regions and Southeast Asia.
- ❖ It is Critically Endangered since 2002 as the population on the Indian subcontinent has declined rapidly.
- ❖ It is used to be the Indian vulture, under the name of "long-billed vulture".
- ❖ But, the Indian vulture is found only to the south of the Ganges and breeds on cliffs while the slender-billed vulture is found along and nests in trees.
- ❖ The slender-billed vulture is found in India from the Gangetic plain north, west to Himachal Pradesh, south potentially as far as northern Odisha, and east through Assam.
- ❖ They typically are sedentary birds, and do not tend to travel large distances nor migrate for any reason.
- ❖ Bombay Natural History Society (BNHS), founded in 1883, is one of the largest non-governmental organisations in India engaged in conservation and biodiversity research.
- ❖ The Asian waterbird census is an annual exercise undertaken in India by Bombay Natural History Society in association with Wetlands International.
- ❖ The exercise is a part of 'International waterbird census', an international exercise.
- ❖ BNHS is the partner of BirdLife International in India.
- ❖ BirdLife International is a global partnership of non-governmental organizations that strives to conserve birds and their habitats.
- ❖ It is the official International Union for Conservation of Nature's Red List authority for birds.
- ❖ BirdLife International has nine conservation programmes implemented across Africa, the Americas, Asia, Europe and Central Asia, the Middle East and the Pacific.

- ❖ It includes the Important Bird and Biodiversity Areas Programme, Marine Programme, Preventing Extinctions Programme, and Flyways Programme.
- ❖ Wetlands International is a global organisation that works to sustain and restore wetlands and their resources for people and biodiversity.
- ❖ It is an independent, not-for-profit, global organisation, supported by government and NGO membership from around the world.

REPORTS AND INDICES

NITI Aayog School Education Index 2026

- ❖ Punjab has overtaken Kerala to rank No. 1 in the NITI Aayog School Education Quality Index 2026.
- ❖ It was developed by NITI Aayog to assess the performance of States and Union Territories in the school education sector.
- ❖ This index uses 30 indicators covering access, infrastructure, equity, governance, and learning outcomes.

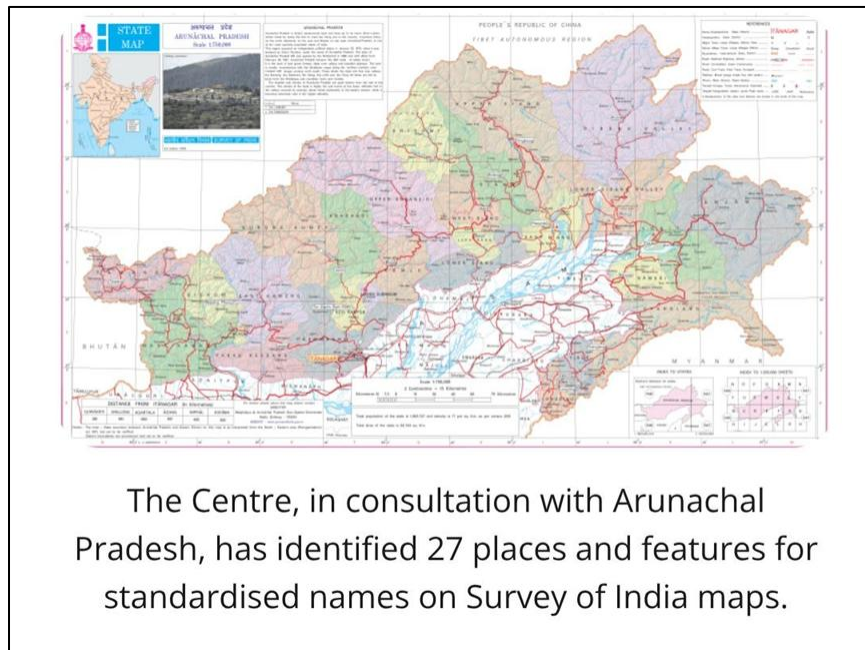


STATE NEWS

27 places in Arunachal Pradesh

- ❖ India officially updated the Survey of India map, to formally identify and mark 27 key locations and geographical features in Arunachal Pradesh with their standard Indian names.
- ❖ It was a move that comes amid repeated attempts by China to rename places in the border state.
- ❖ These are including land, passes, a lake and a monument.
- ❖ It also includes Long Ju located along the Line of Actual Control.

- ❖ It was one of the earliest flashpoints between India and China in 1959 when Chinese forces entered the area.
- ❖ The list also includes Bisa village, a strategically important high-altitude mountain pass in the region, Dzo La, Riza La, and Pukur La.
- ❖ One of the most strategically important high-altitude passes, Thag La, where one of the opening battles between Indian and Chinese forces took place in 1962, has also been formally identified on the official map.
- ❖ Jairampur, an important logistics hub in Changlang district, is known as the gateway to the eastern border region supporting movements of security forces towards eastern Arunachal and the Myanmar frontier.
- ❖ India has repeatedly described the Chinese renaming exercise as "vain and preposterous".
- ❖ And India asserted that it will not change the "undeniable" reality that Arunachal Pradesh "was, is, and will" remain an integral part of India.



Fourth India Cloud Region in Hyderabad

- ❖ Microsoft opens its largest India data centre in Hyderabad.
- ❖ Azure cloud business is run by Microsoft.
- ❖ It was strengthening its AI infrastructure as it competes with Google and Amazon for a larger share of the country's fast-growing cloud market.
- ❖ The facility expands Microsoft's cloud footprint in India to four regions, alongside its existing data centres in Pune, Chennai and Mumbai.

- ❖ Thus, it was making it the country's largest cloud infrastructure provider.
- ❖ Cloud infrastructure has become the backbone of AI services.
- ❖ India's data centre sector is entering a more mature phase, driven by sustained cloud adoption, AI-led computing demand and rapid enterprise digitalisation.
- ❖ AWS, Microsoft and Oracle are expanding through owned cloud regions and colocation partnerships.

