



May - 03

TNPSC BITS

- Inland Waterways Authority of India (IWAI) reported a record cargo movement of 145.5 million tonnes in the fiscal year 2024-25.
- ISRO has assumed the lead role of the "International Charter Space and Major Disasters" for six months from April 2025
- The European Commission has fined for first time Apple and Meta 500 million euros (\$568 million) and 200 million euros (\$227 million), respectively, for violating the Digital Markets Act (DMA).
- ◆ Under the Swachh Bharat Mission-Urban, Ghaziabad successfully issued India's first Certified Green Municipal Bond to raise ₹150 crore for the development of a cutting-edge Tertiary Sewage Treatment Plant (TSTP).
- India has organised the first-ever Capacity Building Programme for Central Asian Republics (CARs) on 'Countering the Financing of Terrorism (CFT) through Crypto currencies, Crowdfunding, and Non-Profit Organisations'.
 - It has brought some experts from five Central Asian countries Uzbekistan, Turkmenistan, Kazakhstan, Tajikistan, and Kyrgyzstan.



NATIONAL NEWS

The Sub-committee on Accreditation (SCA) of the Global Alliance of the National Human Rights Institutions (GANHRI) recommending the National Human Rights Commission (NHRC) of India be downgraded to B status.





- The Indian NHRC will now share its B grade with the National Human Rights Institutions of countries like Bangladesh, Libya, Bahrain and Turkey.
- In simple terms, this means the NHRC of India, cannot speak, submit documents officially, or vote at the United Nations Human Rights Council when the very recommendation becomes final.
- ✤ In 2016, the NHRC's A-grade accreditation was deferred by the GANHRI's Sub-Committee on Accreditation ('SCA') for the first time.
- ◆ In 2023, the SCA deferred accreditation of NHRC for the second time.



SBaaS by IN-SPACe

- The Indian National Space Promotion and Authorization Centre (IN-SPACe), the commercial arm of ISRO, launched the Satellite Bus as a Service (SBaaS) initiative.
- ✤ It aims to promote private sector participation in satellite development.
- It will create the modular small satellite platforms designed by the Indian nongovernmental entities (NGEs) to host payload applications.

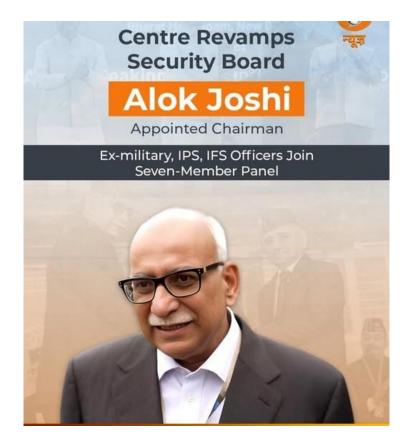




The SBaaS model will ease access to flight-ready satellite platforms for startups and private players.

National Security Advisory Board 2025

- The Union government has now revamped the National Security Advisory Board (NSAB).
- It also appointed the former RAW chief Alok Joshi as its new head, along with six other members.
- The NSAB is a seven-member apex body that provides inputs to the National Security Council Secretariat.
- This reconstituting decision was taken by the Cabinet Committee on Security chaired by Prime Minister of India.
- ✤ This effectively sees half (8) of the 16 member-board reconstituted.



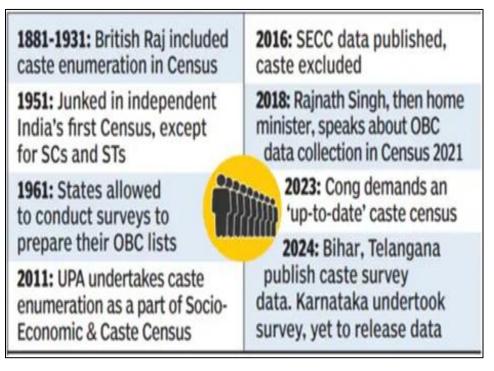
Caste Census update 2025

The Cabinet Committee on Political Affairs (CCPA), headed by the Prime Minister, has approved caste enumeration in the forthcoming population census.





- Every Census in independent India from 1951 to 2011 has published data on Scheduled Castes and Scheduled Tribes, but not on other castes.
- ✤ Before that, every Census until 1931 had data on caste.
- However, in 1941, caste-based data was collected but not published.
- ✤ The Mandal Commission estimated the OBC population at 52%.
- ✤ As per Article 246 of the Constitution of India, the subject of Census is listed at number 69 in the Union List of the Seventh Schedule, making it a Union subject.
- ✤ In 2022, Bihar became the first state in the independent India to successfully enumerate all castes.
- ✤ Later, Karnataka and Telangana have also undertaken the caste census.



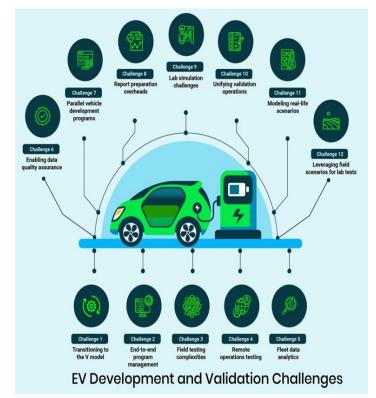
EVolutionS Program

- The Department of Science and Technology (DST) in India has launched the 'Electric Vehicle Solutions led by Startups (EVolutionS)' program.
- This important initiative aims to boost the manufacturing of electric vehicle (EV) components within the country.
- The focus is on assisting startups in transitioning their innovative prototypes into commercially viable products.
- It applicable to electric 2-, 3-, and 4-wheelers, including e-rickshaws (L5), e-carts, and e-buses.





◆ ₹50 lakh will be funded to each selected startup including ₹30 lakh as equitylinked instruments.



2025 Special 301 Report on India



The US has placed India on its 'Priority Watch List', citing concerns over India's intellectual property rights (IPR) protection and enforcement.





- The United States Trade Representative (USTR), in its latest report, dubbed India "one of the most challenging major economies when it comes to the protection and enforcement of intellectual property (IP)".
- The report even called India the world's most "challenging major economies" when it comes to IP enforcement.
- It evaluates over 100 trading partners and identifies those that don't meet the US standards for protecting intellectual property rights.
- India and the US are currently negotiating a bilateral trade deal which aimed at increasing two-way trade to \$500 billion by 2030.
- The pact is also expected to help the US reduce its trade deficit with India, which stood at \$41.18 billion in 2024–25.

INTERNATIONAL NEWS

Bolivia's "zombie" volcano – Uturuncu



 Researchers have solved the mystery on why a dormant volcano in South America has displayed possible signs of an eruption for decades.





- The Uturuncu, a dormant volcano located in the Andes mountains in Bolivia, has not erupted in 250,000 years.
- Since the 1990s, the ground around Uturuncu has appeared to deform in a "sombrero" pattern, with the land in the center of the volcanic system rising up and surrounding areas sinking down
- Over the last 50 years, the central rising was measured at uplifting rates up to 0.4 inches per year.
- The Researchers determined that the rumblings and other signs of unrest were the result of the movement of liquid and gas beneath the crater.
- The Uturuncu sits above the world's largest-known magma body in the Earth's crust.

PEN-Plus implementation framework (five phases) INITIAL PHASE 3 PHASE 4 PHASE 5 PHASE 1 PHASE 2 PHASE Engage ent of Assessment system Service delivery Initial Scale-up in phased Nationwide coverage (>60%) stakeholders and facility readiness implementation fashion odel Step 7. Roll out Step 1. Engage with Step 1. Conduct a Step 4, Develop a Step 10. Implement a Step 13. Collaborate governmental bodies. comprehensive robust service delivery planned interventions monitoring and with national and regional stakeholders for healthcare providers, assessment of existing model based on in selected pilot sites or evaluation framework communities. healthcare systems assessment findings. coordination community leaders, to track progress. anad facilities. and civil society Step 5. Outline Step 8. Test Step 11. Analyse data Step 14. Ensure organizations. Step 2. Identify protocols, guidelines, effectiveness and to assess impact and sustainability through and workflows for Step 2. Foster strengths, weaknesses, feasibilitiy of strategies inform ongoing monitoring, effective service collaboration and opportunities, and in real-word settings. decision-making. evaluation, and adaptation. alignment with project threats within the delivery. Step 12. Gradually Step 9. Pilot new infrastructure objectives. Step 6. Tailor the protocols, conduct scale up successful model to address Step 3. Gather insights. Step 3. Inventory training sessions, and strategies to additional establish feedback available resources and specific needs and identify challenges. sites or regions. challenges. and develop a shared determine capacity and mechanisms vision. potential gaps.

PEN-Plus approach

- Twenty African countries have increased access to the services for severe noncommunicable diseases (NCDs) over the last four years since adapting the PEN-Plus approach.
- In 2019 alone, more than 2.8 million NCD-related deaths were recorded in the WHO African Region, the equivalent of over 7,900 deaths per day.
- While the total number of deaths in the Region decreased from 8.7 million in 2000 to 7.8 million in 2019.
- NCD-related deaths rose sharply, with NCDs accounting for 37 per cent of all deaths in 2019, up from 24 per cent in 2000.
- PEN-Plus, an integrated health care delivery model, was originally developed in Rwanda to provide just this care to affected individuals living in extreme poverty.

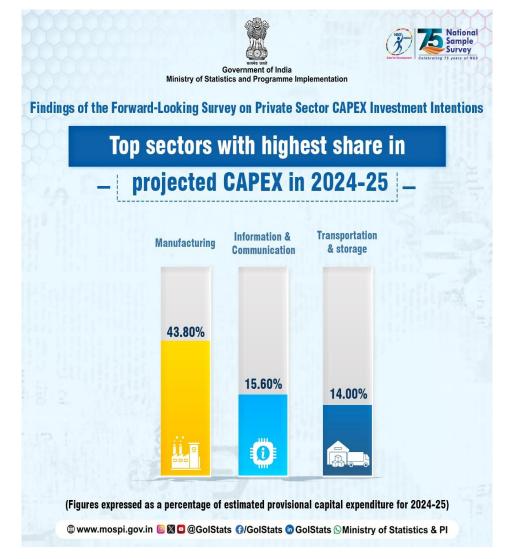




It has been developed to complement the WHO Package of the Essential Noncommunicable Disease (PEN) interventions, which mainly focuses primarily on managing common NCDs at primary health care level.

ECONOMY NEWS

Private Sector Capex survey 2021-22/2024-25



- ✤ After an estimated 55.5 per cent year-on-year increase to Rs 6.56 lakh crore in the intended capital expenditure or capex for financial year 2024-25.
- Private sector enterprises are likely to see a 25.5 per cent drop in their capex intentions for the ongoing financial year 2025-26 to Rs 4.89 lakh crore.
- The intended capex for 2025-26 is seen lower from 2024-25 and 2022-23 levels, but above 2023-24 and 2021-22 levels.

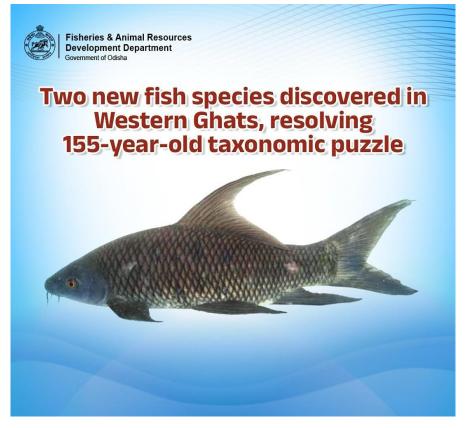




- Overall, there was an increase of 66.3 per cent in aggregate capex over the fouryear period from 2021-22 to 2024-25.
- ♦ The highest capex seen in 2024-25 at Rs 6.56 lakh crore.
- ✤ The estimated provisional capital expenditure per enterprise for purchasing new assets in 2024-25 is Rs 172.2 crore.
- The average Gross Fixed Asset (GFA) per enterprise in the private corporate sector was estimated at Rs 3,151.9 crore in 2021-22.
- It rose by 4 per cent to Rs 3,279.4 crore in 2022-23, and further by 27.5 per cent to Rs 4,183.3 crore in 2023-24.

ENVIRONMENT NEWS

Labeo uru and Labeo chekida - Kerala



- Researchers have discovered two new species of freshwater fish from the Western Ghats — Labeo uru and Labeo chekida.
- Labeo uru, named after the traditional wooden dhow for its sail-like elongated fins, was found in the Chandragiri River, Kerala.





- Labeo chekida, a very small and dark-bodied fish known locally as 'kaka chekida', inhabits the Chalakudy river, Kerala.
- ✤ Both the species, endemic to their respective river systems.

REPORTS AND INDICES

Percentage distribution of intended capital expenditure in 2024-25 by main activity 26.7% 14.0% 15.6% • manufacturing • information and communication • transportation and storage • others

UN World social report 2025

- This report is titled as "World Social Report 2025: A New Policy Consensus to Accelerate Social Progress".
- It has published by the UN Department of Economic and Social Affairs (UN DESA) in collaboration with UNU-WIDER.
- ✤ According to a recent evaluation of the life satisfaction, 60 percent of the people worldwide are struggling and 12 percent are suffering.
- Over 690 million people live in extreme poverty, under \$2.15 a day.
- ✤ Over 2.8 billion, more than a third of the world's population, live on between US\$2.15 and US\$6.85 a day.
- The upcoming Second World Summit for the Social Development, is to be held in Doha, Qatar in November 2025.

STATES' NEWS

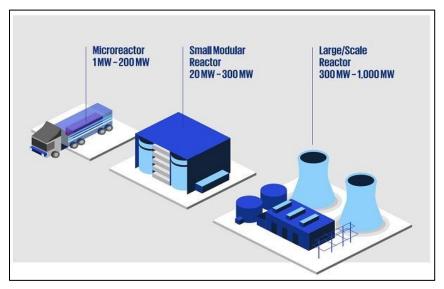
Thorium-based Small Modular Reactor

Maharashtra signed a MoU with Russia's state-owned company ROSATOM for the development of a Small Modular Reactor (SMR) based on thorium fuel.





- This is perhaps for the first time a state government will be venturing into the arena of nuclear energy.
- The Fast Breeder Reactor (FBR) will initially use the Uranium-Plutonium Mixed Oxide (MOX) fuel.
- The Uranium-238 "blanket" surrounding the fuel core will undergo the nuclear transmutation to produce more fuel, thus earning the name 'Breeder'.
- The use of Thorium-232, which in itself is not a fissile material, as a blanket is also envisaged in this stage.
- By transmutation, thorium will create fissile Uranium-233 which will be used as fuel in the third stage.



Karad Sanitary Waste Management Model



 Karad of Maharashtra has set a benchmark in sanitary waste management by ensuring the safe disposal of sanitary waste.





- It has achieved 100% safe segregation, collection, and disposal of sanitary and biomedical waste.
- The Red bins were placed at public toilets and garbage vehicles equipped with dedicated bins for sanitary waste.

Bohag Bihu 2025



- Bohag Bihu, also known as Rongali Bihu or Xaat Bihu, is the most important Assamese festival.
- ◆ It marks the Assamese New Year and the beginning of the spring harvest season.
- ♦ It is celebrated across Assam from 14th to 20th April 2025.
- ✤ It is the most prominent of the three Bihus celebrated annually in Assam
- ✤ The other two are Kati Bihu (October) and Magh Bihu (January).

Gujarat Space Tech Policy 2025-2030

- The Gujarat government, became the first in the country to formally announce the 'Space Tech Policy' 2025-2030 to accelerate growth in space technology.
- ☆ The initiative mainly aims to attract \$5 billion (approximately ₹41,000 crore) in investments and create 25,000 skilled jobs within the next five years.
- The policy was inspired by the legacy of the father of the Indian space programme, Vikram Sarabhai, a native of Gujarat.
- ✤ A day later, Tamil Nadu has unveiled the Tamil Nadu Space Industrial Policy to promote and regulate engagement of the private sector to tap technologies developed by government research and development agencies such as ISRO.





Besides Gujarat and Tamil Nadu, Telangana and Karnataka are also developing capabilities to establish space manufacturing clusters in their regions.



MISCELLANEOUS NEWS

'Golconda Blue' Diamond



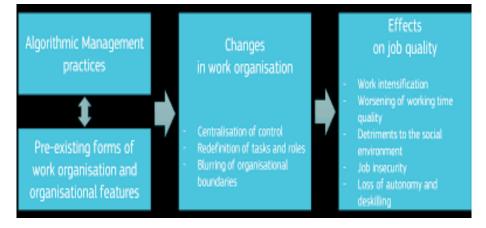
The Golconda Blue — the largest known vivid blue diamond, with Indian origins, has been withdrawn from the auction at Geneva, Switzerland.





- The 23.24 carat pear-shaped diamond is once belonged to Yeshwant Rao Holkar (1908-1962), the Maharaja of Indore.
- ✤ Currently it may have a worth of \$35 to \$50 million.
- ✤ It originated from the Golconda diamond mines in present-day Telangana.
- Some of the world's most famous diamonds, such as the Koh-i-Noor and the Darya-i-Nur, were mined in Golconda.
- Today, Africa, Australia, and Russia are some of the key players in the diamond industry.

ILO Report on Algorithmic Management and Job Quality



- The report is titled as 'the Revolutionizing health and safety: The role of AI and digitalization at work' is released recently.
- Algorithmic management (AM) in India has led to a decline in job quality, with "clear" evidence of increased monitoring, surveillance and work intensity.
- The AM technologies had a positive impact on work organisation in countries like France and Italy, with no significant negative effects on job quality, in South Africa and India.
- AM refers to the allocation, monitoring and evaluation of work tasks and workers' performance through extensive data collection, surveillance, real-time decisionmaking and metrics-driven evaluations.
- ✤ AM has expanded to traditional sectors, including warehouses, factories, call centres, transportation, healthcare and construction.

Sword of Raghuji Bhosale I

 The Maharashtra government reclaimed the iconic sword of Maratha warrior Raje Raghuji Bhonsle I at an auction in London for Rs 47.15 lakh.





- Sena Saheb Subah was a title of high military rank that was associated with the Maratha Empire, and would be usually conferred by the Chhatrapati's of Satara.
- The person was receiving the title would also get a sword and robe.
- This particular sword is likely a gift from Chhatrapati Shahu Maharaj to Raghuji Raje Bhonsle who was conferred with the title of Sena Saheb Subah.
- Raghuji Bhonsle I, expanded the Maratha empire to Orissa, Bihar, West Bengal, Uttar Pradesh, Madhya Pradesh and Chhattisgarh.
- ♦ He led pivotal military campaigns in Bengal from 1745 and 1755.



Soil Moisture - Indicator for Thunderstorm Prediction



The Soil moisture levels could serve as an early warning signal for severe clusters of thunderstorms that cause flash floods and landslides in many regions.





- The mesoscale convective systems (MCS) are large clusters of thunderstorms that can span areas bigger than England and travel hundreds of kilometres.
- These systems often bring intense rainfall, causing widespread damage to lives, livestock and infrastructure.
- ✤ In tropical regions, MCSs accounted for 50 to 90 per cent of total rainfall.
- Regions identified as hotspots for MCSs includes India, West and Central Africa, South America, and parts of the United States and China.
- The shifts in the soil moisture could be detected two to five days before storm formation.
- The atmospheric changes are caused by the contrasting soil moisture levels over hundreds of kilometres increase the area and amount of rainfall by 10 to 30 per cent, depending on the storm's size and location.

Stegodan Ganesa



- ✤ It was a first-of-its-kind discovery in Maharashtra.
- ✤ It found rare fossils of the extinct Stegodon Ganesa.
- ✤ It is an ancient elephant species.
- ✤ It is said to be the ancestor of modern-day Asiatic elephants.
- ✤ The fossils are 25,000 years old and belong to the late Pleistocene period.
- ✤ The elephant found in Chandrapur district was 15 feet in height.





- This has been confirmed by the discovery of the extinct elephant-like head of Elephas Namadicus at this place.
- This species of elephant lived in India during the Pleistocene period from 2 lakh to 11,700 years ago.
- The last period of this period was the Ice Age.
- ✤ When this Ice Age melted, there were huge floods in India.
- ✤ Many species were washed away in this flood.
- Evidence of many living things is found in the sediment (alluvium) of the flood.
- Fossils of Asian elephants have been found in some places in Sindhudurg, Pune and Solapur districts of Maharashtra, as well as in Telangana.
- But this is the first case of the discovery of fossils of Stegodon elephants in Maharashtra.
- Penganga River (676 Km) originates in the Ajantha ranges in Aurangabad district in Maharashtra.
- It flows along the State border between Maharashtra and Andhra Pradesh before converging into Wardha river.
- The Geological Survey of India has its headquarters in Kolkata.



Old Rock Art Sites in Mizoram

The Archaeological Survey of India (ASI) has announced discovery of 4 centuriesold rock art sites in Mizoram.





- ✤ It is estimated to date between the 16th and 19th centuries.
- The Survey conducted areas were Champhai, Khawzawl, Saitual, and Serchhip districts.
- In Maite village, a rock cliff features a prominent human figure surrounded by smaller human figures, animals, gongs, a row of mithun heads, and some unidentified symbols.
- ◆ The mithun (Bos frontalis) is a semi-domesticated bovine found in the region.
- In January 2016, the Archaeological Survey of India (ASI) recognized Vangchhia in the Champhai district.
- ✤ It was a location with indications of a substantial settlement.
- It was possibly linked to a "lost civilization" from the Neolithic Era, and referred to it as a "living history museum."

