

INDIAAI MISSION



Recently, the selection of three new startups for building India's own Foundation Model, the IndiaAI Mission, has taken a significant leap toward strengthening indigenous AI capabilities.

- It was initially launched as a **joint initiative between the Ministry of Electronics and Information Technology** and Nasscom in 2023.
- This initiative aims to bolster **India's AI ecosystem** by making high-end computing resources accessible to startups and researchers.
- **The mission's key goals are:**
 - "Making AI in India" – Encouraging domestic AI development.
 - "Making AI Work for India" – Ensuring AI benefits various sectors in the country.
- **Implementing agency:** IndiaAI, an independent business division **under the Ministry of Electronics and Information Technology (MeitY)**, serves as the implementing agency for the IndiaAI Mission.
- It will help to democratize the benefits of AI, strengthen India's position as a global AI leader and promote ethical and responsible AI use across sectors.
- **Pillars of the IndiaAI Mission**
 - Common Compute Facility
 - AI Kosha (IndiaAI Datasets Platform)
 - AI Safety Institute of India (Upcoming)
 - IndiaAI Innovation Centre
 - AI Application Development Initiative
 - Future Skills Initiative
 - Startup Financing

VITAMIN B9 (FOLATE)



According to a recent study by the All-India Institute of Medical Sciences (AIIMS), nearly 41 per cent of urban adolescents in government schools across northern India suffer from folate or vitamin B9 deficiency, which might be affecting their growth and development.

- Folate is the **natural form of vitamin B9**, water-soluble and naturally found in many foods.
- It is needed for **red blood cell formation** and for healthy cell growth and function, crucial for children in their developmental years.
- It is needed by **cells to carry oxygen** throughout the body.
- **Foods containing Vitamin B9:** Green leafy vegetables (like spinach and fenugreek), legumes (lentils, chickpeas), citrus fruits, nuts, whole grains and fortified cereals.

Role of Vitamin B9 in Children

- Vitamin B9 is essential for **supporting rapid growth phases in children**.
- Folate is involved in the **synthesis and repair of DNA and RNA**, which are the building blocks of genetic material.
- It aids in the **production of red blood cells** and the development of the **central nervous system** during early childhood.
- In growing children, folate ensures **proper brain function and emotional health**.
- It is also **crucial for tissue growth** and cellular repair, processes that are continuous during childhood.
- If there isn't enough folate, it **can lead to anaemia**, when the body lacks enough red blood cells.

WHAT IS THE NEOLITHIC AGE?



- The Neolithic Period, also called the **New Stone Age**, is the **final stage of cultural evolution or technological development among prehistoric humans**.
- It is characterized by the **beginning of a settled human lifestyle**. People learned to **cultivate plants and domesticate animals** for food, rather than relying solely on hunting and gathering.
- The Neolithic stage of development was **attained during the Holocene Epoch** (the **last 11,700 years of Earth's history**).
- The **starting point** of the Neolithic is generally thought to have occurred sometime **around 10,000 BCE**.
- The Neolithic followed the **Palaeolithic Period**, or the age of chipped-stone tools and **preceded the Bronze Age**, or the early period of metal tools.
- The Neolithic Revolution **started in the Fertile Crescent**, a region of the **Middle East**, where humans first took up farming. It then **spread to India, Europe** and beyond.

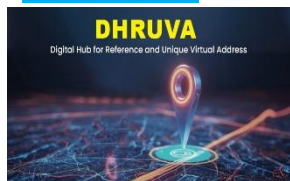
Features of the Neolithic Age:

- It was characterized by **stone tools shaped by polishing or grinding**, dependence on domesticated plants or animals, **settlement in permanent villages** and the appearance of such **crafts as pottery and weaving**.
- The **houses** were **built of mud and reed** in rectangular or circular shapes.
- Alcohol was first produced during this period and architecture, as well as its interior and exterior decoration, first appeared.
- **Status objects** like elaborate pottery and carved jades were **placed in tombs** during the Neolithic period. This practice suggests two things: Neolithic people's **belief in the afterlife** and the **emergence of social classes**. Only

important and wealthy individuals had the privilege of being buried with these precious objects.

- **End of the Neolithic Age:**
 - Towards the end of the Neolithic era, **copper metallurgy was introduced**, which marks a **transition period to the Bronze Age**, sometimes referred to as the **Chalcolithic or Eneolithic Era**.
 - In time, **bronze became the primary material** for tools and weapons and a good part of the **stone technology became obsolete**, signalling the **end of the Neolithic** and thus of the Stone Age.
- Some of the **important Neolithic sites in India** include **Burzahom in Kashmir**, **Chiron in Bihar** and **Uttar in Andhra Pradesh** and **Edakkal caves in Kerala**.

WHAT IS DHRUVA (DIGITAL HUB FOR REFERENCE AND UNIQUE VIRTUAL ADDRESS)?



- Developed by the **Department of Posts**, DHRUVA sets the foundation for a nationwide **Digital Address Digital Public Infrastructure (DPI)**.
- DHRUVA outlines a framework for creating a **standardized, geo-coded and interoperable digital address system**.
- It is designed to simplify address-related services and ensure **secure, consent-based sharing of address information across public and private sectors**.
- At the core of DHRUVA is the concept of **Address-as-a-Service (AaaS)**—a model that supports efficient, secure and user-controlled management of address data.
- The system aims to serve as a backbone for service delivery, governance and commercial interactions.
- Under this system, **citizens, government bodies and businesses can engage in secure, consent-driven and real-time sharing of verified address information**.

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- The AaaS framework ensures:
 - **Interoperability** across different address systems used by various sectors
 - **Standardization** of address formats and geolocation tagging
 - **Consent-based sharing** to empower user control and privacy
 - **Public-private integration** for seamless adoption and innovation
- By recognizing digital addresses as core infrastructure, akin to Aadhaar and Unified Payments Interface (UPI), DHRUVA **sets out to streamline everything** from e-governance and online commerce to urban planning and emergency services.
- The policy also places **emphasis on user-centric design**, ensuring that **citizens** have **meaningful control over how their address data is used** and shared.
 - **Citizens will retain full control over their digital address identity**, with options to manage access, update details, and share their verified address securely for various use cases.
- The DHRUVA platform will **also feature multilingual support, mobile-first access, and integration with identity systems like Aadhaar**, thereby improving usability and accessibility for all demographics.
- The DHRUVA policy **builds upon the earlier launch of the Digital Postal Index Number (DIGIPIN)**—the National Addressing Grid introduced by the Department of Posts.
 - DIGIPIN is an **open-source nationwide geo-coded addressing system** developed by the Department of Posts in collaboration with IIT Hyderabad and NRSC, ISRO.
 - It **divides India into approximately 4m x 4m grids** and assigns each grid a **unique 10-character alphanumeric code** based on latitude and longitude coordinates.
 - The DIGIPIN system is **publicly accessible** and supports improvements in emergency response, logistics efficiency and citizen service delivery.

WHAT IS THROMBECTOMY?



- A thrombectomy is a **surgical or interventional treatment to remove blood clots** in an artery or vein to help restore blood flow through your blood vessel.
- A **blood clot**, also known as a **thrombus**, can **obstruct blood flow**, leading to tissue damage or even death.
- Some of the most common places for blood clots to occur are your legs, arms, intestines, brain, lungs and heart.
- Thrombectomies are **performed to restore blood flow** and prevent serious consequences.
- **Sometimes a thrombectomy must be performed within a matter of hours** to prevent life- or limb-threatening complications from occurring.
- There are two large **categories** of **thrombectomies**:
 - **Surgical (open) Thrombectomy:**
 - During a surgical thrombectomy, your **surgeon makes an incision** to get to your blocked blood vessel, **cuts open your blood vessel**, **removes the blood clot using a balloon** and then **repairs the blood vessel**.
 - **Percutaneous (minimally invasive) Thrombectomy:**
 - During a mechanical thrombectomy, your **surgeon introduces special devices through catheters** that can either **macerate or suction out clots** from within your blood vessel.
 - When there's a **residual clot** left, your surgeon will **infuse the area with local clot-dissolving medicines**.

RBI'S NEW GOLD LOAN REGULATIONS: BALANCING TRANSPARENCY AND ACCESSIBILITY

- The Reserve Bank of India (RBI) had released draft guidelines aimed at regulating loans disbursed against gold as collateral.
- These measures are intended to harmonise practices across regulated entities such as banks and **Non-Banking Financial Companies (NBFCs)**, in light of substantial growth in gold loan portfolios and growing concerns around irregular lending practices.
- This regulatory push follows a significant spike in gold loan activity, especially by banks, whose gold loan portfolios more than doubled during FY2023-24.
- While the product remains a vital source of short-term credit for rural and semi-urban borrowers, inconsistencies in its disbursement, valuation, and recovery mechanisms prompted RBI to propose reforms for standardisation and borrower protection.

Key Proposals in the Draft Guidelines

- **LTV Norms:** The maximum **Loan-to-Value (LTV)** ratio remains capped at 75%. However, for consumption-based bullet loans, the accrued interest is now included in LTV calculations, thereby reducing the net disbursed amount.
- **Collateral Ownership Verification:** Borrowers must provide proof of ownership of the gold to prevent fraudulent pledging.
- **Standardisation of Valuation:** All gold pledged must be valued at 22-carat purity, with uniform standards for purity and weight assessment.
- **Loan Renewals and Top-ups:** These will be allowed only if the original loan is standard and within the LTV cap.
- **Concurrent Loans:** Borrowers will not be allowed to take simultaneous loans for consumption and income-generation using the same gold collateral.
- **Timely Return of Collateral:** Lenders failing to return gold within seven working days of loan repayment will be liable to compensate the borrower ₹5,000 per day.

Conclusion

The RBI's draft norms for gold loans mark a significant step in regulating a fast-growing credit segment that caters predominantly to financially vulnerable groups. By tightening operational practices and enhancing transparency, the RBI seeks to curb risky lending behaviour without eliminating access to credit.

The proposed January 2026 timeline provides sufficient scope for stakeholder consultations and fine-tuning, ensuring that gold loan reforms are implemented without disrupting the flow of credit to those who need it most.

KAWAL TIGER RESERVE



- **Location:** It is located in the **Telangana State** along the **banks of the river Godavari**, forming part of the Deccan peninsula-central highlands.
- The reserve is nestled in the **Sahyadri Mountain Ranges**.
- Geographically, the reserve is situated in the **southern-most tip of the Central Indian Tiger Landscape**, having linkages with the **Tadoba- Andhari** (Maharashtra) and **Indravati** (Chhattisgarh) tiger reserves.
- **Vegetation:** Southern Tropical Dry Deciduous Forest.

Provision to declare Conservation Reserve

- As per the Section 36(A) of the **Wildlife Protection Act, 1972 Act**, the State government may declare any areas owned by it, particularly in areas **adjacent to the national parks and sanctuaries** and those areas which **link one protected area with another**, as **conservation reserve** for protecting landscapes, seascapes, flora and fauna and their habitat.

ZANGEZUR CORRIDOR



The Zangezur Corridor has become a topic of discussion following a recent meeting between Armenia's Security Council Secretary and India's National Security Advisor in New Delhi.

- It is a proposed transport route designed to **connect Azerbaijan's mainland with its exclave, the Nakhchivan Autonomous Republic**, bypassing Armenia's Syunik Province.
- Zangezur, which is currently part of southern Armenia, has been a disputed territory since World War I.
- On Azerbaijan's side, the corridor would be integrated into the **Horadiz-Agabend transport highway** and railway network. On Turkey's side, it would link into the **Nakhchivan-Igdir-Kars railway** and highway, providing a direct land route to Anatolia and beyond.
- It carries significant economic and strategic weight for the **South Caucasus and beyond**.
- The project aims to enhance **Azerbaijan's trade with Turkey and Europe** by improving logistics infrastructure, reducing transportation costs, and significantly cutting travel time between Azerbaijan and Nakhchivan.
- The Zangezur Corridor plays a crucial role in increasing regional connectivity — not only throughout Caucasia, but also across greater Eurasia, joining **Turkish, Russian, Central Asian**, Iranian and Armenian territories and linking Europe to Asia.