

NEWS TODAY

Trilemma of Digital Governance: Digital Ascendancy, Digital Capitulation, or Genuine Digital Sovereignty

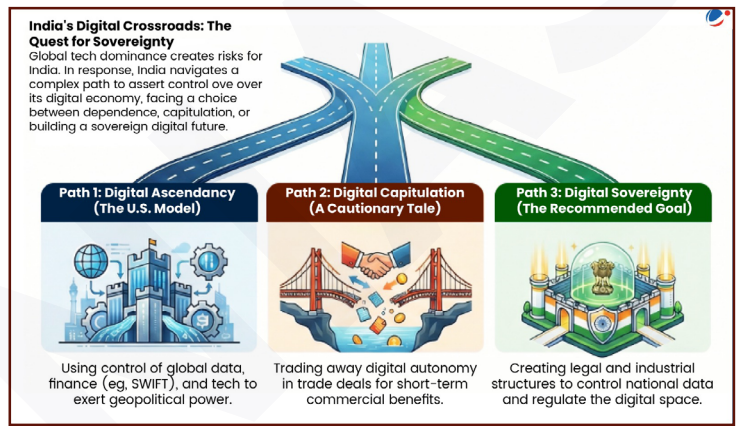
As the locus of geopolitical influence shifts from oil to data, India faces a trilemma of digital governance (refer infographic).

What factors are pushing India towards Digital Sovereignty?

- **Geopolitical Volatility:** Strained India–U.S. ties over **trade, tariffs, Russian oil purchases, and regional issues** create persistent uncertainty, pushing India toward tech self-reliance.
- **Global Digital Dominance:** The U.S.-led “digital ascendancy model” controls global data, internet, and financial infrastructure (e.g., SWIFT), weaponized against Iran, Russia, and indirect pressure on India’s energy trade.
- **Vulnerability to Foreign Control:** E.g. Microsoft’s sudden suspension of services to Nayara Energy (due to EU sanctions) exposed India’s risky dependence on foreign tech providers.
- **Data as the New Currency:** A nation’s digital footprint determines its strategic strength unlike traditional factors.

Pathways to Digital Sovereignty for India

- **Digital Sovereignty Defined:** creating legal and regulatory structures that ensure **sovereign control over data exports and national digital space**. E.g. through Digital Personal Data Protection Act.
- **Digital Industrialization:** Unlike China’s exclusion model (restricting foreign tech presence), India should develop a **national digital industrialization policy framework**.
- **Foundational Initiatives (India Stack):** Through initiatives like the Digital Public Infrastructure (DPI), the Aadhaar system, etc.
- **Others: Sovereign AI (e.g. BharatGen); Free and Open Source Software (FOSS) approach, Indigenous Technology (e.g. Arattai, messaging app developed by Zoho), etc.**



Challenges for India

- **Risk of Digital Capitulation:** India must **avoid FTA clauses forcing non-discrimination on foreign digital services/products**.
⊕ E.g. Indonesia & Malaysia traded digital autonomy for commercial gains.
- **Foreign Investment vs. Sovereignty:** E.g. Google’s \$15B AI hub carries geopolitical and sovereignty risks.
- **Failure of Domestic Alternatives:** E.g. Koo failed to replace X as political hub despite state push and shut down.
- **Privacy vs. Secrecy:** E.g. Zoho blurred privacy/secrecy lines on Arattai; promises not to mine data aren’t future-proof.

Prime Minister pushes for private sector entry in India’s Nuclear Sector

Highlighting the expansion of private entities in Space sector, Prime Minister said that the government is moving towards opening up the civil nuclear sector for private players.

- Opening up of sector will result in mobilizing private sector investment, boosting innovation with faster rollout of Small Modular Reactors, enhancing grid stability and energy security, and strengthening domestic manufacturing.

Civil Nuclear Sector in India

- **Exclusive Control: Nuclear energy in India** is primarily controlled by the **Department of Atomic Energy (DAE)**.
⊕ Currently, India’s 24 reactors are run solely by the state-owned **Nuclear Power Corporation of India Ltd (NPCIL)**, with an installed capacity of just 8.8 GW (2% of India’s total power generation).
- **Target:** Government has set a **target** of achieving 22 GW capacity by 2032 and **100 GW by 2047**.
- **Primary Legislations:** Atomic Energy Act (AEA) 1962 and Civil Liability for Nuclear Damage Act (CLNDA), 2010.
⊕ Presently, **AEA** prohibits the participation of the private sector or even state governments in nuclear energy generation.
- ⊕ **CLNDA** provides legal framework for compensation to victims of a nuclear accident.
◆ Under it, the amount an operator will have to pay in case of damage caused by an accident goes up to Rs 1,500 crore.

Challenges to Private sector participation

- **Safety, Regulation, and Liability Concerns:** CLNDA 2010 places heavy liability on suppliers, which may deter private investment.
- **National Security:** Increasing private participation requires **stronger oversight, traceability, and compliance mechanisms**.
- **Long Gestation Periods:** Nuclear projects often take 7–10 years to complete, private investors may be reluctant without assured returns or risk sharing mechanisms.
- **Resource Supply:** India’s domestic uranium supply is insufficient to meet increasing demand and private entities will have to depend on imports.

IMF Assigns Second-Lowest 'C' Rating to India's National Accounts Statistics (NAS) and Inflation Data

IMF Grading is divided into four grades:

- **A:** The data provided are adequate for surveillance.
- **B:** Data have some shortcomings but is broadly adequate for surveillance.
- **C:** Data have some shortcomings that somewhat hamper surveillance.
- **D:** Data have serious shortcomings that significantly hamper surveillance.

Key Issues highlighted by IMF

- **Outdated Base Year (2011-12) for GDP calculation:** fails to reflect current production technology and user preferences, which can lead to over or underestimating economic activity.
- **Need to use updated data sources:** E.g. Household consumption and expenditure survey (HCES), Periodic Labour Force Survey (PLFS), etc. to better capture the structural changes in the economy.
- **Lack of Seasonally Adjusted Data:** National accounts are not seasonally adjusted, making it difficult to interpret short-term quarterly movements.
- **Outdated statistical techniques** in the quarterly national accounts data.
- **Lack of Producer Prices Indices (PPI):** Excessive use of single deflation i.e. Wholesale Price Index (WPI), may introduce cyclical biases.
- **Outdated CPI Components:** The IMF highlights that the current CPI base year, items basket, and weights are outdated (2011/12).

IMF's Recommendation:

Going forward, regular benchmark revisions of national account, price, and other key statistics should be conducted according to international best practices.

Key Statistical Indicators of Economy

- **Gross Domestic Production (GDP):** It is the total money value of all final goods and services produced within a country's borders in one year.
- **Gross Value Added (GVA):** It is the value of output minus the value of intermediate consumption. The value that producers have added to goods and services.
- **Wholesale Price Index (WPI):** It measures the average change in the prices of goods at the wholesale level. It covers mainly goods, not services.
- **Consumer Price Index (CPI):** It measures the average change in prices of goods and services consumed by households.
- **Producer Price Index (PPI):** It measures the average change in selling prices received by domestic producers. It captures inflation at the producer or factory gate level.

Supreme Court highlighted the need to regulate abusive online content

Supreme Court emphasized the need for effective mechanism to regulate user-generated content, ensuring accountability for content uploaded online.

Concerns raised by the Supreme Court

- **Virality and Velocity of Online Content:** Harmful posts can go viral within seconds, rendering reactive takedown mechanisms ineffective before reputational or security damage occurs.
- **Adult Content:** One-line "adult content" warnings are insufficient and fail to prevent minors from accessing explicit material.
- **Unregulated Nature of User-Generated Channels:** Individuals can run online channels without regulatory oversight, enabling unverified or provocative content to spread unchecked
- **Misinformation:** While dissent is democratic, digital platforms become problematic when misinformation is used to incite hatred, distort facts, or trigger social unrest.

Proposal and Directions by Supreme Court

- **Drafting of New Guidelines:** Directed the Centre to frame fresh rules for all digital content – UGC (User Generated Content), OTT, news, and curated content –after public consultation.
- **Autonomous Regulator:** Court suggested establishing a neutral, independent authority to regulate online content, replacing or supplementing existing self-regulation models.
- **Expert Committee:** Constitute an expert committee with domain experts and persons with judicial background to study the issue.
- **Age Verification System:** Aadhaar or PAN-based checks were proposed to verify user age before accessing adult or explicit content, moving beyond mere disclaimers.

Existing Legal Mechanisms

- **Information Technology Act, 2000 (IT Act) and IT Rules 2021:** Mandate grievance redressal officers, time-bound removal of unlawful content, and due diligence for intermediaries.
 - ⊗ In October 2025, the government proposed rules to ensure AI-generated content is clearly labelled and verified by intermediaries before upload.
- **Bharatiya Nyaya Sanhita (BNS), 2023:** Criminalises defamation, obscenity, sedition-like acts, and incitement to violence.
- **Self-regulatory codes of digital platforms:** OTT services and broadcasters have internal guidelines, rating systems, and content moderation procedures.
- **Judicial remedies:** Victims can seek damages, injunctions, or criminal proceedings after harm is inflicted.

Also In News



Chasing China Report

AidData publishes Chasing China report highlighting China's overseas lending portfolio.

Key Highlights of the Report

- **Scale of Lending:** China has provided over \$2 trillion in loans and grants worldwide since 2000.
 - ⌚ Over 80% nations got loans from China's state-owned creditor between 2000-2023.
- **Biggest Borrowers:** United States is the largest recipient of Chinese loans followed by Russia and Australia.
- **Belt and Road Initiative (BRI) Decline:** It now comprises **only about 25%**, showing a strategic pivot away from infrastructure-heavy projects in poorer regions.
- **India's Borrowing Pattern:** Indian entities received \$11.1 billion, largely for energy and financial services sectors.



Bamboo

37,000-Year-Old Thorny Bamboo Fossil was discovered among the silt-rich deposits of **Chirang River** in Manipur's Imphal Valley, representing the **earliest evidence of thorny bamboo in Asia**.

- Thorniness in bamboo is a defense against herbivores.

About Bamboo or Green Gold

- It is a type of woody plant that **belongs to the grass family**.
- It is amongst the fastest **growing plants with some varieties growing up to 4 cm** in an hour.
- Bamboo **has a higher compressive strength** than wood, brick or concrete and finds application in paper industries, furniture making, civil works, food, medicine etc.

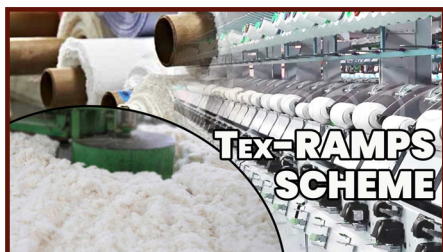


'Tex-RAMPS' Scheme

Government has approved the **Textiles Focused Research, Assessment, Monitoring, Planning and Start-up (Tex-RAMPS) Scheme**.

About 'Tex-RAMPS' Scheme

- **Ministry:** Ministry of Textiles
- **Funding:** 305 crore from 2025-26 to 2030-31.
- **Aim:** To future-proof India's textiles and apparel (T&A) ecosystem by strengthening Research, Innovation and Competitiveness in Textiles Sector.
- **Key Components:**
 - ⌚ **Research & Innovation:** In smart textiles, sustainability etc.
 - ⌚ **Data, Analytics & Diagnostics:** Including employment assessments, supply chain mapping, etc.
 - ⌚ **Real-time Integrated Textiles Statistical System (ITSS):** To support structured monitoring and strategic decision-making.
 - ⌚ **Capacity Development & Knowledge Ecosystem:** Strengthening of State-level planning, dissemination of best practices.
 - ⌚ **Start-up & Innovation Support:** Support for incubators, hackathons, and academia-industry collaborations.



Vikram-1

Prime Minister unveiled Vikram-1, which is India's new private orbital-class launch vehicle.

About Vikram-1

- **Developer:** Skyroot Aerospace — a private Indian space-startup based in Hyderabad.
- **Purpose:** To launch satellites into Low Earth Orbit (LEO) or Sun-Synchronous Orbit (SSO); designed to serve small satellites and rideshare missions.
- **Payload Capacity:** It can carry up to 350 kg to Low Earth Orbit and 260 kg to Sun-synchronous Orbit.
- **Propulsion:** Four-stage rocket — the first three stages use solid-fuel boosters, the final (upper) stage uses a liquid-propellant "Raman" engine for precise orbital insertion.
- **Structure:** The rocket uses an all-carbon-fibre body and features 3D-printed engines, aiming for lightweight, efficient design.



Indian Army's Three Phase Plan

Chief of Army Staff unveiled a comprehensive **three-phase road map** to transform the Indian Army into an integrated, future-ready force by 2047.

- He also highlighted **four key springboards** for India's military evolution — Self Reliance (Atmanirbharta), Innovation (Anusandhan), Adaptation (Anukulan), and Integration (Ekikaran).

About Three Phase Plan

- **Phase 1: Till 2032 – Decade of Transformation:** Rapid enhancement of capabilities, force structure, and operational readiness to build a modern, agile Army.
- **Phase 2: 2032–2037 – Consolidation:** Strengthen and integrate the gains achieved in the first phase across organisation, technology, and doctrine.
- **Phase 3: 2037–2047 – Fully Integrated Future Force:** Achieve a technologically advanced, networked, and fully integrated military prepared for next-generation warfare.



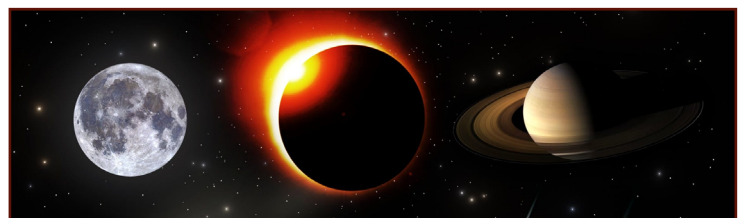
International Astronomical Union (IAU)

Seven Indian names featured in the latest list prepared by the IAU's Working Group for Planetary System Nomenclature.

- **E.g.** Periyar river, Bekal fort, Varkala beach for geological features on Mars.

About International Astronomical Union (IAU)

- **Established** in 1919.
- **HQ:** Paris, France.
- **Mission:** To promote and safeguard the science of astronomy in all its aspects, including research, communication, education and development, through international cooperation.
- **National Members:** **85** including India's **Indian National Science Academy**.
- **Key Contributions:** Planetary definitions, Standard celestial coordinate system etc.





Moh Juj

Assam Assembly passes Prevention of Cruelty to Animals (Assam Amendment) Bill, 2025 to allow **Moh Juj sport**.

About Moh Juj

- Moh-Juj refers to **traditional buffalo fights** held in certain parts of Assam.
- **Meaning in Assamese:** "Moh" refers to buffalo, and "Juj" means fight together "buffalo-fight."
- The fights are **part of the cultural celebrations of Magh Bihu** (or Bhogali Bihu), the harvest-festival celebrated in Assam.



Amphibians

A global study has found that 788 amphibian species have declined in conservation status in the last 40 years.

- **Threats to Amphibians:** Habitat loss and degradation, Agriculture, Timber and plant harvesting, Infrastructure development, etc.
- They account for **25.2% of all threatened vertebrates** on the IUCN Red List (185 Critically Endangered, 37 Extinct).

About Amphibians

- They are **cold-blooded vertebrate animals** that can **live both in water and on land** at different stages of their life. **E.g. frogs.**
- **Role in ecosystem:** Support nutrient cycling, soil aeration, and productivity. Also provide ecosystem services, e.g., pest control.



Personality in News

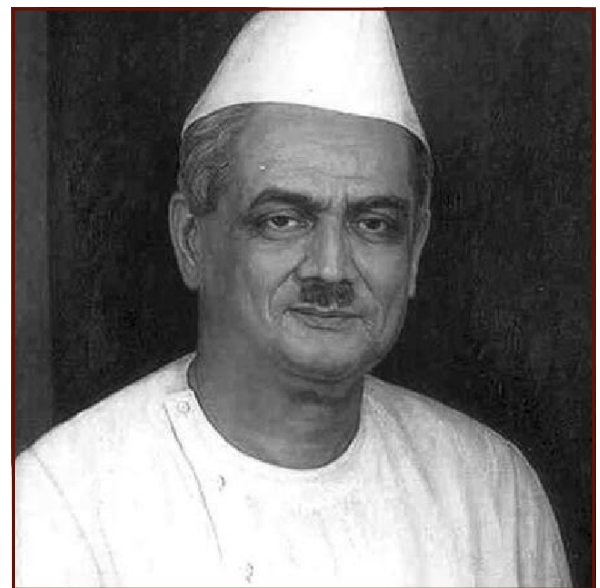


G. V. Mavalankar (1888 - 1956)

Lok Sabha Speaker paid floral tributes to **Shri Ganesh Vasudev Mavalankar**, the first Speaker of Lok Sabha.

About G. V. Mavalankar

- Popularly known as Dadasaheb, he was conferred the title '**Father of the Lok Sabha**' by Jawaharlal Nehru.
- **Key Contributions:**
 - ⊕ He was active in Gujarat Education Society, Gujarat Sabha, and joined Swaraj Party.
 - ⊕ He played active role in **Non-Cooperation movement** and '**Khaira No-Rent**' campaign.
 - ⊕ Remained Speaker of Bombay Legislative Assembly (1937-1946), elected to preside over **Central Legislative Assembly (1946)** and became speaker of **Provisional Parliament in 1949**.
 - ⊕ He was the **founder Chairman of the National Rifle Association** as also of the Institute for Afro-Asian Relations.
 - ⊕ **Books:** Manavatana Jharna, Sansmarano, A great Experiment.
- **Values:** Nonpartisanship, leadership, integrity, patriotism etc.



AHMEDABAD



BENGALURU



BHOPAL



CHANDIGARH



DELHI



GUWAHATI



HYDERABAD



JAIPUR



JODHPUR



LUCKNOW



PRAYAGRAJ



PUNE



RANCHI