



Guiding Dreams, Empowering Future

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EXCLUSIVE CURRENT AFFAIRS BULLETIN

Happy New Year
2026

ISRO HEAVIEST LAUNCH BlueBird Block-2 Mission

Why in News...?

The Indian Space Research Organisation (ISRO) successfully carried out its heaviest-ever launch by placing the BlueBird Block-2 communication satellite into Low Earth Orbit using the LVM3 rocket in December 2025. This marks a major milestone in India's heavy-lift launch capability.

About BlueBird Block-2 Satellite

- Developed by AST SpaceMobile, a US-based space company
- Designed to enable direct-to-mobile satellite broadband connectivity
- Supports 4G and 5G services directly to standard mobile phones
- Aims to provide connectivity in remote, rural, and disaster-prone regions

About LVM3 Launch Vehicle

- India's primary heavy-lift launch vehicle
- Three-stage launch vehicle with solid, liquid, and cryogenic stages
- Capable of launching heavy satellites into LEO and GTO
- Previously used for Chandrayaan-2, Chandrayaan-3, and Gaganyaan missions

Strategic and Technological Significance

- Demonstrates ISRO's capability to undertake heavy commercial launch missions



► Mission Highlights

- **Mission Name:** LVM3 – BlueBird Block-2
- **Launch Vehicle:** LVM3 (earlier known as GSLV Mk-III)
- **Launch Site:** Satish Dhawan Space Centre, Sriharikota
- **Payload:** BlueBird Block-2 communication satellite
- **Payload Mass:** Around 6,100 kg (heaviest payload launched by ISRO)
- **Target Orbit:** Low Earth Orbit (LEO)

- Strengthens India's position in the global space launch market
- Boosts confidence in LVM3 for future human spaceflight missions
- Supports growth of space-based telecommunications infrastructure

Facts for Prelims :

- ▶ Heaviest payload launched by ISRO to date
- ▶ Orbit Type: Low Earth Orbit (LEO)
- ▶ Launch Vehicle: LVM3
- ▶ Satellite Purpose: Direct-to-mobile communication.



Infrastructure Bonds

Why in News...?

Infrastructure bonds came into focus after a public sector bank raised a large amount through infrastructure bonds in December 2025, highlighting their growing role in financing India's infrastructure expansion.

What are Infrastructure Bonds?

- ▶ Long-term debt instruments issued to finance infrastructure projects such as roads, railways, ports, power, and urban infrastructure
- ▶ Issued by governments, public sector banks, and financial institutions
- ▶ Investors receive fixed interest (coupon) payments and principal repayment on maturity
- ▶ Typical tenure ranges from 7 to 15 years or more

Types of Infrastructure Bonds

- ▶ Government infrastructure bonds issued by Centre, States, or agencies like NHAI
- ▶ Bank-issued infrastructure bonds, often exempt from CRR and SLR requirements
- ▶ Institutional bonds issued by bodies such as PFC, REC, IRFC, and IREDA
- ▶ Green infrastructure bonds for environmentally sustainable projects

Why Banks Issue Infrastructure Bonds

- To raise long-term funds matching the long gestation period of infrastructure

projects

- To reduce asset–liability mismatch arising from short-term deposits and long-term loans
- CRR and SLR exemptions lower the effective cost of funds
- Supports large-scale infrastructure financing without stressing deposit resources

Benefits for Investors

- ▶ Provide stable and predictable fixed returns
- ▶ Suitable for long-term and conservative investors
- ▶ Offer portfolio diversification through debt instruments
- ▶ Enable participation in national infrastructure development

Risks Associated with Infrastructure Bonds

- Interest rate risk due to long tenure
- Liquidity risk because of limited secondary market trading
- Credit risk if issuer faces financial stress
- Inflation risk eroding real returns over time

Facts for Prelims

- ✓ Used for financing long-gestation infrastructure projects
- ✓ Generally long-term in nature (7–15+ years)
- ✓ Issued by governments, banks, and financial institutions
- ✓ Helps deepen India's bond market

Rare Earth Permanent Magnets (REPM)

Why in News...?

On 29 December 2025, the Government of India approved a ₹ 7,280 crore scheme to promote domestic manufacturing of Sintered Rare Earth Permanent Magnets (REPMs), aiming to reduce import dependence and strengthen India's critical minerals ecosystem.

Objectives of the Scheme

- Establish a 6,000 Metric Tonnes Per Annum (MTPA) integrated domestic REPM manufacturing ecosystem
- Develop the complete value chain from rare-earth oxides to finished permanent magnets
- Reduce strategic dependence on imports, especially from China
- Support electric mobility, renewable energy, electronics, aerospace, and defence sectors

Scheme Implementation Framework

- Total duration: 7 years
- Gestation period: 2 years
- Incentive period: 5 years
- Up to 5 beneficiary manufacturers
- Capacity per beneficiary: 1,200 MTPA

Financial Outlay & Incentives

- Total scheme outlay: ₹ 7,280 crore
- Sales-linked incentives: ₹ 6,450 crore
- Capital subsidy: ₹ 750 crore
- Incentives linked to production and value addition

▶▶ Continued on P3



Feature	Infrastructure Bonds	InvITs
Nature	Debt instrument	Trust-based investment vehicle
Returns	Fixed interest	Market-linked cash flows
Risk Level	Relatively lower	Moderate
Liquidity	Limited	Higher (exchange traded)

Pradhan Mantri Gram Sadak Yojana (PMGSY)

STRENGTHENING INDIA'S RURAL ROAD NETWORK

Context :

- The Pradhan Mantri Gram Sadak Yojana (PMGSY) completed 25 years in December 2025, marking a major milestone in India's journey towards universal rural road connectivity.
- PMGSY completed 25 years in December 2025, marking a key milestone in India's push towards universal rural road connectivity.

What is PMGSY?

- ▶ A centrally sponsored scheme providing all-weather road connectivity to unconnected rural habitations.
- ▶ Integrates villages with markets, schools, and healthcare facilities.

Launch Details

- Launch date: 25 December 2000



- Occasion: Birth anniversary of Atal Bihari Vajpayee
- Implementing ministry: Ministry of Rural Development (MoRD)

Phased Implementation

- **PMGSY-I:** Universal connectivity to unconnected habitations
- **PMGSY-II:** Upgradation and consolidation of existing rural roads
- **PMGSY-III:** Strengthening through routes and major rural links to markets, schools, and health facilities
- **PMGSY-IV (2024–29):** Connectivity to 25,000 habitations through 62,500 km of roads

Features

- ▶ Coverage: Over 8.25 lakh km roads sanctioned; nearly 95% completed by December 2025

- ▶ Monitoring: OMMAS, e-MARG, GPS tracking, and geo-tagged inspections
- ▶ Quality control: Three-tier monitoring system
- ▶ Sustainability: Waste plastic, fly ash, bio-bitumen, climate-resilient construction

Significance

- Strengthens farm-to-market linkages and improves price realisation for farmers
- Expands access to education, healthcare, and welfare services
- Enhances rural employment, mobility, and inclusive socio-economic development

Overall Assessment

- ▶ PMGSY has become a cornerstone of rural infrastructure ensuring last-mile connectivity.
- ▶ PMGSY-IV will support balanced regional development and inclusive growth.

Conclusion :

Over the past 25 years, PMGSY has become a cornerstone of rural infrastructure development in India by ensuring reliable last-mile connectivity. Through its phased approach, technology-enabled monitoring, and sustainability orientation, the scheme has significantly improved rural livelihoods and service delivery. As PMGSY-IV advances, it will play a critical role in achieving balanced regional development, strengthening rural economies, and realising the goal of inclusive growth.

▶▶ From P1

Resource Availability & Import Dependence :

- India depends heavily on imports for permanent magnets
- China supplied about 60–90% of imports during 2022–25
- Domestic demand for REPMs is expected to double by 2030
- India has about 13.15 million tonnes of monazite resources

- Monazite contains nearly 7.23 million tonnes of rare-earth oxides

About Rare Earth Permanent Magnets (REPM) :

- High-strength permanent magnets made using rare-earth elements such as neodymium and samarium
- Provide very high magnetic strength in compact size
- Essential for EV motors, wind turbines, electronics, aerospace, and defence applications

Supporting & Related Initiatives:

- ▶ National Critical Minerals Mission (NCMM), 2025 – ensures long-term supply from exploration to recycling
- ▶ MMDR Act, 1957 Amendment (2023) – enables private participation and mineral concession auctions
- ▶ Khanij Bidesh India Limited (KABIL) for overseas mineral security
- ▶ Engagements in Minerals Security Partnership (MSP), IPEF, and iCET

Climate Change & Cyclone Pattern Changes in the North Indian Ocean

Overview

- Climate change is reshaping cyclone patterns across the North Indian Ocean, covering the Arabian Sea, Bay of Bengal, and nearby land regions.
- Clear impacts of changing climate patterns and rising ocean temperatures have been observed over the past 100 years.

Changes in Cyclone Frequency

- Data analysis from 1900 to 2025 using 10-year rolling averages shows a distinct inverted U-shaped trend over the last century.
- Recent decades show a clear decline in the overall number of cyclonic disturbances.

Regional Differences in Cyclonic Activity :

Bay of Bengal

- Recent years have witnessed a sharp decline in the number of cyclonic disturbances.
- This reduction accounts for the largest share of the overall decrease in cyclonic activity in the North Indian Ocean.



Arabian Sea

- Cyclonic disturbances show a steady increase in number.
- Although total cyclones are fewer than in the Bay of Bengal, cyclone intensity is increasing significantly.

Rise in Cyclone Strength

- A higher proportion of cyclones now intensify into severe cyclonic storms or stronger categories.
- Despite fewer cyclones overall, their destructive potential has increased.

Impact of Rising Ocean Temperatures

- Higher sea surface temperatures provide additional energy for cyclone intensification.
- The Arabian Sea is warming faster than the global average, contributing to stronger and less predictable cyclones.

Challenges in Cyclone Timing

- Increasing number of cyclones are forming during the October to December period.
 - The dominance of the July to September season in the Bay of Bengal is weakening.
- Conclusion

The North Indian Ocean sees fewer

cyclones overall, yet these are intensifying into stronger systems with destructive power. Regional shifts toward the Arabian Sea and seasonal moves to October–December heighten risks, demanding sharper disaster management, coastal planning, and climate adaptation strategies.

Your Money, Your Right” Initiative: RBI



- Nationwide government initiative to help citizens reclaim unclaimed financial assets (UFA).
- Nearly ₹ 2,000 crore returned to rightful owners.

Unclaimed Financial Assets (UFA)

- Assets lying unclaimed with banks, insurers, mutual funds, or statutory bodies.

Assets Covered

- Bank deposits (inactive for 10+ years)
- Insurance proceeds
- Mutual fund units/dividends
- Dividends and shares
- Pension and retirement benefits

Reasons for Unclaimed Assets

- Migration for work
- Change in contact details
- Closure of old accounts
- Low awareness among heirs

Magnitude of Unclaimed Assets

- Bank deposits: ₹ 78,000 crore
- Insurance: ₹14,000 crore
- Mutual funds: ₹3,000 crore
- Dividends: ₹9,000 crore

Initiative Details

- Duration: October–December 2025
- Coordinated by: Department of Financial Services, Ministry of Finance

- Partner institutions: RBI, IRDAI, SEBI, IEPFA, PFRDA
- Framework: 3A – Awareness, Accessibility, Action

Outreach Mechanism

- Digital platforms and facilitation camps in 668 districts
- Support for asset tracing and KYC/re-KYC

Digital Portals

- UDGAM – Bank deposits
- Bima Bharosa – Insurance claims
- MITRA – Mutual fund investments
- IEPFA – Dividends and shares

Significance

- Unlocks household savings
- Supports senior citizens
- Strengthens trust in the financial system
- Promotes financial inclusion

INDIA'S URBAN TRANSITION: Challenges and the Path to Inclusive Cities

Context

- India's urban transition faces rapid growth pressures.
- Cities must handle migration, inequality, and infrastructure gaps while boosting economic contributions.
- Policy focus is on reshaping the urban model to address rapid urbanisation, migration pressures, mobility issues, and rising inequality.
- Goal: Make cities inclusive, sustainable, and resilient.

Urbanisation in India

Meaning:

- Shift of population from rural to urban areas.
- Expansion of economic activity and city size/spatial footprint.

Drivers:

- Industrialisation.
- Migration.
- Better access to services.

Trends

- Urban population at 36% in 2024, expected to cross 50% by the 2050s–60s.
- Cities generate 65–70% of GDP despite a smaller population share.
- Rising inter-State and rural–urban migration to Tier-1 and Tier-2 cities.

Existing Pattern of Urban Growth

- **Metro-centric expansion:**
 - Growth concentrated in Tier-1 cities.
 - Limited emergence of new urban centres.
- **Peripheral sprawl:**
 - Growth of informal settlements at city edges.
 - Poor access to basic services.
- **Sectoral urban hubs:**
 - Cities specialise in IT, manufacturing, and services.
 - Leads to uneven regional development.
- **Smart City approach:**
 - Focuses mainly on physical infrastructure.
 - Neglects social inclusion and lived



urban experiences.

Challenges of Urbanisation :

Exclusion and Inequality

- Migrants face language, cultural, and documentation barriers.
- Limited access to welfare schemes such as PDS.

Housing Deficit

- High land prices and weak rental housing markets.
- Rising slums and insecure housing.

Urban Mobility Stress

- Heavy dependence on private vehicles.
- Only 37% of urban residents have easy access to public transport.
- Requirement of nearly 2 lakh urban buses versus about 35,000 currently operational.

Governance Gaps

- Fragmented authority across multiple agencies.
- Urban Local Bodies (ULBs) lack adequate fiscal autonomy.

Environmental Stress

- Increase in urban heat islands, air pollution, and water scarcity.
- Delhi's AQI often exceeds 400 during winter smog.

Social Fragmentation

- Weakening of community bonds.
- Growth of gated communities and

social silos.

Way Forward for Indian Cities

People-Centric Urban Planning

- Design cities as human-focused ecosystems.
- Prioritise safety, walkability, and public spaces.

Inclusive Urban Governance

- Enable multilingual service delivery.
- Include migrants in urban decision-making processes.

Sustainable Urban Mobility

- Strengthen bus-based public transport systems.
- Integrate last-mile connectivity and non-motorised transport.

Fiscal Empowerment of ULBs :

- Promote issuance of municipal bonds.
- Apply rational user charges to improve financial autonomy.

Affordable and Integrated Housing

- Promote transit-oriented development.
- Leverage schemes such as PMAY-Urban and ARHCs.

Conclusion

India's cities shape economic growth, social unity, and environmental strength; inclusive governance and people-centric planning are key to sustainable urban future.

Rashtra Prerna Sthal :

Why in News

The Prime Minister of India inaugurated the Rashtra Prerna Sthal in Lucknow, Uttar Pradesh, on 25 December 2025, marking the 101st birth anniversary of former Prime Minister Atal Bihari Vajpayee. The site is dedicated to national unity, good governance, and public service.

About Prerana Sthal :

- Name: Rashtra Prerna Sthal
- Location: Lucknow, Uttar Pradesh, on the banks of the Gomti River
- Area: Spread over approximately 65 acres
- Project Cost: Around 230 crore

Purpose and Significance :

- National memorial and inspirational complex

- Promotes values of nationalism, unity, self-respect, and public service
- Aims to inspire present and future generations
- Permanent national asset highlighting leadership and governance ideals

Important Components :

1. Bronze Statues:

- 65-feet tall statue of Atal Bihari Vajpayee – former Prime Minister of India and Bharat Ratna awardee
- 65-feet tall statue of Pandit Deendayal Upadhyay – proponent of Integral Humanism and Antyodaya
- 65-feet tall statue of Dr. Syama Prasad Mookerjee – founder of Bharatiya Jana Sangh

2. Lotus-Shaped Museum:

- Designed in the shape of a lotus
- Showcases India's national journey and

leadership legacy

- Features digital, immersive, and educational galleries

Philosophical and National Values Highlighted

- Unity and national integration
- Good governance (Good Governance Day observed on 25 December)
- Service to the nation and ethical public life

Facts for Prelims :

- Inauguration Date: 25 December 2025
- Occasion: 101st Birth Anniversary of Atal Bihari Vajpayee
- Location: Lucknow, Uttar Pradesh
- Area: Approximately 65 acres
- Major Features: Bronze statues and lotus-shaped museum



Himalayan Red Fox

Why in News

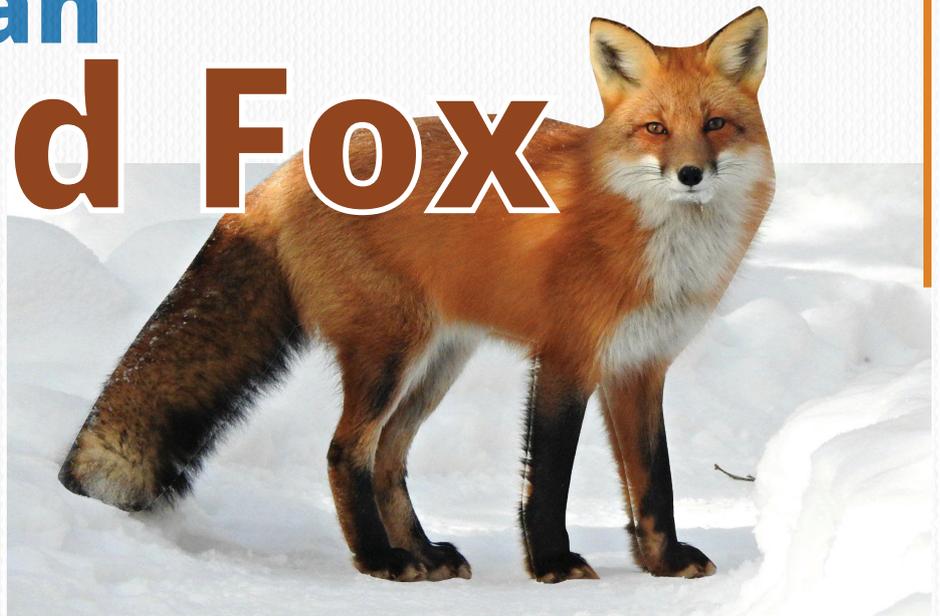
- A roadside sighting of a Himalayan Red Fox near Pangong Tso in Ladakh went viral on social media.
- Wildlife authorities cautioned that human interaction with wild animals can disturb natural behaviour, increase stress and create ecological risks in fragile ecosystems.

Species Profile

- Himalayan Red Fox is a subspecies of the widely distributed Red Fox.
- One of the most adaptable predators of high-altitude Himalayan ecosystems.
- Adapted to cold desert conditions, low oxygen levels and limited prey availability.

Conservation Status

- Classified as Least Concern on the IUCN Red List.
- Even Least Concern species can face localized threats due to habitat disturbance



and human interference.

Distribution

- Native to the Himalayan mountain range.
- Found in India, Nepal, Bhutan and Tibet.
- In India: Jammu & Kashmir, Himachal Pradesh, Uttarakhand, Sikkim and Arunachal Pradesh.

Pangong Tso : Facts

- High-altitude endorheic (landlocked) lake in the Ladakh Himalayas.
- Approximately one-third lies in India and two-thirds in China.
- World's highest saltwater lake.
- Known for changing colours: blue, green and reddish shades.

Pinaka Long-Range Guided Rocket (LRGR-120)

Why in News

India successfully conducted the maiden flight test of the Pinaka Long-Range Guided Rocket (LRGR-120) at the Integrated Test Range (ITR), Chandipur, Odisha, strengthening the Indian Army's long-range precision strike capability.

About Pinaka LRGR-120

- Type: Long-range, precision-guided artillery rocket
- Maximum Range: Approximately 120 km
- Guidance System: Inertial Navigation System (INS), mid-course guidance, and terminal guidance
- Launcher Compatibility: Can be fired from existing Pinaka Multi-Barrel Rocket Launcher (MBRL) systems

Developing Agency

Developed indigenously by the Defence Research and Development Organisation (DRDO). Key laboratory involved is the Armament Research and Development Establish-

ment (ARDE).

Pinaka Weapon System – Key Facts

- Indigenous artillery rocket system of the Indian Army
- Capable of firing 12 rockets in less than 60 seconds
- High mobility with shoot-and-scoot capability
- Designed for rapid deployment and saturation strikes
- Named after Pinaka, the bow of Lord Shiva

Evolution of Pinaka System

Variant	Approximate Range
Pinaka Mk-I	40 km
Pinaka Mk-I Enhanced	60 km
Pinaka Mk-II	75–90 km
Pinaka LRGR-120	120 km

Strategic Significance

- Bridges the gap between conventional artillery and tactical missile systems
 - Provides cost-effective precision strikes using existing launch infrastructure
 - Enhances deep-strike capability without dependence on air platforms
 - Strengthens India's deterrence posture
- Indigenisation and Defence Preparedness The development of Pinaka LRGR-120 supports Atmanirbhar Bharat in defence, demonstrates indigenous guided rocket capability, and improves operational readiness without the need for new launcher procurement.

Facts for Prelims:

- Range: 120 km
- Test Location: Integrated Test Range, Chandipur (Odisha)
- Guidance: INS with terminal guidance
- Developer: DRDO
- Launcher: Pinaka Multi-Barrel Rocket Launcher (MBRL)