



KAVISH IAS

— Converting Possibilities into Reality —

KAVISH INFORMIX

DAILY CURRENT AFFAIRS

🎯 PRECISE | 🧠 RELEVANT | ⌚ EXAM FOCUSED

STAY AHEAD. STAY INFORMED. STAY READY.

TODAY'S DATE



01 SEPTEMBER 2026

---TUESDAY---



Kolkata Topper

VAISHNA BISWAS

AIR - 367 | CSE 2025

★ OUR PROVEN LEGACY ★

OUR UPSC TOPPERS 2023



IPS LAXMAN PRATAP
RANK - 597

FORMER ASST. COMMANDANT IN BSF
CITY COLLEGE KOLKATA

OUR UPSC TOPPERS 2024



IRS SARLA JAKHER
AIR 593

CITY COLLEGE KOLKATA



IRS TANMAY
AIR 346

IIT KHARAGPUR



YOUR
DREAMS.

OUR
MISSION.

TOGETHER,
WE ACHIEVE
THE EXTRA
ORDINARY.

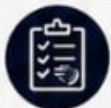


Converting Possibilities into Reality

PRELIMS MAINS | INTERVIEW



DAILY CURATED
NEWS



EXAM ORIENTED
ANALYSIS



SMART NOTES &
INFOGRAPHICS



BOOST YOUR
PREPARATION

— "INFORMED TODAY, EMPOWERED TOMORROW." —

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DAILY CURRENT AFFAIRS

1. V-Dem Report Flags Decline in India's Democratic Performance
2. What Two Districts Can Teach Us About Dealing with Rural Waste
3. Solid Waste Management Rules, 2026
4. C-DOT Unveils 14 Indigenous Quantum Products

1.V-Dem Report Flags Decline in India's Democratic Performance

Source: The Hindu

Why in News?

The Varieties of Democracy (V-Dem) Institute has reported that India's electoral democracy index has reached its lowest level since 1975, while the country continues to be classified as "autocratising".

Key Highlights

- The V-Dem Institute's report places India's electoral democracy index at its lowest level since 1975.
- India has been classified as an **"autocratising"** country, citing concerns over the weakening of democratic institutions.
- Declines have been reported in areas such as **judicial accountability**, autonomy of the Election Management Body and impartiality of public administration.
- The UN Committee on the Elimination of Racial Discrimination (CERD) has expressed concern over alleged large-scale violations by law enforcement officials in India.
- CERD has also raised concerns about the exclusion of voters, particularly Muslims, during the **Special Intensive Revision of electoral rolls**.

Detailed Insights

- The V-Dem Institute, based at the University of Gothenburg, uses a multidimensional methodology and expert assessments to evaluate democratic qualities across countries.
- According to the report, India's democratic performance has declined gradually since 2009, reaching levels comparable to the Emergency period of 1975.
- The report identifies deterioration in academic and cultural expression freedoms and increased harassment of journalists.
- CERD is an independent expert body that monitors implementation of the International Convention on the Elimination of All Forms of Racial Discrimination (ICERD).

- CERD conducted its first review of India since 2007.
- The Special Intensive Revision (SIR) of electoral rolls is undertaken by the Election Commission of India to verify and update voter lists and improve their accuracy.
- Concerns have been raised that the exercise could result in the exclusion of eligible voters.

Varieties of Democracy (V-Dem) Institute

- The V-Dem Institute is based at the University of Gothenburg, Sweden.
- It measures democracy through multiple dimensions rather than relying only on elections.
- Its assessment incorporates expert judgments and evaluates aspects such as electoral democracy, political participation, institutional checks and freedoms.

UPSC Prelims Question

Q. Consider the following statements regarding the Varieties of Democracy (V-Dem) Institute:

1. It uses a multidimensional approach to measure democratic qualities.
2. Its assessments involve expert judgments.
3. It is based at the University of Gothenburg.
4. It is an organ of the United Nations responsible for monitoring electoral democracy.

Which of the statements given above are correct?

- (a) 1, 2 and 3 only
- (b) 1 and 4 only
- (c) 2, 3 and 4 only
- (d) 1, 2, 3 and 4

Answer: (a) 1, 2 and 3 only

UPSC Mains Question

Q. Democratic governance extends beyond the conduct of periodic elections. Discuss the institutional and societal dimensions that are essential for ensuring the quality and resilience of democracy in India.

(150 words)

2.What Two Districts Can Teach Us About Dealing with Rural Waste

Source: The Hindu

Why in News?

Majuli in Assam and Tawang in Arunachal Pradesh have developed community-led rural waste management models that demonstrate how local participation, waste segregation and decentralized systems can address rural waste challenges.

Key Highlights

- Majuli and Tawang have implemented community-led models for rural waste management.
- Majuli began transporting waste across the Brahmaputra in April 2025 with support from Sahaas.
- Tawang introduced monthly “Swachchata Divas” in 2024 through the Himalayan Fringes Project.
- The Supreme Court has directed Union and State governments to institutionalize the Solid Waste Management Rules, 2016.
- Rural India faces major challenges due to inadequate waste data, limited collection systems and rising plastic consumption.

Majuli Model

- Majuli established Central Material Collection Facilities (CMCFs) for waste collection and management.
- Community awareness was promoted to encourage proper disposal and segregation.
- Waste is transported across the Brahmaputra to enable further processing and recycling.
- The model demonstrates the importance of decentralized infrastructure and community participation in geographically difficult regions.

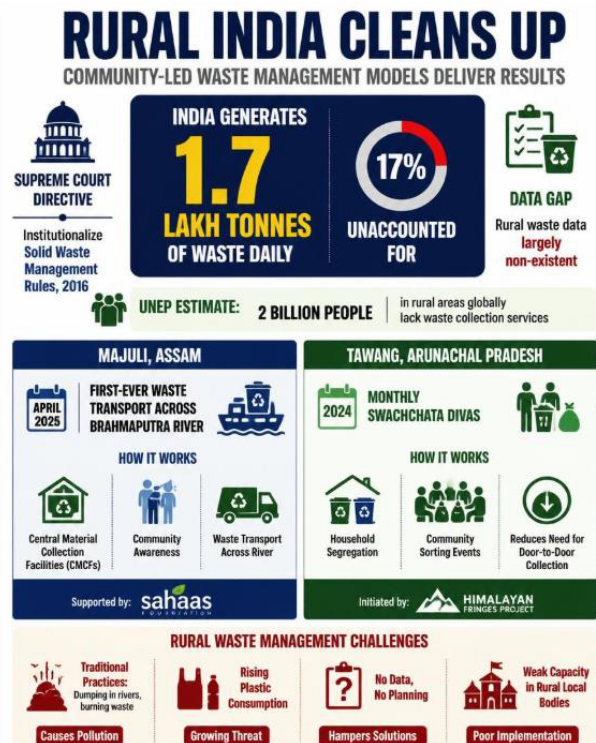
Tawang Model

- Tawang's model is based on household-level waste segregation and community-organized sorting events.
- Monthly “Swachchata Divas” encourage collective participation in waste segregation.
- The system reduces dependence on door-to-door waste collection.

- Households and shops contribute monthly fees, providing financial sustainability.
- Material Recovery Facilities (MRFs) process segregated waste into different categories.
- Recyclable materials generate revenue, helping sustain the system.

Rural Waste Management Challenges

- India generates around 1.7 lakh tonnes of waste daily, with about 17% remaining unaccounted for.
- Reliable rural waste data is largely absent.
- Rural local bodies often do not adequately perform waste-data collection responsibilities.
- Traditional practices such as dumping waste into rivers and open burning cause environmental pollution.
- Rural areas often lack adequate waste collection and processing infrastructure.
- Remote locations face high transportation costs for taking waste to recyclers.
- Increasing use of mixed waste and multi-layered plastics makes waste management more complex.



Role of Institutions

- The Central Pollution Control Board is responsible for waste-data collection.
- The Supreme Court has emphasized institutionalization of the Solid Waste Management Rules, 2016.
- Local committees can play an important role in organizing collection, segregation and financing.
- Community participation can reduce the financial and logistical burden on rural local bodies.

Significance

- Community-led systems can provide locally appropriate solutions to rural waste-management problems.

- Source segregation improves the recovery and recycling of valuable materials.
- Material Recovery Facilities can convert recyclable waste into an economic resource.
- User fees and revenue from recyclables can improve financial sustainability.
- Decentralized waste management can reduce pollution of rivers, land and other ecosystems.
- Such models can contribute to cleaner villages, environmental protection and sustainable rural development.

Way Forward

- Strengthen waste-data collection in rural areas.
- Promote segregation at source.
- Establish decentralized collection and Material Recovery Facilities.
- Encourage community participation through local committees and awareness campaigns.
- Develop financially sustainable models using user fees and revenue from recyclables.

UPSC Prelims Question

Q1. With reference to rural waste management in India, consider the following statements:

1. Material Recovery Facilities can be used for processing segregated recyclable waste.
2. Source segregation can improve the recovery of recyclable materials.
3. Rural waste management is free from major logistical challenges because waste generation is lower than in urban areas.
4. Community participation can contribute to the financial and operational sustainability of rural waste-management systems.

Which of the statements given above are correct?

- (a) 1 and 2 only
(b) 1, 2 and 4 only
(c) 2, 3 and 4 only
(d) 1, 2, 3 and 4

Answer: (b)

UPSC Mains Question

Q. Rural India faces distinctive challenges in solid waste management due to inadequate data, weak infrastructure and geographical remoteness. Discuss how community-led and decentralized waste-management models can provide sustainable solutions. (150 words)

3.Solid Waste Management Rules, 2026

Source: PIB

Why in News?

The Solid Waste Management Rules, 2026 replace the 2016 framework and shift India's waste management approach from "collect-and-dump" towards a **Circular Economy** model.

Key Features

- The rules mandate **four-way segregation at source** into wet waste, dry waste, sanitary waste and special care waste.
- Wet waste includes kitchen waste, food waste and other biodegradable material, which is intended for composting or bio-methanation.
- Dry waste includes plastic, paper, metal, glass and wood, which is intended for recovery and recycling through Material Recovery Facilities (MRFs).
- Sanitary waste includes used diapers, sanitary pads and tampons, which is required to be securely wrapped before disposal.
- Special Care Waste has been introduced as a distinct category covering items such as expired medicines, paint containers and mercury-containing devices.

- Bulk Waste Generators (BWGs) are identified on the basis of meeting at least one of the prescribed criteria: floor area of 20,000 sq m or more, water consumption of 40,000 litres/day or more, or waste generation of 100 kg/day or more.
- BWGs are required to follow Extended Bulk Waste Generator Responsibility (EBWGR) by processing wet waste on-site or obtaining certification for its off-site processing.
- A digital tracking system is intended to monitor waste from its generation to final disposal and improve accountability.
- The Polluter Pays Principle is strengthened through environmental compensation for improper disposal, false reporting and operation without registration.
- Landfills are intended to receive only inert residual waste, while disposal of unsegregated waste attracts higher charges.

HIMALAYAN HANGING GLACIERS

Silent Threat in Alaknanda Basin



Significance

- The framework seeks to increase waste segregation, recycling and resource recovery.
- It promotes circular economy principles by treating waste as a potential resource rather than merely as material for disposal.
- Digital monitoring and stronger penalties are intended to improve compliance and reduce illegal dumping.

4.C-DOT Unveils 14 Indigenous Quantum Products

Source: PIB

Key Points

- The Centre for Development of Telematics (C-DOT) has unveiled 14 indigenous quantum products during its 43rd Foundation Day celebrations in New Delhi.

- The products focus mainly on Quantum Key Distribution (QKD) and Post-Quantum Cryptography (PQC) to secure communication networks.
- QKD enables the secure generation and distribution of encryption keys using principles of quantum mechanics.
- PQC uses cryptographic algorithms designed to remain secure against attacks by future quantum computers.
- The products incorporate NIST-recommended PQC algorithms for quantum-resistant security.
- The portfolio includes solutions for quantum-safe encryption, secure communications and quantum-system components.
- These technologies can be deployed across telecom, enterprise, wireless, optical, strategic and defence sectors.
- The initiative strengthens India's indigenous cybersecurity and communication infrastructure against emerging quantum threats.

The Core Mechanism: Why QKD is Different

Traditional encryption (like RSA) relies on mathematical problems that are currently hard to solve but could be broken by future **Quantum Computers**. QKD, however, uses the properties of quantum mechanics to distribute a secret key.

- **Quantum Bits (Qubits):** Information is encoded in the quantum states of light particles (**photons**), such as their polarization.
- **The Observer Effect:** According to the **Heisenberg Uncertainty Principle**, measuring a quantum system disturbs it. If an eavesdropper (often called 'Eve') tries to intercept the key, the quantum state changes.
- **Tamper Detection:** This change introduces errors that the sender (Alice) and receiver (Bob) immediately notice. They discard the compromised key and start over, ensuring that no secret is ever leaked.

IN India's Recent Breakthroughs (2024–2026)

India has made rapid strides under the NQM, positioning itself among a handful of nations with advanced QKD capabilities.

- **1,000 km Milestone (April 2026):** India successfully demonstrated a 1,000-km quantum communication network, one of the longest in the world. This was achieved using indigenous technology developed by the startup **QNu Labs** in collaboration with the Indian Army.
- **ISRO's Free-Space Success (May 2026):** ISRO demonstrated free-space QKD over 300 meters at the Space Applications Centre. This is a crucial step toward **Satellite-Based Quantum Communication (SBQC)**, which will allow secure links between distant ground stations across the country.
- **C-DOT's Indigenous Products (August 2026):** The Centre for Development of Telematics (C-DOT) unveiled products like **Q-AKSHAY**, a compact QKD system,

and **Q-SETU**, a quantum-safe encryptor, reducing India's reliance on imported high-tech hardware.

Prelims Focus

- **C-DOT**: Autonomous R&D centre under the **Department of Telecommunications, Ministry of Communications**.
- **QKD** → Secure key distribution using quantum principles.
- **PQC** → Cryptography designed to resist quantum-computer attacks.
- **NIST** → U.S. National Institute of Standards and Technology.