

8. Short News

Gujarat has successfully transformed its rural landscape using this scheme.

Full Form- Galvanising Organic Bio-Agro Resources Dhan.

Goal- To convert organic waste (cattle dung, agricultural waste) into wealth (biogas, compost) and promote a circular economy.

Launch Details- Launched in 2018 under Swachh Bharat Mission (Gramin).

Nodal Ministry- Ministry of Jal Shakti.

Key Features- Sets up Biogas/Compressed Biogas (CBG) plants in villages.

Impact- Helps villages achieve ODF+ (Open Defecation Free Plus) status and reduces dependence on fossil fuels.

2. Nupi Lan Day

Observed on 12 December; President Murmu paid tribute on the 86th anniversary.

Meaning- "Nupi Lan" means "Women's War" in the Meitei language.

Historical Events-

First Nupi Lan (1908)- Protested against forced labour and colonial excesses.

Second Nupi Lan (1939)- A mass uprising against the export of rice, price hikes, and exploitation by traders backed by the British.

Key Hub- Centred around Khwairamband Bazar (Ima Market), a women-run market.

Significance- It is a symbol of women's resistance against economic injustice and colonial rule, eventually sparking demands for constitutional reforms.

3. Piprahwa Stupa & Gems

India blocked the auction of Piprahwa gems in Hong Kong, securing their return as cultural heritage.

The Stupa

Location- Siddharthnagar, Uttar Pradesh (near Lumbini).

Significance- Considered the burial site for the Shakya clan's share of Lord Buddha's ashes (c. 480 BCE).

Discovery- Excavated in 1898 by British engineer William Claxton Peppé.

The Gems- Found inside the stupa along with bone relics. Include gold ornaments, beads, and semi-precious stones.

2025 Event- Peppé's descendants tried to auction them; the Godrej Group acquired them to bring them back to India for public display.

4. India and Doping (WADA Report 2024)

India recorded the highest number of doping violations globally for the third consecutive year.

Key Statistics

Positivity Rate- 3.6% (260 positive cases out of 7,113 samples).

Comparison- India has more violations than China, Russia, and the USA despite conducting fewer tests.

Trend- Violation rate has decreased from 5.6% (2019) to 3.6% (2024).

Most Affected Sports- Athletics, Weightlifting, and Wrestling.

Doping- Use of banned substances to artificially enhance performance. Examples- Anabolic Steroids (muscle growth), Stimulants (alertness), EPO (stamina).

Regulatory Bodies- WADA- World Anti-Doping Agency (Global). NADA- National Anti-Doping Agency (India).

5. Rhino Dehorning

A strategy where 90–93% of a rhino's horn is surgically removed to discourage poaching.

Effectiveness- Reduced poaching by 78% in trial reserves; dehorned rhinos have a 95% lower risk of being killed.

Process- Rhino is sedated. Horn is cut above the germinal layer (allowing it to regrow eventually). Stump is coated with pine tar to prevent infection.

Poach- Horns are made of Keratin (same as human nails). High demand in Vietnam and China for traditional medicine (despite no scientific proof of medical value) and as status symbols.

Global Status- Fewer than 28,000 rhinos remain worldwide.

6. Jumping Genes (Transposons)

Polar bears in Southern Greenland are using "jumping genes" to adapt to melting ice.

Definition- Also called Transposons, these are DNA sequences that move from one location in the genome to another.

Function- They switch other genes on/off. They create genetic diversity and help organisms adapt rapidly to stress.

Findings- Bears in warmer areas showed higher "jumping" activity in genes related to metabolism and heat stress. This suggests a mechanism for short-term survival against climate change.

