

DAILY CURRENT AFFAIRS 13-08-2025

GS-2

- 1. Talaq-E-Hasan
- 2. SC Orders Removal of Free-Ranging Dogs from Delhi-NCR Localities

GS-3

- 3. Pneumococcal Disease
- 4. Envelope Dimer Epitope (EDE)
- 5. World Elephant Day 2025

Talaq-E-Hasan

Syllabus: GS-2: Indian Polity - Personal Laws.

Context:

> The Supreme Court agreed to hear petitions challenging the constitutionality of **Talaq-e-Hasan**.

About Talaq-e-Hasan

- > Meaning: An extrajudicial form of divorce under Islam, only men can practice.
- > **Nature:** Revocable form of divorce.
- > **Religious sanction:** Approved by Prophet Mohammad; valid as per all schools of Muslim law.

Procedure

- Pronouncement: Husband pronounces "talaq" once every month for three months.
- ➤ **Iddat Period:** 90 days gap between the first and final pronouncement (period of abstinence).
- **Revocation:** If the couple resumes cohabitation during iddat, divorce is nullified.

Difference from Triple Talaq (Talaq-e-Biddat)

Feature	Talaq-e-Hasan	Talaq-e-Biddat (Triple Talaq)
Form	Revocable	Irrevocable
Procedure	Pronounced over 3 months	Pronounced thrice in one sitting
Time gap	Yes (iddat period)	No gap (instant)
Legal status in India	Still practiced	Banned in 2019

Constitutional Debate

- Challenge: Petitioners argue it violates Articles 14, 15, and 21 (Equality, Non-discrimination, Right to life with dignity).
- > Supporters' view:
 - Claimed to be in line with Quranic procedure.

Allows scope for reconciliation during iddat.

> Opponents' view:

- o Discriminatory against women; unilateral male privilege.
- Need for gender-neutral divorce laws.

Relevant Precedent

- > **Shayara Bano v. Union of India (2017):** SC struck down triple talaq (Talaq-e-Biddat) as unconstitutional.
- > Current petitions extend challenge to **Talaq-e-Hasan**.

SC Orders Removal of Free-Ranging Dogs from Delhi-NCR Localities

Syllabus: GS-2: Indian Polity and Governance.

Context:

Delhi-NCR is witnessing a sharp rise in human-dog conflicts, with over 37 lakh dog bite cases reported nationally in 2024 (NCDC).

The Supreme Court (Aug 2025) has directed immediate removal and permanent sheltering of strays from streets, bringing the public health–animal welfare debate into sharp focus.

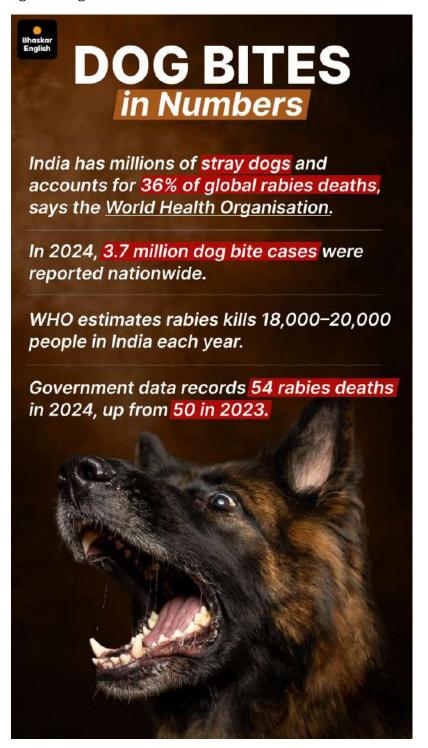
Magnitude of the Problem

- ➤ As per the 2019 Livestock Census, India has 1.5 crore stray dogs.
- ▶ Delhi alone recorded 35,198 animal bite incidents between Jan–Jun 2025.
- ➤ Rabies prevention costs ₹5,128 per patient; sheltering costs ~₹2,500 per dog; infrastructure for sheltering could reach ₹15,000 crore.
- > Impact is uneven across urban, semi-urban, and rural areas due to differences in infrastructure and community attitudes.

Constitutional & Legal Framework

- > **Art. 243W**: Assigns municipal bodies the duty to prevent cruelty to animals.
- > **Art. 51A(g)**: Citizens' duty to show compassion towards living creatures.

- ➤ **Animal Birth Control Rules, 2023**: Promote sterilisation, vaccination, and regulated feeding.
- > SC Jallikattu Judgment (2014): Extended Article 21 protections to animals, recognising their right to life.



Ethical Dimensions

- Utilitarianism: Policies should aim to maximise welfare and minimise harm for both humans and animals.
- > **Deontology**: Protecting human safety and animal rights are equal duties, not to be compromised.
- > **Virtue ethics**: Decision-making should reflect compassion, prudence, and responsibility.

Global Lessons

- > Netherlands eliminated stray dogs via strong legislation, sterilisation drives, and awareness campaigns.
- > Bhutan and Thailand's long-term CNVR programs reduced both dog populations and rabies incidence.
- > Evidence warns against the "vacuum effect," where removal without population control causes quick replenishment.

Way Forward

- ➤ Integrated approach: Sterilisation and vaccination for general population, sheltering for aggressive/high-risk dogs.
- Coordination between government, AWBI, RWAs, and NGOs.
- > Use of technology for GPS-based tracking, bite-reporting apps, and vaccination databases.
- Community engagement to address resistance and improve compliance.
- Sustainable financing through PPPs, CSR contributions, and dedicated municipal funds.

Conclusion

Effective stray dog management must be humane, scientifically grounded, and economically viable—protecting public health while upholding constitutional compassion for animals.

Pneumococcal Disease

Syllabus: GS-3: General Science - diseases.

Context:

- Pfizer launched the 20-valent pneumococcal conjugate vaccine (PCV20) for adults in India.
- Provides protection against 20 serotypes responsible for the majority of pneumococcal diseases.

About the Disease

- **Cause:** Infection by *Streptococcus pneumoniae* (pneumococcus).
- ➤ **Nature:** Encapsulated bacteria with **polysaccharide capsule** crucial for virulence.
- ➤ **Global Diversity:** ~90 identified serotypes; few cause most human disease.

Types of Illness

- > Mild: Otitis media (ear infections).
- > **Severe:** Pneumonia, septicemia (bloodstream infection), meningitis (CNS infection).

Epidemiology

- > **Global Impact:** Major public health challenge.
- > High-Risk Groups:
 - Young children (esp. <5 years)
 - Elderly
 - Immunocompromised individuals
- ➤ **Mortality:** ~1 million child deaths annually worldwide.
- > **Transmission:** Direct contact with **respiratory secretions** (patients or carriers).

Treatment & Prevention

- **Treatment:** Antibiotics (concern rising **antimicrobial resistance**).
- > Prevention:
 - Pneumococcal vaccines (e.g., PCV13, PCV20)
 - Targeted vaccination for high-risk groups.

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Significance for India

- ➤ High childhood morbidity & mortality from pneumococcal pneumonia.
- > Vaccination part of **Universal Immunization Programme (UIP)** for children (PCV13); now adult coverage with PCV20 may expand protection.

Envelope Dimer Epitope (EDE)

Syllabus: GS-3: Science and Technology - Biotechnology.

Context:

Landmark study offers new insights into what protects against dengue.

Envelope Dimer Epitope (EDE) and Dengue Immunity

What is EDE?

- ➤ **Definition**: A *quaternary epitope* on the dengue virus envelope (E) protein, formed when two E proteins pair together.
- **Function**: Major immune target for generating *broad, cross-serotype protection*.
- > **Uniqueness**: Present only in **mature virus particles**, making it a precise neutralising antibody target.

How it Works

- **Recognition** EDE forms on the virus surface when E proteins dimerise.
- > **Antibody Binding** Special **EDE-like antibodies** attach to this structure.
- **Blocking Infection** Prevents virus from binding and entering host cells.
- ➤ Cross-Serotype Protection Structure conserved across all four dengue serotypes → broad neutralisation.

Key Characteristics

- Broadly Neutralising Active against all 4 dengue virus serotypes.
- ➤ **High Protective Value** Linked with milder disease and fewer hospitalisations.
- > **Induced by Multiple Exposures** Common after reinfections or vaccination with prior exposure.
- **Low in Primary Infection** Rare in first infection.

▶ Biomarker Role – High EDE-like antibodies = strong, broad dengue immunity → useful in vaccine efficacy studies.

Existing Vaccines

- > **Dengvaxia** Licensed in some countries; use restricted to previously infected individuals due to **Antibody-Dependent Enhancement (ADE)** risk.
- > **QDENGA** Approved in some regions; effective mainly in pre-exposed individuals.
- Limitation Both need prior infection for optimal protection; cannot fully remove ADE risk.

Implications

- > Vaccine Development Targeting EDE may enable *cross-serotype immunity* without ADE.
- **Public Health** Broader immunisation possible in endemic zones (e.g., India).
- Therapeutics Potential monoclonal antibody treatments for rapid immunity during outbreaks.

World Elephant Day 2025

Syllabus: GS-3: Wildlife Conservation

Context:

The first World Elephant Day was observed on August 12, 2012, to highlight the plight of Asian and African elephants.

World Elephant Day 2025

- ➤ **Date & Venue:** August 12, 2025 Coimbatore, Tamil Nadu.
- ➤ **Organisers:** Ministry of Environment, Forest and Climate Change (MoEF&CC) in collaboration with Tamil Nadu Forest Department.
- > Theme Focus: Human–Elephant Conflict Mitigation.

About

- Nature of Event:
 - o Annual global event for elephant conservation and protection.

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 Raises awareness about threats — habitat loss, poaching, humanelephant conflict.

> History:

 Established in 2012 by Patricia Sims (Canadian filmmaker) & Elephant Reintroduction Foundation (Thailand).

> Aims:

- o Preserve and protect elephants & habitats.
- o Promote sustainable **human-elephant coexistence**.

Elephant - Key Facts

Taxonomy

- > **Family:** Elephantidae
- > Largest terrestrial mammals.
- > Known for intelligence, complex social structures, and keystone ecological role.

IUCN Red List Status

Species	Scientific Name	Status
Asian Elephant	Elephas maximus	Endangered
African Savanna Elephant	Loxodonta africana	Endangered
African Forest Elephant	Loxodonta cyclotis	Critically Endangered

Features

> Physical Traits:

 Massive body, trunk (multifunctional), large ears (larger in African, smaller in Asian).

> Tusks:

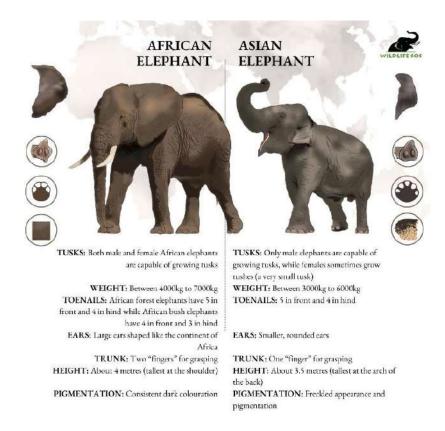
- o Modified incisors for foraging, digging, defence.
- o African: both sexes have tusks; Asian: only some males.

> Social Structure:

- Matriarch-led herds (females + calves).
- Males solitary or in small bachelor groups.

> Reproduction:

- Gestation ~22 months; one calf every 4–5 years.
- Calf care is communal.



Ecological Role

- Seed dispersal maintaining forest biodiversity.
- ► **Landscape engineering** create water holes, maintain grasslands.
- **Keystone species** influence survival of multiple other species.