
Prelims Exam Topics

STATE OF INDIA'S BATS (SOIBATS) 2024-25 REPORT

Context

The State of India's Bats (SoIBats) 2024-25 Report, a joint initiative by the Nature Conservation Foundation (NCF) and Bat Conservation International (BCI), is the first-ever comprehensive national-level assessment of bats in the country.

Key Findings

- India currently hosts **135 recognized species** of bats.
- The highest levels of species richness are concentrated in **West Bengal** (68 species) and **Meghalaya** (66 species).
- **Conservation Status:** While many species are stable, **7 species** are listed as "Threatened" by the IUCN, and **16 species** are endemic to the Indian subcontinent.
- While natural caves and old-growth trees are the primary habitats, bats are increasingly adapting to urban environments, utilizing monuments, wooden beams in old houses, and abandoned buildings.

Bats of India

India's bat population is split into two broad functional groups: the larger fruit bats (Megachiroptera) and the smaller, insect-eating bats (Microchiroptera).

- **The Kolar Leaf-nosed Bat:** This "Critically Endangered" species is found in only one cave in Karnataka, making it one of the rarest mammals in the world.
- **Salim Ali's Fruit Bat:** A rare species endemic to the Western Ghats, named after the legendary "Birdman of India."
- **Island Endemics:** The **Andaman Horseshoe Bat** and the **Nicobar Flying Fox** represent unique evolutionary lineages restricted to India's island territories.
- **The Giant Indian Flying Fox:** One of the largest bats globally, frequently seen in urban canopy trees across the mainland.

About Bats

- **Order: Chiroptera** (Only mammals capable of true flight).
- **Ecological Role**
 - **Pollination and Seed Dispersal:** Fruit bats are primary pollinators for several economically important plants and are responsible for nearly **40% of forest regeneration** in certain tropical regions through seed dispersal.
 - **Natural Pest Control:** Insectivorous bats act as biological pesticides, consuming massive quantities of insects (including mosquitoes and crop-damaging moths), thereby reducing the need for chemical fertilizers.
 - **Guano as Fertilizer:** Bat droppings (guano) are rich in nitrogen and phosphorus, serving as a high-quality natural fertilizer for cave and forest soil health.
- **Threats and Concerns**

- **Habitat Fragmentation:** Mining (especially in the limestone caves of Meghalaya) and the felling of old-growth trees for infrastructure projects are destroying primary roosting sites.
- **Zoonotic Stigma:** Since the COVID-19 pandemic, bats have faced increased persecution due to public fear. The report clarifies that bats have co-existed with various viruses for **52 million years**; spillover events only occur when humans encroach upon or disturb their habitats.
- **Chemical Poisoning:** The overuse of pesticides reduces their food source and leads to bioaccumulation of toxins within bat populations.
- **Urban Mismanagement:** Lack of protection for "man-made" roosts like heritage monuments often leads to colonies being smoked out or excluded during renovations.

SIJIMALI BAUXITE CONFLICT

Context

The Sijimali bauxite block in Odisha has become a site of intense conflict as the Kondh tribal community resists land acquisition and road construction.

About Sijimali Hill

- **Location:** Straddles the border of **Rayagada and Kalahandi** districts in Odisha.
- **Ecological Zone:** Located in the heart of the **Eastern Ghats**, a region often compared to the Aravallis for its ecological sensitivity.
- **Bauxite Reserves:** The hill is estimated to hold **311 million tonnes** of bauxite. Odisha itself holds **51% of India's bauxite reserves**, making this region the "Aluminium Hub" of India.

About Bauxite

- **Characteristics**
 - **Non-ferrous metallic mineral**
 - Principal ore of **aluminium**
 - Generally **reddish-brown, white, grey or yellow** in colour
 - Composed mainly of **hydrated aluminium oxides** (gibbsite, boehmite, diaspore)
 - **Lightweight**, low density but high strength (via aluminium extraction)
 - Formed by **intense chemical weathering (laterisation)** in tropical and subtropical climates
 - Occurs as **residual deposits**, not associated with veins or lodes
 - Typically found on **plateaus, uplands and hilltops**
- **Uses**
 - **Aluminium** used in transport, construction, packaging)
 - Electrical transmission lines and cables
 - Aircraft, automobiles, ships and rail coaches (lightweight metal)
 - Packaging industry (cans, foils)
 - Defence, aerospace and renewable energy sectors
 - Alumina used in refractories, abrasives, cement and chemicals
- **Worlds Largest producer:** Guinea

Distribution of Bauxite in India

State	Major Belts / Districts / Mines
Odisha (largest producer)	Koraput, Kalahandi, Rayagada; Panchpatmali (Damanjodi)
Gujarat	Kachchh; Jamnagar; Bhavnagar
Jharkhand	Lohardaga plateau
Maharashtra	Kolhapur; Ratnagiri; Satara
Chhattisgarh	Surguja; Bilaspur; Bastar
Madhya Pradesh	Amarkantak; Mandla; Shahdol
Andhra Pradesh	Eastern Ghats (Visakhapatnam, East Godavari)
Tamil Nadu	Salem; Nilgiris (limited deposits)

Facts

1. **Niyamgiri Precedent (2013):** India's first "environmental referendum" where Gram Sabhas rejected mining, citing tribal religious rights (Dongria Kondh).
2. **Kondh Tribe:** Particularly Vulnerable Tribal Groups (PVTGs) and other Scheduled Tribes residing in the hilly tracts of Odisha.

TRENDS ON WOMEN'S REPRESENTATION IN INDIA

Context

Women's representation in India continues to be limited, with participation in Parliament and State Assemblies reflecting persistent gender disparities. The trends also underscore India's low global standing and highlight the pressing need for structural reforms, including measures like reservation or quotas.

Recent trends

Union level

- Women's representation in Indian legislatures remains consistently low, rarely crossing 15%.
- In the Lok Sabha, representation rose from 4.9% (1951–52) to about 13.6% (2024–29) and its peak was 14.36% (2019–24); lowest 3.5% (1977–79).
- In the Rajya Sabha, women constitute around 16%, slightly higher than Lok Sabha but still far from parity.

State Assemblies

- **Uneven Representation**
 - Women's participation across State Assemblies is low and highly uneven.
 - Only Chhattisgarh (21.1%) has crossed 15%, making it an exception.
- **Relatively better-performing states:**
 - Tripura (15%)
 - Jharkhand (14.8%)
 - Haryana (14.4%)
 - West Bengal (13.6%)
- **Lowest representation:**
 - Nagaland, Puducherry (~3.3%)

- Nagaland elected women MLAs for the first time only in 2023
- **Widespread gaps:**
 - 19 Assemblies have less than 10% women MLAs
 - Major states include Gujarat, Maharashtra, Tamil Nadu, Assam, Karnataka

Global Comparison: India's Position

- India ranks 147th globally in women's representation in lower houses (IPU, 2026).
- This reflects a significant lag compared to global standards.
- **Countries with high representation (50%+):**
 - Rwanda, Cuba, Nicaragua
 - Mexico, Bolivia, Costa Rica
 - UAE, Andorra
- **Global trend:**
 - Increased from 11.3% (1995) to 27.2% (2025)
 - Growth has slowed in recent years

Key Drivers of Higher Representation

- **Countries performing better share common features:**
 - Legislative gender quotas
 - Proportional or mixed electoral systems
 - Gender-sensitive parliamentary practices
 - Measures to curb violence against women in politics
- **Data insight:**
 - Countries with quotas: 31.2% women representation
 - Without quotas: 16.8%

Need for Reform

- India lacks strong institutional mechanisms like quotas.
- Proposed reforms such as 33% reservation in Parliament and Assemblies remain stalled.
- Improving representation requires:
 - Political will from parties
 - Institutional reforms (quotas, electoral changes)
 - Social change to reduce gender barriers

WOMEN'S RESERVATION CANNOT WAIT

Context

The rejection of the 131st Constitutional Amendment Bill (April 2026) has revived the debate on the urgent need to implement women's reservation in legislatures.

Key Data

- **Parliament vs States:** Women form only 14–15% in Parliament and about 9% in State Assemblies, despite being nearly half the population.

- **High voter participation:** In many states, women's turnout equals or exceeds men's, showing strong political engagement.
- **Local governance success:** Reservation in Panchayati Raj Institutions (33–50%) has led to better focus on health, sanitation, and welfare.
- **Global comparison:** India's representation remains far below international democratic standards.

Reasons for immediate action

- **Bridging structural inequality:** Voluntary efforts by parties have not worked and systemic exclusion needs systemic solutions.
- **Improved policy outcomes:** Women leaders tend to prioritise education, healthcare, and social welfare.
- **Role model effect:** Greater visibility of women in power encourages future leadership.
- **Democratic legitimacy:** A democracy must reflect its population; underrepresentation weakens its credibility.
- **Rising aspirations:** With more women in education and jobs, delayed representation risks alienation and frustration.

The 106th Constitutional Amendment (2023)

- **Provides 33% reservation for women in:**
 - Parliament
 - State Assemblies
 - Delhi Assembly
- **Includes:**
 - 15-year duration (extendable)
 - Sub-quota for SC/ST women
 - Rotation of reserved seats
- **Implementation condition:** Linked to delimitation after the next census, which has delayed rollout.

Risks of Delaying Reservation

- **Growing representation gap:** Postponement beyond the 2027 Census may exclude women from the 2029 elections.
- **Continued male dominance:** Parties may keep nominating fewer women due to entrenched biases.
- **Policy blind spots:** Key areas like safety, health, and welfare lack adequate female perspective.
- **Weakening democracy:** Participation without representation limits democratic depth.
- **Economic cost:** Excluding women from leadership reduces governance efficiency and development outcomes.

Way Forward

- **Remove census linkage:** Explore legal options to implement reservation without waiting for delimitation.
- **Build leadership pipelines:** Use SHGs and grassroots networks to train future women leaders.
- **Party reforms:** Encourage internal quotas in ticket allocation.
- **Support mechanisms:** Provide financial and institutional backing for women candidates.
- **Public consensus:** Frame women's reservation as a national priority, not a partisan issue.