



India's 1st DNA-Based Elephant Census | Uttarakhand | 18 Oct 2025

Why in News?

India's first-ever **nationwide DNA-based census** of wild elephants has revealed a **25% decline in the country's elephant population** over the past eight years, highlighting growing threats from **habitat loss, fragmentation, and human-elephant conflict**.

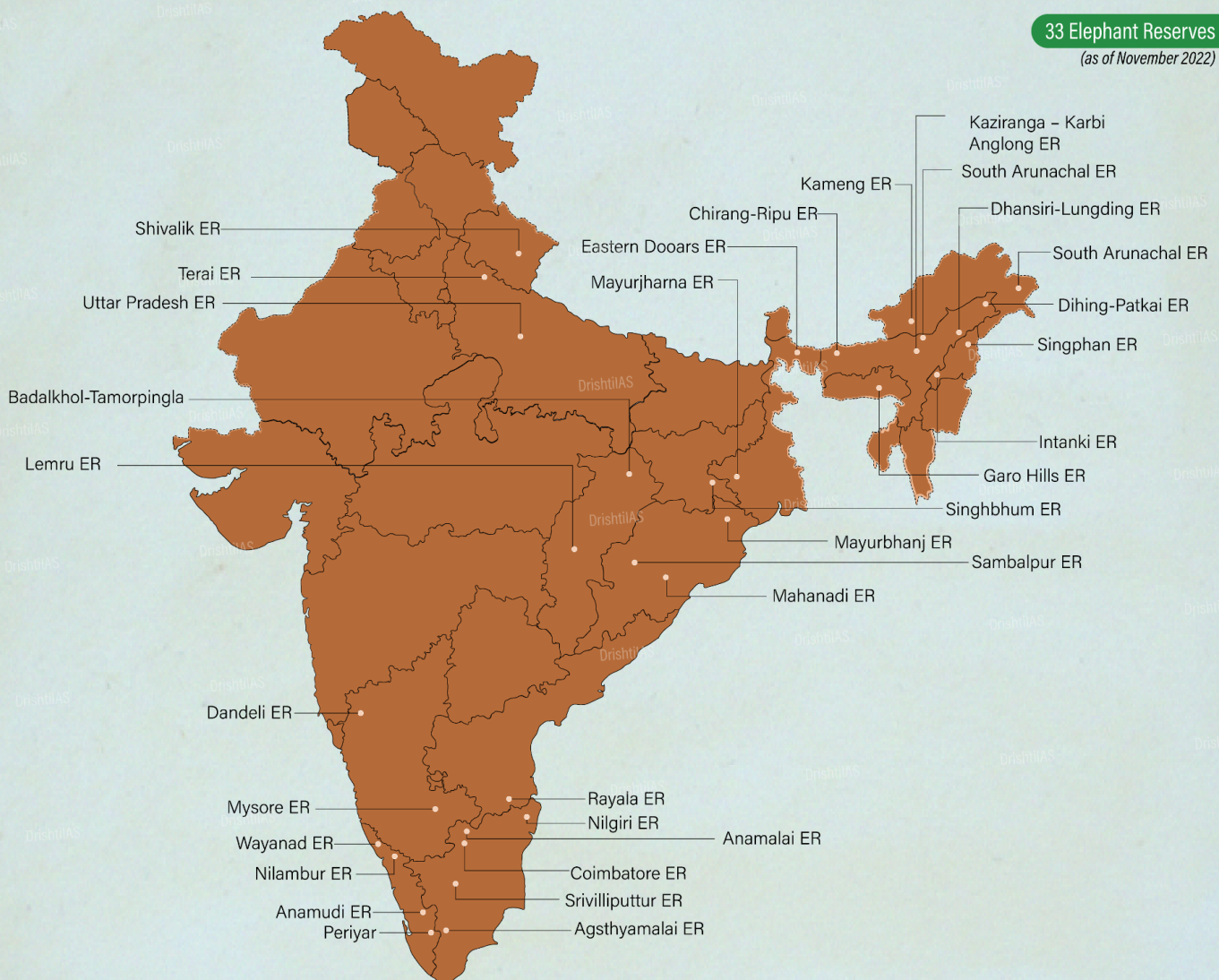
Key Points

- **About:** The report titled '**Status of Elephants in India: DNA-based Synchronous All-India Population Estimation of Elephants (SAIEE 2021-25)**' estimated **22,446 elephants**, compared to **29,964 in 2017**.
 - The exercise was conducted by the **Wildlife Institute of India (WII)** under **Project Elephant (1992)**.
 - The study marks a shift from **visual and dung-based counts** to a **DNA mark-recapture technique**, enabling more **scientifically accurate population estimation**.
 - The **DNA-based method**, similar to that used in tiger estimation, identifies individual elephants through **unique genetic markers**, overcoming the limitation of elephants' lack of distinctive physical features.
- **Data Collection:**
 - Conducted across **188,030 trails** covering **6.66 lakh km**.
 - Over **3.19 lakh dung plots** examined and **21,056 samples** collected.
 - **DNA profiles** generated for **4,065 individual elephants**.
- **Estimation Technique:** Used **Spatially Explicit Capture-Recapture (SECR) models** integrating genetic and habitat data for accurate population estimation.
- **Regional Distribution:**
 - Karnataka - 6,013
 - Assam - 4,159
 - Tamil Nadu - 3,136
 - Kerala - 2,785
 - Uttarakhand - 1,792
 - Odisha - 912
- **Regional Trends:**
 - **Western Ghats:** 11,934 elephants (down from 14,587 in 2017)
 - **Northeastern Hills & Brahmaputra Plains:** 6,559 (down from 10,139)
 - **Central Indian Highlands & Eastern Ghats:** 1,891 (down from 3,128)
 - **Shivalik-Gangetic Plains:** 2,062 (nearly unchanged from 2,085)
- **Key Insights:**
 - **Habitat Fragmentation:** Expansion of **coffee and tea plantations, farmland fencing, and infrastructure projects** are fragmenting elephant habitats, especially in the **Western Ghats**.
 - **Human-Elephant Conflict:** Highest in **Assam** (Sonitpur, Golaghat) and **central India** (Jharkhand, Chhattisgarh, Odisha).
 - Central India, with less than 10% of elephants, accounts for **45% of human deaths** caused by elephants.
 - **Positive Development:** **Poaching incidents have declined**, but **habitat degradation** remains the major threat.

Elephant Reserves

33 Elephant Reserves

(as of November 2022)



FACTS

- Tamil Nadu and Assam have the highest number (5) of elephant reserves in India.
- The Indian elephant *Elephas maximus* is included in Schedule I of the Indian Wildlife (Protection) Act, 1972 and in Appendix I of CITES.
- Indian Elephant has also been listed in the Appendix I of the Convention of the Migratory Species and as 'Endangered' in the IUCN Red List.
- The elephant was declared the National Heritage Animal of India in 2010.
- MoEFCC provides financial and technical support to major elephant range states in the country through Project Elephant. Project Elephant was launched by the Government of India in the year 1992 as a Centrally Sponsored Scheme.



UN Troop Contributing Countries (UNTCC) Chiefs Conclave 2025 | National Current Affairs | 18 Oct 2025

Why in News?

The **United Nations Troop Contributing Countries (UNTCC)** Chiefs Conclave 2025, hosted by the Indian Army from 14th to 16th October 2025, brought together senior military leaders from 32 nations that play a key role in global [UN peacekeeping](#) operations.



Key Points

- **About:** The conclave is attended by senior military officials from 32 nations, including Algeria, Armenia, Australia, **Bangladesh, Brazil, Egypt, Ethiopia**, France, Ghana, India, Italy, Kenya, Malaysia, Nepal, Nigeria, Poland, Rwanda, Sri Lanka, Tanzania, Thailand, Uganda, Uruguay, and Vietnam.
 - The event also features defence exhibitions aimed at building shared capacities for peacekeeping missions.
- **Objectives:** The UNTCC serves as a vital forum to **address operational challenges**, evolving threats, interoperability, inclusivity in decision-making, and the role of technology and training in strengthening UN peacekeeping.
 - India, one of the largest contributors to UN peacekeeping, has convened this high-level forum to **discuss best practices, share insights**, and build mutual understanding for future peacekeeping.
- **Technology Demonstration:** The chiefs witnessed a demonstration of integrated, [new-age military technology](#) by the Indian Army, showcasing various indigenous military equipment.
- **4C Formula for UN Peacekeeping:** Defence Minister Rajnath Singh proposed a guiding principle of enhanced *Consultation, Cooperation, Coordination, and Capacity Building (4C)* to **address emerging challenges** in peacekeeping.
 - He noted that the **Centre for UN Peacekeeping in New Delhi** has trained participants from over 90 countries, contributing significantly to the development of interoperability among peacekeepers.

United Nations Peacekeeping (UNPK)

- The first UNPK mission, **the United Nations Truce Supervision Organisation (UNTSO)**, was established in May 1948 to monitor the [Armistice Agreement](#) between Israel and its Arab neighbours with a small team of military observers.
- They are deployed by the [UN Security Council](#) to support ceasefires and peace agreements and are called Blue Helmets due to the light blue colour symbolising peace on the UN flag.
- Currently, over 61,000 military and police peacekeepers from 119 countries and more than 7,000 civilian personnel serve in 11 UN Peacekeeping Missions.

