

India's First AI Elephant Research Centre in Palamu Tiger Reserve

Prelims: Current events of national importance | Conservation

Why in News?

Palamu Tiger Reserve in Jharkhand is set to establish first AI powered Human -elephant conflict research Centre in India.

- **Aims** - To Transition Wildlife Management from traditional, reactive methods to proactive, AI tech- driven method.

Core Objectives -

- **Audio - Decoding** - Using AI models to understand elephant vocalizations & Distress alerts correspondence to Grazing, danger, or delivery.
- **Predictive Tracking** - With help of AI to track seasonal Migratory corridors & Behavior patterns, establishing automated early warning system in nearby villages.
- **Uniform Framework** - Creating the nation's first data-driven matrix using captive elephants to evaluate herd-human behavioral dynamics and refine mitigation strategies.

Facts of Palamu Tiger Reserve

- **Location** - Chhotanagpur plateau (Jharkhand)
- **Constituted as** - Protected Forest in 1947, it holds a pioneering position in global wildlife conservation as one of the original 9 tiger reserves designated at the launch of Project Tiger in 1974.
- Its baseline scientific forestry management dates back to 1864 under Dr. Anderson, serving as an administrative archive of Indian forest laws.
- **Total Area** - 1129.93 sq. km.
- **Core Area (Critical Tiger Habitat)** - 414.08 sq. km, which fully encompasses the Betla National Park (226.32 sq. km).
- **Buffer Area** - 715.85 sq. km.
- **Drainage Network** - Drained by 2 Perennial rivers—the North Koel and Burha River alongside seasonal torrents like the Auranga, Satnadi, and Sukri.
- It also features a unique geological half-lock spring called Taru.
- **Located in** - rain-shadow zone
- **Biodiversity** - It Hosts Leopards, Elephants, Sloth Vear, Gaur, Tigers & Indian Wolves.

For Reference: [The New Indian Express](#) | [IAS Parliament](#)



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