

Dhole Conservation Breeding Programme

Mains Syllabus: GSIII - Conservation

Why in news?

Recently, the Indira Gandhi Zoological Park announced the successful birth of 14 dhole puppies, showcased a thriving breeding effort for this endangered species.

What is the dhole conservation breeding programme?

- Dhole conservation breeding programme It is a captive breeding and release program focused on increasing the population of the Asiatic Wild Dog (dhole).
- It aims to mitigate threats like **inbreeding and habitat loss**, and to improve understanding of the species for better conservation efforts.
- The first dedicated conservation breeding facility for dholes in India was established in 2014.
- Location Indira Gandhi Zoological Park (IGZP), Visakhapatnam, Andhra Pradesh
- **Implemented by** Indira Gandhi Zoological Park (IGZP) and supported by Central Zoo Authority (CZA).
- **Research and technical support** Wildlife Institute of India (WII), Dehradun and LACONES, Hyderabad

• Partner zoos for genetic exchange:

- Nehru Zoological Park (Hyderabad)
- Arignar Anna Zoological Park (Vandalur)
- Sri Venkateswara Zoological Park (Tirupati)
- Main objectives of the programme
 - Breed endangered dholes in captivity
 - Maintain a healthy gene pool
 - $_{\circ}$ Understand dhole behaviour and social dynamics
 - \circ Generate data for scientific research
 - Support potential future reintroductions into protected habitats

Dhole (Asiatic Wild Dog)

Scientific Name - Cuon alpinus Common Names - Dhole, Asiatic Wild Dog, Indian Wild Dog



• **Physical Features -** Rusty-red coat, bushy black-tipped tail. Slim, agile body with long legs.

• Habitat - It is found in forests, grasslands, and scrublands and it prefers densely vegetated regions with access to water.

• In India it is found in Western Ghats, Eastern Ghats, central India, northeast, and Himalayas.

Conservation Status

- IUCN Status - Endangered

- Indian Wildlife Protection Act - Schedule II

• **Major Threats** - Habitat loss due to deforestation and human encroachment, decline in prey species, disease transmission from domestic dogs.

What is the methodology involved in breeding?

- **Careful pair selection** Potential breeding pairs are identified based on health, age, and compatibility.
- **Gradual introduction** Once deemed compatible, pairs are moved into a shared enclosure (day kraal) for natural mating over 3–5 days.
- Simulated natural habitat Breeding areas are designed to mimic wild

habitats with trees, dens, water pools, and space for natural behaviours.

- Low-interference monitoring Pregnant females and new mothers are left undisturbed and caretakers observe from a distance to minimize stress.
- Monitoring and documentation Each dhole are tagged, and records such as health, breeding status, and behaviour are maintained in studbooks for long-term genetic tracking and population management.

What are the positive outcomes of the programme?

- Conservation breeding centre at Visakhapatnam Zoo has successfully bred over 40 dholes, including 16 pups and it is recognised as a national centre for dhole conservation
- It provides a captive safety net for a declining wild species and led and contributed crucial insights into dhole social and reproductive biology.
- It encourages research into lesser-known carnivores and provoide valuable insights on Dhole conservation across India.
- It educates zookeepers and researchers through observation and shows the potential of well-managed conservation breeding.

Indira Gandhi Zoological Park has been formally recognised by the Central Zoo Authority as **India's flagship conservation breeding centre** for Asiatic wild dogs.

What are the other major challenges encountered?

- Limited founder population The breeding programme started with a very small number of wild-caught dholes, leading to a restricted genetic base, which risks inbreeding and reduces long-term viability.
- **Genetic bottlenecks** Due to the low genetic diversity, there's an increased risk of inherited health problems and poor reproductive success, making it difficult to build a strong, diverse captive population.
- Unpredictable breeding behaviour Dholes have complex social hierarchies, and successful mating often depends on stable pack dynamics.
- **Stress and handling issues** Dholes are highly alert and fidgety, making it difficult to handle them for medical care or tagging.
- Physical restraint causes stress, so veterinarians rely on non-invasive techniques like blowpipes and remote monitoring.
- Lack of awareness and research gaps There is limited scientific data

on dhole behaviour, reproductive biology, and disease management.

What lies ahead?

- Developing a genetically strong and behaviourally stable captive population
- It serves as a referral and knowledge hub for dhole conservation in India
- Expanding collaboration across more zoos and wildlife centres.
- Preparing for eventual reintroduction into suitable protected habitats

Reference

The Hindu| Reviving India's elusive predator

