Environment & Ecology · GS - III

Species reintroduction programmes can contribute to ecological restoration, but their long-term success depends on more than increasing animal numbers. Examine the ecological, institutional and scientific requirements for making Project Cheetah a sustainable conservation initiative.

EXAM YEAR	PAPER	SUBJECT
DAILY PRACTICE 20/11/2026	GS - III	Environment & Ecology

MARKS	WORD LIMIT
15	~250 words

Answer Hint

Species reintroduction, genetic diversity, habitat suitability, prey availability, carrying capacity, human-wildlife conflict, disease surveillance, metapopulation, landscape connectivity, community participation, adaptive management.

Model Answer

Introduction

Project Cheetah, launched in 2022, aims to reintroduce cheetahs in India through translocation from African countries. The reported population of 52 cheetahs, including 32 India-born cubs, represents progress towards establishing a viable population.

Requirements for Long-term Sustainability

1. **Habitat suitability:** Protected areas must provide adequate grassland, open woodland, water and prey resources.
2. **Genetic diversity:** Periodic genetic assessment and scientifically managed breeding are necessary to avoid inbreeding.

3. **Metapopulation management:** Establishing multiple connected populations can reduce vulnerability to local extinction.
4. **Disease surveillance:** Veterinary monitoring, quarantine and preventive healthcare are essential for translocated animals.
5. **Human-wildlife coexistence:** Community participation, compensation mechanisms and awareness programmes can reduce conflict.
6. **Scientific monitoring:** GPS tracking, reproductive assessment and mortality analysis should guide adaptive management.

Institutional Priorities

- Strengthen coordination among the National Tiger Conservation Authority, state forest departments and scientific institutions.
- Protect surrounding landscapes and wildlife corridors.
- Ensure adequate long-term funding and transparent reporting.
- Develop local livelihood opportunities linked to responsible ecotourism.

Conclusion

The success of Project Cheetah should be measured not merely by population growth but by the establishment of genetically viable, ecologically sustainable and self-sustaining wild populations. Scientific management and community participation are central to achieving this objective.

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