

# Cheetah Project

# Reintroduction

September 23, 2022

## **Manifest Pedagogy:**

In India, the cheetah population used to be fairly widespread. The animal was found from Jaipur and Lucknow in the north to Mysore in the south, and from Kathiawar in the west to Deogarh in the east. But eventually Cheetah's became extinct from the subcontinent. In India, where the cheetah had lived for centuries, reintroducing the species is possible, according to a detailed review of the pros and cons associated. But to ensure their long-term survival, the related issues should be properly addressed.

**In News:** Seventy years after the Asiatic Cheetah was declared extinct in India, eight cheetahs were flown in from Namibia to the Kuno National Park in Madhya Pradesh.

**Placing it in the Syllabus:** Environment

## **Static Dimensions**

- Background
- How did cheetahs go extinct in India?
- Earlier attempts to bring back the cheetah

## **Content**

### **Background**

- The cheetah is believed to have originated in South Africa and spread across the world through land connectivity.
- Over 70 years after it went extinct in India, the cheetah will return to the country.
  - Eight African cheetahs from Namibia, five females

and three males between the ages of 4-6 years flew 8,000 km over the Indian ocean to the Kuno National Park in Madhya Pradesh, where they will be released as part of India's **Rs 90-crore Cheetah Introduction project**.

- This is the first time in the world that a large carnivore will be relocated from one continent to another.

### **How did cheetahs go extinct in India?**

- The cheetah has an ancient history in the country, with a Neolithic cave painting of a 'slender spotted feline being hunted' having been found at Chaturbhuji Nala in Mandasaur, Madhya Pradesh.
- The name 'cheetah' is believed to have originated from Sanskrit word chitrak, which means 'the spotted one'.
- In India, the cheetah population used to be fairly widespread. The animal was found from Jaipur and Lucknow in the north to Mysore in the south, and from Kathiawar in the west to Deogarh in the east.
- The cheetah is believed to have disappeared from the Indian landscape in 1947 when Maharaja Ramanuj Pratap Singh Deo of Koriya princely state hunted down and shot the last three recorded Asiatic cheetahs in India.
- The cheetah was officially declared extinct by the Indian government in **1952**.
- **Over-hunting** was a major contributing factor for the cheetah's extinction.
- **Decimation of its relatively narrow prey base** species and the loss of its grassland-forest habitat also played a role.
- **Destruction of habitat**-During the decades preceding independence, as well as those after, India's emphasis on agriculture which included acquiring and parcelling off grassland led to a decline in the cheetah's habitat.

- The advent of **climate change** and growing human populations have only made these problems worse.
- Since the 1940s, the cheetah has gone extinct in 14 other countries Jordan, Iraq, Israel, Morocco, Syria, Oman, Tunisia, Saudi Arabia, Djibouti, Ghana, Nigeria, Kazakhstan, Pakistan and Afghanistan.

### **Why is the cheetah being brought back?**

- The aim behind the translocation is not only to restore India's '**historic evolutionary balance**', but also to develop a cheetah 'metapopulation' that will help in the global conservation of the animal.
- As it is a flagship species, the conservation of the cheetah **will revive grassland-forests and its biome and habitat**, much like Project Tiger has done for forests and all the species found in these forests.
- Project Tiger has also resulted in the **conservation of 250 water bodies** found in India's 52 Tiger Reserves. The Cheetah Project is likely to have a similar impact.
- The translocation project has also helped conservation efforts in Africa, in particular South Africa.
  - The South African cheetah population had dwindled two decades ago, before the conservation programme ensured that the numbers increased of the global cheetah population of 7,000, 4,500 belong to South Africa.
- In the Kalahari, the cheetah was once critically endangered due to poaching and hunting. But now, with healthy female cheetahs producing five to six cubs each, South Africa is rapidly running out of space for its cheetah population.
- According to experts there is a need to look at cheetahs as a global population, a metapopulation, instead of breaking them into fragments of small species.
  - Especially in the case of cheetahs where the

genetic difference between the African and Indian cheetahs is so small, and the ecological functions are practically the same.

### **Earlier attempts to bring back the cheetah**

- Attempts to relocate cheetahs to India began in 2009, but it was only in 2020 that the Supreme Court of India finally gave the green signal for such efforts.
- An expert committee set up by the Ministry of Environment, Forests and Climate Change completed an assessment of the sites to which the cheetah can be relocated.
- India's first attempt to bring back the cheetah was in the early 1970s.
  - Dr Ranjitsinh was tasked with carrying out negotiations with the Iran government.
  - The negotiations went well and Iran had promised the cheetah.
  - But potential release sites needed to be upgraded with an increase in prey base and greater protection.
- While the Persian Cheetah was preferred for relocation, as it was Asiatic, this is no longer possible as the cheetah population in Iran has dwindled to under 50.

### **How was Kuno National Park chosen for the translocation?**

- Six sites, which had been previously assessed in 2010 for the translocation of the Asiatic Lion, were reassessed by WII in 2020 -Mukundara Hills Tiger Reserve and Shergarh Wildlife Sanctuary, both in Rajasthan, and Gandhi Sagar Wildlife Sanctuary, Kuno National Park, Madhav National Park and Nauradehi Wildlife Sanctuary, which are in Madhya Pradesh.
- Of these six sites, Kuno, which had been monitored since 2006, was found to be ready to receive the cheetah immediately, as it had already been prepared for the

## Asiatic Lion.

- Both animals share the same habitat – semi-arid grasslands and forests that stretch across Gujarat, Rajasthan and Madhya Pradesh.
- The upgradation of sites required investment on a large scale in terms of reducing anthropogenic pressures through relocation of villages, mitigating infrastructure (roadways and railway) and prey augmentation for the cheetah through translocation of blackbuck, chital, chinkara and wild boar, among other animals.
- In Kuno National Park, because of the lion relocation project, the Madhya Pradesh Forest Department had already relocated 24 of the 25 villages and declared it a national park, which led to “remarkable recovery in its habitat, prey abundance and reduction of human impact”, according to the assessment carried out by WII in 2020.
- Only one village – Bagcha, with a population of 148 – remains on the fringes of the forest.
- While Kuno itself has a healthy prey base (with chital, sambhal, nilgai, wild pig, gazelle, langur, peafowl), 700 more such herbivores have also been introduced to the area, said Forest Ministry officials.
- In Sheopur district, where Kuno is located, rainfall levels, temperatures, altitude, and conditions are similar to conditions in both South Africa and Namibia.
  - The park spans an area of 740 square km and is a part of the Kuno Wildlife Division, which has an area of 1235 square km, and has a healthy population of chital, sambar, nilgai, wild pig, chinkara and cattle.
  - The leopard and striped hyena are currently the only larger carnivores within the national park, the single lone tiger having returned to Ranthambore in 2019-20.
- The south-eastern portion of this area is patchily

connected to the Panna-Tiger Reserve through the Madhav National Park-Shivpuri Forest Division.

- The Ranthambhore Tiger Reserve in Rajasthan across the Chambal river is connected on the north-western side.

### **How are the cheetahs being translocated?**

- For the past month, both the Namibian and the South African cheetahs have been quarantined in 'Bomas', a smaller fenced camp in which animals are kept temporarily for treatment or quarantine.
- Extensive health checks-ups have been carried out for detection of diseases and vaccination has been completed. The cheetahs have also been radio collared.
- The Namibian cheetahs will not be tranquilised for the journey.
  - They were fed before they embarked on the journey, and were accompanied in the aircraft by a team of three veterinarians who have been tasked with looking after them.
  - The cheetahs were transported in cages, in keeping with international specifications, of 114cm x 118cm x 84cm dimensions.
- The cheetahs will first be released into a quarantine enclosure of 1500 square metres, where they will be kept in nine compartments for a one-month period to not only ensure their adaptation to the new environment, but also to check if they are carrying parasitic loads or diseases from the African continent.
- After being monitored closely for 30 days, they will be released into a bigger enclosure of 6 square km for the period that it takes them to adapt.
- In this bigger enclosure, where they will have prey and be able to hunt, they will be monitored closely to keep a check on their health, overall adaptation to Kuno and hunting patterns, among other factors. Once the cheetah is found to have acclimatised, they will be released

into the Kuno National Park.

- They have been known to attack livestock, so local villagers have been apprised and 'cheetah-mitras' appointed to keep a watch on the animals.
- Cattle and feral dogs in the area have been vaccinated. The Madhya Pradesh government has also put in place 'adequate compensation' for any possible conflict between cheetahs and villagers.
- Several leopards usually found in the area of the cheetah's enclosure have also been removed, as they can be potential threats while the animal is acclimatising.
- Over the past year, expert teams from both Namibia and South Africa have visited Kuno to oversee the arrangements, including to train Indian forest officers and wildlife experts on the handling, breeding, rehabilitation, medical treatment and conservation of cheetahs

### **Significance of reintroduction of Cheetah**

- Pride element for the nation as it is a very challenging project.
  - The cheetah used to live and thrive in the Indian Subcontinent for centuries, hence their reintroduction is a realistic step.
- **Ecosystem stability:** In saving cheetahs, one would have to save not only its prey-base comprising certain threatened species, but also other endangered species of the grasslands and open forest ecosystems.
- Reintroduction of a flagship species like Cheetah would attract a significant amount of tourism to the cheetah range states.
  - This would give a boost to other sectors like transportation, hotels etc. and also generate additional jobs.
- Among large carnivores, conflict with human interests is lowest for Cheetahs. They are not a threat to humans and

do not easily attack large livestock.

### **Challenges associated**

- There may be intra-guild competition between the big cats in Kuno. More aggressive predators such as tigers and leopards will compete with the cheetahs
- This exercise will require continuous and intensive management.
- Diversion of scarce conservation resources, distraction from the real conservation priorities and a further delay in the translocation of lions to Kuno.
- Such a small number of cats at very few sites cannot meet the stated goal of performing its ecological function at any significant scale to have real on ground impact.
- The gene flow in such a small group of cheetahs is a matter of concern. Gene flow between populations can help maintain genetic diversity and prevent inbreeding, which is especially important for small and fragmented habitats.
- **Man Animal Conflict**– More aggressive predators such as tigers and leopards will compete with the cheetahs in the park. They may drive cheetahs to the outskirts of the park, where it could come into conflict with humans.
- **Disease Transmission to other species**-There are very few diseases unique and specific to predators. However, transmission of these to the endemic tiger population is a cause for concern.

### **Wayforward**

- The cheetah can also live in a wide range of habitats, which includes the most prominent semi-arid grassland, but also coastal scrub, wooded savannah, Montane habitat, snow deserts and rugged semi-arid areas.
- Over the coming 15 years, the Indian government will acquire two to four cheetahs from Africa, with the



process undertaken at an interval of one to four years, to establish a breeding cheetah metapopulation of 35-40 in the country.

- Once the population in Kuno National Park has adapted and is flourishing, the Indian government will expand the efforts to reserves in other parts of the country as well.

### **Mould your thoughts**

1. Critically discuss the Cheetah reintroduction project recently done at Kuno National Park in Madhya Pradesh. Also highlight the factors responsible for selection of Kuno National Park for the translocation. (250 Words)

### **Approach to the answer.**

- Introduction about cheetah extinction in India.
- Reasons for Extinction.
- Need for reintroduction program and its significance.
- Challenges associated
- Factors responsible for selection of Kuno National Park
- Wayforward and Conclusion.