TATHASTU
Institute Of Civil Services

DAILY CURRENT AFFAIRS

17th JUNE, 2024

THE GANDHI SAGAR WILDLIFE SANCTUARY

SOURCE: *THE INDIAN EXPRESS*

TAG: MAINS EXAMINATION: GS III: **Environment.**
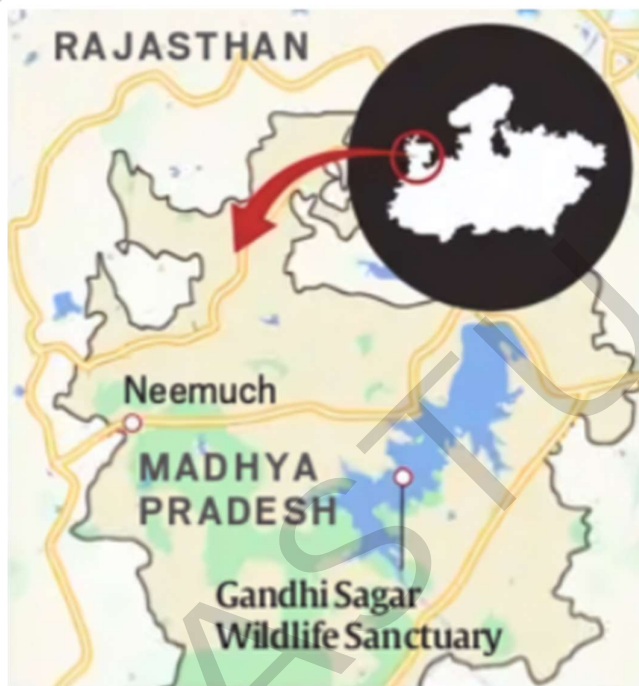
Why in News:

❖ The Gandhi Sagar Wildlife Sanctuary will be the second home for cheetahs in India, after the Kuno National Park. The Madhya Pradesh government has announced that it has completed its preparations for the ambitious project.

About The Gandhi Sagar Wildlife Sanctuary:

❖ The Gandhi Sagar Wildlife Sanctuary is located in Mandsaur and Neemuch districts of Madhya Pradesh, India.

❖ It surrounds the Gandhi Sagar Reservoir, one of the largest man-made lakes in India, formed by the damming of the Chambal River.

❖ The sanctuary covers an area of approximately 492 sq km and was established in 1974 to protect the flora and fauna of the region.

❖ It is home to a diverse range of wildlife including nilgai, chital, sambar, wild boar, chinkara, and numerous bird species like bar-headed geese, pelicans, and cormorants.

❖ The reservoir attracts a large number of migratory birds during the winter season, making it an important bird area.

❖ The sanctuary's vegetation ranges from dry deciduous forests to grasslands and scrublands.

❖ Important features include the Gandhi Sagar Dam, waterfalls, and rocky outcrops that provide nesting sites for birds.

Caused the extinction of cheetahs in India:

- ❖ **Hunting and Poaching:** Cheetahs were heavily hunted by the royalty and nobility for sport during the British colonial era. Uncontrolled hunting decimated their populations.
- ❖ **Human-wildlife Conflict:** As human settlements and activities expanded, cheetahs faced habitat loss and fragmentation, leading to conflicts with villagers and farmers.
- ❖ **Loss of Natural Habitat:** The conversion of grasslands and dry forests into agricultural lands and human settlements restricted the natural habitat range for cheetahs.

The last recorded sighting of a cheetah in India was in 1947, and they were declared extinct in the country in 1952 after years of drastically declining numbers due to the combined effects of these factors.

The Project Cheetah:

- ❖ Project Cheetah is an ambitious initiative by the Indian government to reintroduce cheetahs in the country's wildlife landscapes after a gap of over 70 years since they went extinct in 1952.
- ❖ **Significance:**
  - ☞ **Restoring Biodiversity:** Reintroducing cheetahs aims to restore India's unique natural heritage and biodiversity by reviving the fastest land animal.
  - ☞ **Conservation Efforts:** It highlights India's commitment to conservation and efforts to protect threatened species and their habitats.
  - ☞ **Scientific Research:** The project provides opportunities for research on species reintroduction, conservation biology, and wildlife management.

The types of cheetahs in the world and their IUCN status:

- ❖ **Asiatic Cheetah (Acinonyx jubatus venaticus):**
  - ☞ **IUCN Status:** Critically Endangered
  - ☞ Found in parts of Iran, with fewer than 50 individuals remaining
- ❖ **Northwest African Cheetah (Acinonyx jubatus hecki):**
  - ☞ **IUCN Status:** Extinct in the Wild
  - ☞ Formerly found in northwestern African countries, but now extinct in the wild
- ❖ **Sudan Cheetah (Acinonyx jubatus soemmeringii):**
  - ☞ **IUCN Status:** Extinct
  - ☞ Formerly found in Sudan, but declared extinct.
- ❖ **Southeast African Cheetah (Acinonyx jubatus jubatus):**
  - ☞ **IUCN Status:** Vulnerable
  - ☞ Found in parts of eastern and southern Africa, with a population of around 4,000 individuals

Conclusion:

- ❖ The selection of the Gandhi Sagar Wildlife Sanctuary as an additional reintroduction site for cheetahs underscores India's dedicated efforts towards reviving its lost natural heritage, promoting biodiversity conservation, and creating a sustainable ecosystem for the long-term survival of this iconic species through Project Cheetah.

INCOIS'S NEW PRODUCT TO FORECAST EL NIÑO AND LA NIÑA CONDITIONS

SOURCE: *THE HINDU*

TAG: MAINS EXAMINATION: GS –I & III: **Important Geophysical Phenomena and Environment.**
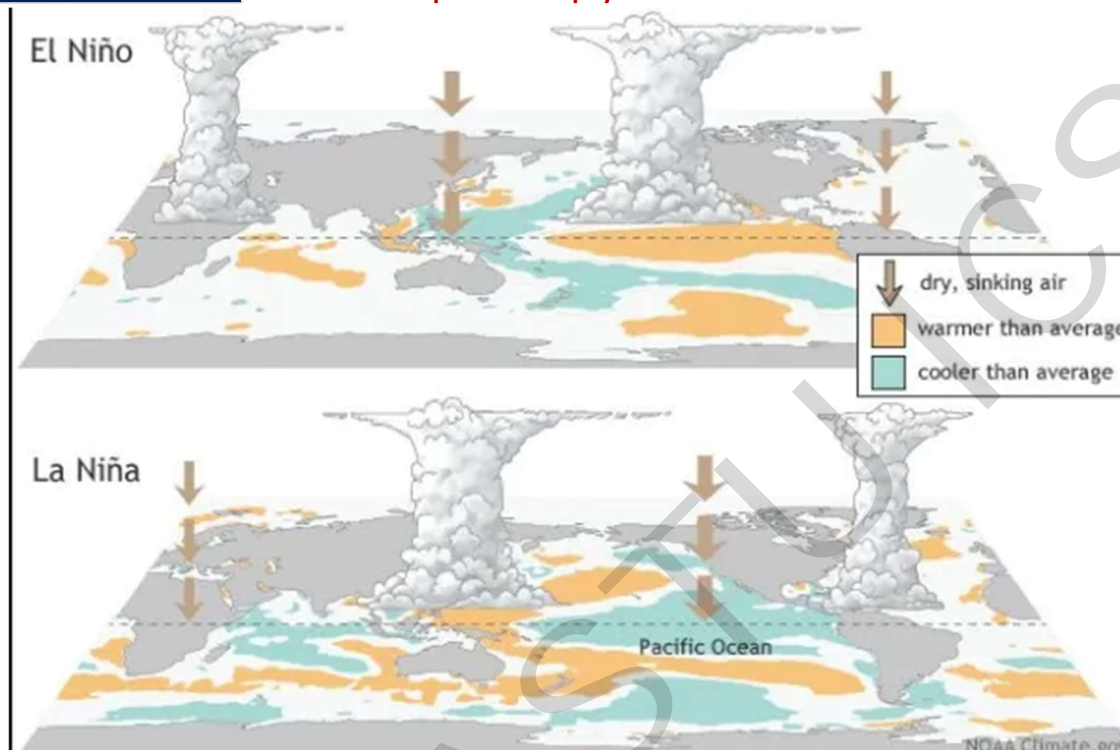
Why in News:

❖ Hyderabad-based Indian National Centre for Ocean Information Services (INCOIS) has developed a new product in the form of Bayesian Convolutional Neural Network (BCNN)

❖ That uses latest techniques like Artificial Intelligence (AI), Deep Learning and Machine Learning (ML) to improve forecasts related to ENSO phases.

About El Niño Southern Oscillation (ENSO):

❖ El Niño Southern Oscillation (ENSO) is a periodic fluctuation in sea surface temperatures and air pressure across the tropical Pacific Ocean.

It has two Phases:

❖ **El Niño:** Warming of the central and eastern tropical Pacific Ocean, causing changes in global weather patterns.

❖ **La Niña:** Cooling of the same Pacific Ocean region, having opposite effects compared to El Niño.

☞ ENSO results from variations in ocean temperatures, air pressure systems, and wind patterns across the tropical Pacific. It is one of the most significant drivers of global climate variability on annual to multi-year timescales.

☞ El Niño and La Niña events can significantly impact temperature, precipitation patterns, storm tracks, marine ecosystems, and agricultural productivity in many regions worldwide.

☞ Monitoring ENSO is crucial for predicting and preparing for associated weather anomalies, droughts, floods, and other environmental consequences in affected areas.

About INCOIS:

- ❖ INCOIS stands for Indian National Centre for Ocean Information Services. It is an autonomous organization under the Ministry of Earth Sciences, Government of India.
- ❖ Established in 1999, headquartered in Hyderabad.
- ❖ Mandated to provide ocean data, information and advisory services.
- ❖ Offers services like ocean state forecasts, tsunami warnings, ocean state advisories, etc.
- ❖ Operates ocean observation systems like moored and drifting buoys.
- ❖ Conducts research on ocean science, modeling, and observations.
- ❖ Provides scientific data and services for sustainable ocean development.
- ❖ Acts as the national coordinator for ocean observations and information management.

Conclusion:

- ❖ The development of the Bayesian Convolutional Neural Network (BCNN) by the Hyderabad-based Indian National Centre for Ocean Information Services (INCOIS) signifies a significant advancement in leveraging artificial intelligence for accurate and reliable ocean observations and forecasting.