

**DAILY
CURRENT
AFFAIRS
ANALYSIS**



LAKSHYA ACADEMY®

07 FEBRUARY 2024

1 - Northeastern Cheetahs in Africa:

GS III

Environmental Conservation

- **Context:**

- The unlawful transfer of cubs to Arab countries is causing a loss in genetic diversity among cheetahs in Northeast Africa.

- **What are the salient features of cheetahs in northeastern Africa?**

- Scientific Name: *Soemmeringii Jubatus Acinonyx*

- **About:**

- This subspecies of cheetah was initially named *Cynailurus soemmeringii* by Austrian biologist Leopold Fitzinger in 1855. Fitzinger's description was based on a specimen that was brought to Vienna's Tiergarten Schönbrunn from Sudan's Bayuda Desert.
- Another name for it is the Sudan cheetah. The cheetah populations in Southern Africa and the Sahara are more closely linked to this subspecies than they are to each other.

- **Distribution:**

- They can be found in South Sudan, Ethiopia, and Northeast Africa.
- They inhabit grasslands, broad open spaces, semi-arid regions, and other open environments with plenty of prey, including the East Sudanian Savanna.

- **Habitat:**

- Their habitats were often diverse, including grasslands, savannas, and semi-arid regions; they were also frequently found in locations with little vegetation, which facilitated their high-speed hunting tactics.

- **Danger:**

- They are being trafficked extensively to Arab nations including Yemen, Saudi Arabia, and the United Arab Emirates across the Red Sea.
- Only a few dispersed populations, mostly in protected regions, survive after their numbers have drastically decreased as a result of habitat degradation, human encroachment, and poaching.

- *Source → The Hindu*

2 - Roche's Groundbreaking Antibiotic:

GS II

Health related issues

- **Context:**
- Roche, a major player in the Swiss healthcare industry, has found a novel antibiotic called Zosurabalpin that targets the infamous gram-negative bacteria.
- **About:**
- It has demonstrated encouraging effectiveness against drug-resistant strains of Acinetobacter, especially Carbapenem-resistant A baumannii (CRAB), which the World Health Organisation[®] lists as an important pathogen.
- The action of zosurabalpin interferes with the formation of the outer membrane of the bacteria, specifically affecting the lipopolysaccharide transport mechanism, which is a vital barrier in gram-negative bacteria.
- Gram-positive and Gram-negative bacteria are distinguished by their ability to hold onto a particular stain colour. Gram-negative bacteria become pinkish or red, while Gram-positive bacteria keep their violet stain.
- Gram-negative bacteria have a complicated structure due to a thin coating of peptidoglycan in their cell wall that is surrounded by two lipid membranes.
- Because of the barrier function of their outer membrane, they are more resistant to antibiotics.
- *Source → The Hindu*

3 - Duration of Transaction:

GS III

Economy related issues

- **Context:**

- Based on national revenue statistics, the Terms of Trade (ToT) for Indian agriculture have significantly improved during the last fifteen years.

- **About:**

- The surge in global agri-commodity prices and governmental interventions, particularly increases in the minimum support price (MSP), are credited with the ToT improvement in agriculture.
- In Indian agriculture, time to market (ToT) describes how agricultural commodity prices fluctuate in relation to non-farm goods and services.
- The ratio of agricultural to industrial prices, expressed as price indices, is referred to as terms of trade.
- Better purchasing power for the agricultural sector in terms of industrial goods is implied by an increase in the terms of trade.
- A ratio greater than one, or 100%, indicates that farmers have favourable pricing power when comparing what they buy and what they sell.
- Exchange conditions are unfavourable when the TOT ratio is less than one.
- The cost of food subsidies has increased due to rising procurement prices, which has exacerbated the budget deficit and created problems with macroeconomic management.

- **Source** → *The Hindu*

4 – Panspermia:

GS III

Science and Technology

- **Context:**

- The hypothesis of panspermia, which suggests that life could exist on other planets, has long been a topic of discussion and investigation in science.

- **About:**

- The theory of panspermia, first put forth by the Greek philosopher Anaxagoras, postulates that life may be able to migrate across planets in the form of "seeds."
- Research has shown that microbes can withstand the harsh circumstances of space flight as well as the shock of landing on a new planet.
- Researchers from the 19th century, such as Svante Arrhenius, proposed mechanisms that could allow microbes to travel through space, such as radiation pressure from the Sun.
- Three steps are involved in the modern hypothesis of panspermia: leaving a planet, travelling through interplanetary space, and arriving on a different planet.
- Due to the difficulty of establishing its veracity, panspermia is regarded as a fringe idea because it cannot explain the genesis of life itself.

- *Source → The Hindu*

5 - Brassware Industry of Moradabad:

GS I

Indian Culture

- **Context:**

- The building of the Ram Temple in Ayodhya, Uttar Pradesh, has led to a rebirth of the brassware industry in Moradabad and a rise in demand for idols of religious figures, especially those of Lord Ram.

- **About:**

- The city came to be known as Moradabad because it was founded in 1600 by Murad, the son of Mughal Emperor Shahjahan.
- Famous for its brass work, Moradabad has made a name for itself in the global handicraft market.
- The Middle East, Asia, the US, Britain, Canada, and Germany are among the nations to which the brassware is sold. As a result, Moradabad is also known as Peetal Nagri or "Brass City".
- Brass is a copper and zinc alloy that is remarkably workable and hard, giving it historical and lasting value.
- With the advent of diverse metal goods like brass, iron, and aluminium in the 1980s, the sector underwent diversification. New technologies such as powder coating, lacquering, and electroplating were introduced to Moradabad's art industry with this boom.
- The geographical indicator (GI) tag is attached to Moradabad Metal Craft (Word Mark).

- *Source → The Hindu*



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