



## Global Multidimensional Poverty Index (MPI) 2023

# GLOBAL MULTIDIMENSIONAL POVERTY INDEX (MPI) 2023

### BASIC DETAILS

- ◉ **Launched**
  - ▣ 2010
- ◉ **Function**
  - ▣ Reflects multiple deprivations that poor people face (in education, health, and living standards)
- ◉ **Score**
  - ▣ MPI ranges from 0 to 1 (higher value = higher poverty)
- ◉ **Released by**
  - ▣ UNDP and Oxford Poverty and Human Development Initiative (OPHI)
- ◉ **Multidimensional Poor**
  - ▣ Person who is deprived in >1/3rd (>33%) of the 10 indicators
- ◉ **Extreme Multidimensional Poverty**
  - ▣ Where person is deprived in >50% of the indicators

**DIMENSIONS**      **INDICATORS**      **POVERTY MEASURES**

- Health**
  - ◉ Nutrition
  - ◉ Child mortality
- Education**
  - ◉ Years in schooling
  - ◉ School attendance
  - ◉ Intensity of Poverty
  - ◉ Headcount ratio
- Standard of living**
  - ◉ Cooking fuel
  - ◉ Sanitation
  - ◉ Drinking water
  - ◉ Electricity
  - ◉ Housing
  - ◉ Assets

## MPI

Multidimensional Poverty Index

### MPI 2023

- ◉ **Global Scenario**
  - ▣ 1.1 bn (out of 6.1 bn living in 110 countries) are acutely multidimensionally poor
  - ▣ 5 out every 6 people poor in Sub-Saharan Africa and S. Asia
  - ▣ Half of the MPI-poor people are children <18 years (556 mn)
- ◉ **Indian Scenario**
  - ▣ Incidence of poverty ↓ from 55.1% in 2005-06 to 16.4% in 2019-21
  - ▣ Progressed significantly in all three dimensions
  - ▣ Still >230 mn people poor and 18.7% of the population vulnerable

**Vulnerable - People who aren't poor but have deprivations in 20-33.3% of all weighted indicators**

- ◉ NITI Aayog also released India's National MPI (2<sup>nd</sup> edition) 2023
- ◉ It is prepared based on the latest NFHS-5 (2019-21)
- ◉ As per it:
  - ▣ Uttar Pradesh - Largest decline in number of poor individuals
  - ▣ Bihar - Fastest reduction in MPI value in absolute terms

## India-Sri Lanka Relations

For Prelims: [India-Sri Lanka Relations](#), Tamil National Alliance, [Sri Lankan Tamils](#), [Indo-Lanka](#)

[Accord of 1987](#), [Buddhism](#), Indian Ocean.

**For Mains:** India-Sri Lanka Relations.

[Source: TH](#)

## Why in News?

Recently, the **Tamil National Alliance (TNA)**, the largest parliamentary grouping of Tamil parties in Sri Lanka has rejected the Sri Lankan President's offer to implement the **13<sup>th</sup> Amendment of the Sri Lankan Constitution without police powers**.

- This rejection by the TNA assumes significance before the President's scheduled visit to India, as India has consistently emphasized the **"full implementation" of this legislation**, which is vital for addressing the **historic demand of Sri Lankan Tamils** for self-determination.



## What is the Background?

- **About:**
  - The **13<sup>th</sup> Amendment** was enacted after the [Indo-Lanka Accord of 1987](#), and it remains the **only legislative guarantee** of power devolution to the provinces.
    - Indo-Lanka Accord 1987 was signed by the **then Prime Minister Rajiv Gandhi and President J.R. Jayawardene**, to resolve Sri Lanka's ethnic conflict that had aggravated into a **full-fledged civil war, between the armed forces and the Liberation Tigers of Tamil Eelam**, which led the struggle for Tamils' self-determination and sought a separate state.
  - The 13<sup>th</sup> Amendment, which led to the creation of **Provincial Councils, assured a power sharing arrangement** to enable all nine provinces in the country, including Sinhala majority areas, to self-govern.
  - Subjects such as **education, health, agriculture, housing, land and police** are devolved to the provincial administrations, but because of restrictions on financial powers and overriding powers given to the President, the provincial administrations have not made

much headway.

- However, successive governments in **Sri Lanka have refused to grant land** and police powers to the provinces, leading to **unresolved issues since the civil war ended 14 years ago**.
- **President's Proposal and TNA's Response:**
  - The Sri Lankan President presented a **comprehensive dossier to Tamil political parties**, outlining plans for truth-seeking, reconciliation, accountability, development, and power devolution.
    - The proposal included implementing **the 13<sup>th</sup> Amendment, except for police powers**, and empowering provincial councils through various Bills.
  - However, the TNA rejected the proposal, calling it a "**hollow promise**," **citing a lack of political will** to genuinely devolve power, as provincial councils have been defuncting for five years without elections.
  - The Tamil National People's Front and civil society leaders expressed **concerns to the Indian Prime Minister**, urging a federal solution due to limitations of the 13<sup>th</sup> Amendment under a unitary constitution.

## How are India's Relations with Sri Lanka?

### ▪ About:

- India and Sri Lanka are two South Asian nations situated in the **Indian Ocean** region. Geographically, Sri Lanka is located just off the southern coast of India, separated by the **Palk Strait**.
- This proximity has **played a significant role in shaping the relationship** between the two countries.
- The Indian Ocean is a **strategically important waterway** for trade and military operations, and Sri Lanka's location at the crossroads of major shipping lanes makes it a critical point of control for India.

### ▪ Relations:

- **Historical Ties:** India and Sri Lanka have a long history of cultural, religious, and trade ties dating back to ancient times.
  - There are strong cultural ties between the two countries, with many Sri Lankans tracing their heritage to India. **Buddhism**, which originated in India, is also an important religion in Sri Lanka.
- **Economic ties:** India is **Sri Lanka's third largest export destination**, after the US and UK. More than 60% of Sri Lanka's exports enjoy the benefits of the **India-Sri Lanka Free Trade Agreement**. India is also a major investor in Sri Lanka.
  - Foreign Direct Investment (FDI) from India amounted to around USD 1.7 billion over the years from 2005 to 2019.
- **Defence:** India and Sri Lanka conduct **joint Military (Mitra Shakti)** and **Naval exercise (SLINEX)**.
- **Participation in Groupings:** Sri Lanka is also a member of groupings like **BIMSTEC (Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation)** and **SAARC** in which India plays a leading role.

### ▪ Issues in India-Sri Lanka Relations:

- **Killing of Fishermen:** Killing of Indian fishermen by the Sri Lankan Navy is a lingering issue between these two nations.
  - In 2019 and 2020, a total of 284 Indian fishermen were arrested and a total of 53 Indian boats were confiscated by the Sri Lankan authorities.
- **Influence of China:** **China's rapidly growing economic footprint** (and political clout as a corollary) in Sri Lanka is straining India-Sri Lanka relations.
  - China is already the largest investor in Sri Lanka, accounting for 23.6% of the total **Foreign Direct Investment (FDI)** during 2010-2019 as against 10.4% from India.

## Way Forward

- The rejection of the President's proposal by the Tamil National Alliance and the growing concerns among Tamil political parties and civil society members underscore the ongoing challenges in implementing the **13<sup>th</sup> Amendment and devolving power in Sri Lanka**.

- India's emphasis on "full implementation" and the push for a federal solution are crucial aspects to watch as President Wickremesinghe's visit to India approaches.

## UPSC Civil Services Examination, Previous Year Questions (PYQs)

### Prelims

**Q. Elephant Pass, sometimes seen in the news, is mentioned in the context of the affairs of which one of the following? (2009)**

- (a) Bangladesh
- (b) India
- (c) Nepal
- (d) Sri Lanka

**Ans: (d)**

### Mains

**Q. In respect of India-Sri Lanka relations, discuss how domestic factors influence foreign policy. (2013)**

**Q. 'India is an age-old friend of Sri Lanka.' Discuss India's role in the recent crisis in Sri Lanka in the light of the preceding statement. (2022)**

## Project Cheetah and Radio Collar Infections

**For Prelims:** [Cheetah Reintroduction Plan](#), [Kuno-Palpur National Park \(KNP\)](#), [Gandhi Sagar Wildlife Sanctuary](#)

**For Mains:** Challenges Associated with the Translocation of Cheetah in India

**Source:** [IE](#)

### Why in News?

Recently, the use of **radio collars** in the [cheetah reintroduction project in Kuno Wildlife Sanctuary](#), Madhya Pradesh, India, has resulted in unexpected setbacks, with cheetahs experiencing neck wounds and septicaemia, an infection of the blood by bacteria.

- This situation has raised concerns among experts familiar with collaring practices in India and Africa.

### What are Radio Collars?

- **About:**

- Radio collars are used to **track and monitor animals in the wild**.
- They consist of a **collar with a small radio transmitter**.
- Collars provide **data on animal behavior, migration, and population dynamics**.
  - They can be combined with GPS or accelerometers for additional information.

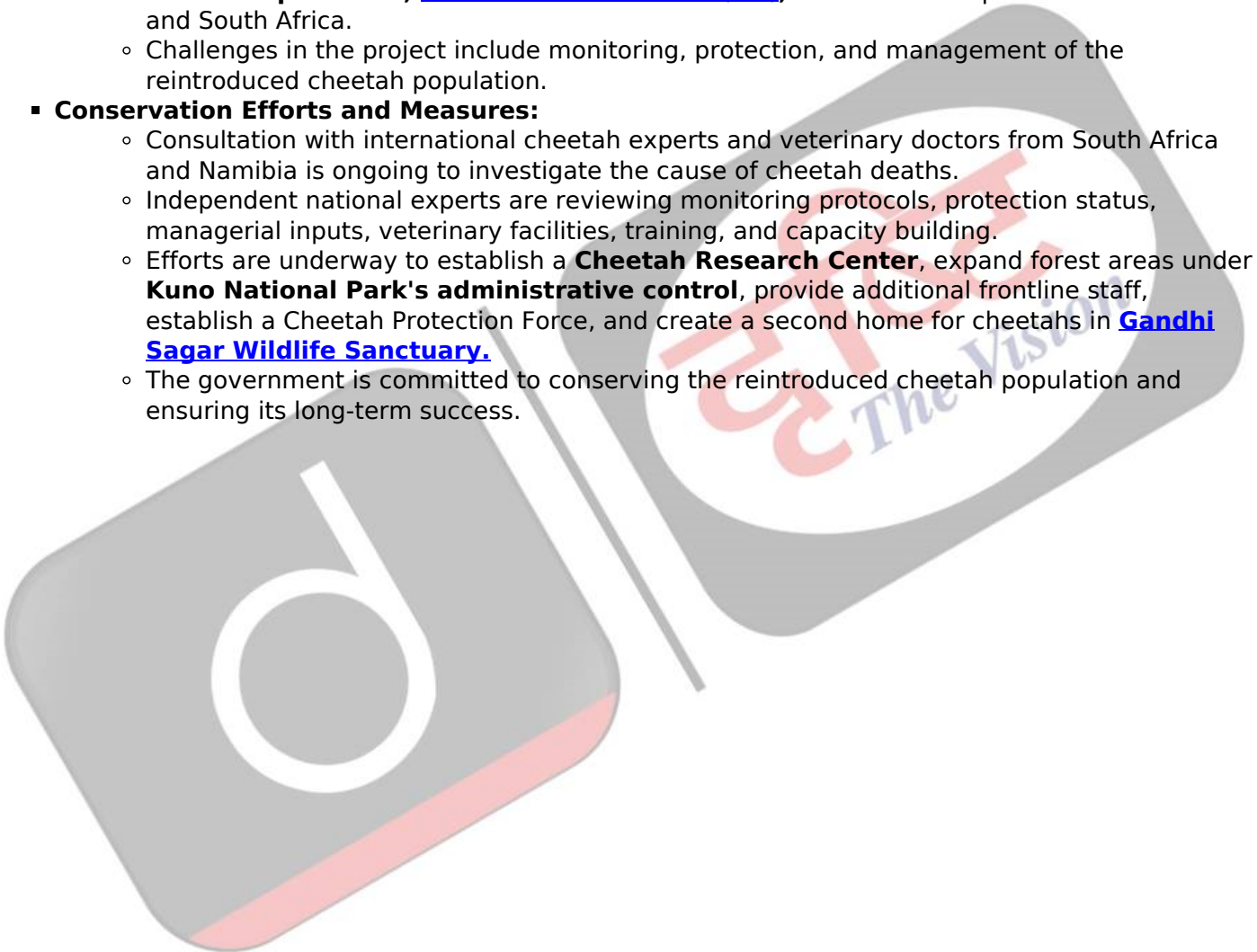
- Collars are designed to be **lightweight and comfortable for animals**.
- Potential risks and challenges, such as injuries or infections, must be managed.
- **Challenges Associated with Radio Collars:**
  - **Festering Neck Wounds and Septicaemia:**
    - **Two cheetahs in Kuno died due to suspected septicaemia** caused by festering neck wounds from radio collars.
      - Additional cheetahs, including Oban, Elton, and Freddie, have exhibited similar injuries.
    - These setbacks have raised concerns about the use of radio collars in the cheetah reintroduction project.
  - **Problems with Long-term Collar Usage:**
    - Carrying something on the body for an extended period can have downsides, as seen in studies on watch wearers and pet dogs.
    - **Staphylococcus aureus bacteria** presence was higher on watch wearers' wrists, which can lead to sepsis or death.
    - Dogs wearing collars can develop **acute moist dermatitis or hot spots, aggravated by ticks or fleas**.
    - Tight-fitting collars can cause **pressure necrosis and rapid hair loss around the neck**, similar to bedsores.
  - **Weight Considerations:**
    - Globally, the general guideline is to keep **radio collar weight below 3% of the animal's body weight**.
    - Modern collars for wild cats typically weigh **around 400g**, which is suitable for cheetahs weighing between 20 kg and 60 kg.
      - However, fitting collars on cheetahs can be challenging due to their **small necks, especially for younger animals**.
  - **Vulnerability to Collar-Induced Injuries:**
    - Cheetahs' winter coat, **which is thicker and furrier than that of tigers or leopards**, can retain more water and take longer to dry.
    - In a 2020 study, the collar weight rule was criticized for not considering **animal athleticism**, revealing that **collar forces can surpass the collar's weight during movement**.
      - For instance, the forces exerted by collars were found to be generally **equivalent to up to five times the collar's weight for a lion and a staggering 18 times for a cheetah**.
    - African Cheetahs may be **more susceptible to local pathogens compared to Indian tigers and leopards**, potentially due to differences in immunity and environmental conditions.
  - **Lack of Adaptation to Monsoon Conditions:**
    - Secondary bacterial infections under collars are not commonly reported in **African conditions due to drier skin between rain spells**.
    - In historical times, **cheetahs in India did not wear collars during the monsoon and may have adapted differently to the local climate**.
  - **Implications for the Reintroduction Project:**
    - Tracking, immobilizing, and assessing cheetahs for neck injuries poses challenges and potential delays.
    - The absence of a clear roadmap for the next monsoon raises questions about re-collaring cheetahs and their well-being.

## What is Cheetah Reintroduction Project in India?

- **About:**
  - The Cheetah Reintroduction Project in India formally commenced on **September 17, 2022**, with the objective of restoring the **population of cheetahs**, which were declared **extinct in the country in 1952**.
  - The project involves the translocation of cheetahs from South Africa and Namibia to Kuno National Park in Madhya Pradesh.
- **Reintroduction Process:**
  - **20 radio-collared cheetahs** were translocated from **South Africa (12 cheetahs) and**

### **Namibia (8 cheetahs) to Kuno National Park.**

- In March 2023, India announced the **birth of 4 cubs** to one of the eight cheetahs that were relocated from Namibia.
- The cheetahs underwent a **quarantine period** and were then shifted to larger acclimatization enclosures.
- Currently, there are **11 cheetahs in free-ranging condition and 5 animals, including a cub**, in quarantine enclosures.
- Dedicated monitoring teams ensure round-the-clock monitoring of the free-ranging cheetahs.
- **Mortalities:**
  - 8 cheetahs have died in Kuno National Park due to natural causes.
  - Preliminary analysis by the [National Tiger Conservation Authority \(NTCA\)](#) indicates that the **deaths were natural and not related to other factors like radio collars.**
- **Project Implementation and Challenges:**
  - The project is implemented by the NTCA in collaboration with the **Madhya Pradesh Forest Department**, [Wildlife Institute of India \(WII\)](#), and cheetah experts from Namibia and South Africa.
  - Challenges in the project include monitoring, protection, and management of the reintroduced cheetah population.
- **Conservation Efforts and Measures:**
  - Consultation with international cheetah experts and veterinary doctors from South Africa and Namibia is ongoing to investigate the cause of cheetah deaths.
  - Independent national experts are reviewing monitoring protocols, protection status, managerial inputs, veterinary facilities, training, and capacity building.
  - Efforts are underway to establish a **Cheetah Research Center**, expand forest areas under **Kuno National Park's administrative control**, provide additional frontline staff, establish a Cheetah Protection Force, and create a second home for cheetahs in [Gandhi Sagar Wildlife Sanctuary](#).
  - The government is committed to conserving the reintroduced cheetah population and ensuring its long-term success.



# Cheetah

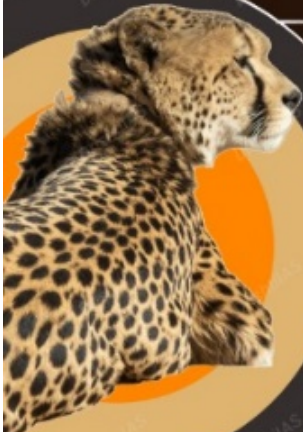
**Common Name** - Cheetah

**Scientific Name** - *Acinonyx jubatus*

- *Acinonyx jubatus jubatus* (African Cheetah)
- *Acinonyx jubatus venaticus* (Asiatic Cheetah)

## Reintroduction of Cheetah to India:

- The "Action Plan for Introduction of Cheetah in India" was released by MoEF&CC at the 19th meeting of the National Tiger Conservation Authority (NTCA) (January 2022).
  - Such a plan was first proposed in 2009.
- In September 2022, eight cheetahs landed in India from Namibia.
  - The 8 cheetahs have been relocated to the Kuno-Palpur National Park, Madhya Pradesh.
- The relocation of cheetahs to India from Namibia is the world's first inter-continental large wild carnivore translocation project.



Slightly brownish and golden skin; thicker than the Asiatic Cheetahs

More prominent spots and lines on the face

Found all over the African continent

**IUCN Red List Status - Vulnerable**



## African Cheetah

Slightly smaller than the African ones.

Pale yellowish fawn coloured skin - more fur under body, belly specifically.

Found only in Iran; the country claims there are only 12 of them left. Year 1952 - Asiatic Cheetah officially declared extinct from India.

**IUCN Red List Status - Critically Endangered**



## Asiatic Cheetah



Drishti IAS

Dr  
Vision

## UPSC Civil Services Examination Previous Year Question (PYQ)

### Prelims

**Q. Consider the following: (2012)**

1. Black-necked crane
2. Cheetah
3. Flying squirrel
4. Snow leopard

**Which of the above are naturally found in India?**

- (a) 1, 2 and 3 only  
(b) 1, 3 and 4 only  
(c) 2 and 4 only  
(d) 1, 2, 3 and 4

**Ans: (b)**

---

## Desiccation-Tolerant Plant Species

**For Prelims:** [Western Ghats Species](#), Hydration, Tropical rock outcrops

**For Mains:** How Desiccation-tolerant vascular (DT) plant species can be used to boost climate resilience agriculture and ensure mass [food security](#).

**Source:** [DTE](#)

### Why in News?

New study discovers 62 desiccation-tolerant vascular plant species in India's Western Ghats, with potential applications in agriculture & conservation. These species of plants can withstand harsh environments.

- A recent study by scientists from **Agharkar Research Institute (ARI)** Pune, an autonomous institute of the [Department of Science and Technology \(DST\)](#), has identified **62 DT species** in the **Western Ghats**, many more than the earlier known nine species.

### What is DT Plant?

- Desiccation-tolerant vascular (DT) plants are able to tolerate the desiccation of their vegetative tissues. DT plants are the most common residents of tropical rock outcrops.
- DT plants can survive high dehydration, losing up to 95% of their water content.
  - Dehydration in plants occurs when the plant loses more water than it takes in. A close-up of



a plant



- Population:
  - As per the study, the global population of these species' ranges between 300 and 1,500.
    - Out of the 62 species found, 16 are native to India and 12 are restricted to Western Ghats outcrops.
- Habitation:
  - DT plants can be found in both tropical and temperate regions.
  - They can quickly regenerate when water supplies are restored and are frequently found on rocky outcrops in the tropics.
  - It is crucial for the world's warming that some species can thrive at higher temperatures.
  - Hydration and desiccation resistance are two widely studied mechanisms for plants in harsh environments.
    - Hydration is a situation in which plant tissues can withstand more than 30% water content.
  - Indian desiccation tolerant plants are primarily found in forest rock outcrops and partially shaded tree trunks. Ferricretes (a hard, erosion-resistant layer of sedimentary rock) and basaltic plateaus (plateaus produced by volcanic activity) seemed to be the preferred habitats.
    - **Glyphochloa goensis**, **Glyphochloa ratnagirica** and **Glyphochloa santapau** were found only on ferricretes (a hard, erosion-resistant layer of sedimentary rock), while the rest of the species were found in both ferricretes and basaltic (plateaus produced by volcanic activity) plateaus.
    - The dominant genus was **Glyphochloa**, with mostly annual species occurring on plateaus.
- Characteristic:
  - The DT species showed colour variations and morphological characteristics.
    - **Tripogon species** changed colours from greyish in dry conditions to green in hydrated situations.
    - In **Oropetium thomaeum**, the leaf cloud transformed from green to dark purple or orange in the hydrated phase and ranged from brownish to ash in the desiccation phase.
    - Ferns (fronds) displayed a variety of characteristics, including curling inwards towards the costa, exposing spores at the start of the dry season and during brief dry spells.
- This, however, was not true for all species. In the case of **C lanuginosus**, the leaves folded and shriveled inward to shield the **chlorophyllous portion**, avoiding direct sunlight exposure during the desiccation phase.
- Significance:
  - Desiccation-resistant vascular plant genes can be used to develop a high temperature tolerant crop variety to boost climate resilience.
    - The discovery of the desiccation-tolerant (DT) vascular plants has **agricultural**

- **uses**, particularly in locations where water is scarce.
- These plants' genes could be exploited to develop a high-temperature tolerant crop variety to boost climate resilience and ensure mass food security.

---

## Lightning in India

**For Prelims:** [State Disaster Response Fund](#), [Lightning](#), [National Crime Records Bureau](#), [Natural disaster](#), [Global warming](#), [Urban heat island effect](#), [Deforestation](#).

**For Mains:** Current Scenario of Lightening in India, Factors Behind the Increasing Trend of Lightning Strikes

**Source:** [TH](#)

### Why in News?

**Lightning** has been a cause of concern in India, leading to a significant number of fatalities each year. As demands arise from states like **Bihar and West Bengal** to declare **lightning a natural disaster**, the Union government has taken a cautious stance.

- If approved, victims would be entitled to compensation from the [State Disaster Response Fund \(SDRF\)](#), of which 75% is contributed by the Central government.

### Note:

At present **cyclone, drought, earthquake, fire, flood, tsunami, hailstorm, landslide, avalanche, cloudburst, pest attack, frost and cold waves** are considered disasters that are covered under the SDRF. This does not include lightning yet.

### What is the Current Scenario of Lightening in India?

- **About:**
  - **Lightning** is a **powerful and visible electrical phenomenon** that takes place when there is a **buildup of electrical charges within clouds and between clouds and the ground**.
    - The discharge of this electrical energy results in a **brilliant flash of light and a rapid expansion of air**, creating the characteristic thunder that accompanies lightning.
    - **Cloud-to-ground (CG)** lightning is dangerous because it can electrocute people due to its high electric voltage and current.
  - India ranks among the **five countries worldwide** with an **early warning system for lightning**.
    - The system provides forecasts ranging from **five days to as close as three hours before the occurrence of lightning**.
- **Lightning Fatalities: Statistics and Trends**
  - [National Crime Records Bureau \(NCRB\) Data](#): In 2021, **lightning accounted for 2,880 deaths**, comprising **40% of all accidental deaths caused by "forces of nature."**

- The trend indicates an increase in lightning-related fatalities compared to other natural events.

- **Geographical Distribution in India:**

- Lightning frequency is highest in northeastern states and West Bengal, Sikkim, Jharkhand, Odisha, and Bihar.
  - However, the number of lightning-related deaths is higher in central Indian states like **Madhya Pradesh, Maharashtra, Chhattisgarh, and Odisha.**
- Bihar is one of the **most vulnerable states to lightning strikes**, with a significant number of deaths reported annually.
  - In 2023, till July 6, **Bihar recorded 107 deaths due to lightning.**

- **Union Government's View About Lightning:**

- The **Union government opposes declaring lightning a [natural disaster](#).** The government believes that education and awareness can help prevent lightning-related deaths effectively.

## What are the Possible Factors Behind the Increasing Trend of Lightning Strikes?

- **Climate Change:** [Global warming](#) and [climate change](#) could potentially influence atmospheric conditions, leading to an increase in thunderstorms and lightning activity.
  - As the planet's temperature rises, there may be **changes in the distribution of moisture, instability, and convective processes** that could favor more frequent lightning occurrences.
  - Kalbaisakhi is a localised thunderstorm occurrence that is **accompanied by lightning**, typically observed during the **pre-monsoon season in the Indian subcontinent.**
- **Urbanization:** The expansion of urban areas can create what is known as the "[urban heat island effect](#)."
  - Cities tend to be warmer than surrounding rural areas due to increased **human activity, energy consumption**, and impervious surfaces.
  - These localized heat islands may lead to the formation of more thunderstorms and, consequently, an increase in lightning strikes.
- **Land Use Changes:** [Deforestation](#), changes in agricultural practices, and alterations of natural landscapes may disrupt local atmospheric conditions.
  - Such changes might contribute to the development of thunderstorms and, consequently, more lightning.
- **Pollution and Aerosols:** Air pollution, including aerosols and particulate matter, can affect cloud formation and electrical activity within storms.
  - [Anthropogenic emissions](#) might influence the frequency and intensity of thunderstorms, potentially leading to more lightning strikes.

## Way Forward

- **Educational Campaigns:** Launch extensive educational campaigns to raise awareness about lightning safety.
  - The focus should be on educating people, **especially in rural areas**, about the dangers of lightning and the precautions they can take to stay safe.
- **Lightning Prediction and Warning Systems:** Develop and implement lightning prediction and warning systems to provide advanced notice of lightning storms. This can help people take necessary precautions and seek shelter in time.
- **Lightning-Resistant Infrastructure:** Encourage the construction of lightning-resistant infrastructure, especially in high-risk areas such as **schools, hospitals, and public buildings.**
  - It can include **installing lightning rods** on tall structures, buildings, and houses to provide a safe path for lightning to travel to the ground, reducing the risk of damage from a direct strike.
  - Also, using surge protectors for electrical equipment and devices. Lightning strikes can cause power **surges that may damage sensitive electronics. Surge protectors can divert excess voltage and protect the equipment.**
- **Training for First Responders:** Train local emergency services and first responders on **how to**

**deal with lightning-related incidents** and provide them with necessary equipment.

### UPSC Civil Services Examination, Previous Year Questions (PYQ)

Q.1 During a thunderstorm, the thunder in the skies is produced by the (2013)

1. meeting of cumulonimbus clouds in the sky
2. lightning that separates the nimbus clouds
3. violent upward movement of air and water particles

Select the correct answer using the codes given below:

- (a) 1 only
- (b) 2 and 3
- (c) 1 and 3
- (d) None of the above produces the thunder

**Ans: (d)**

---

## Overview of Indian Nursing Colleges

**For Prelims:** Nurse to Population Ratio, [National Health Profile](#), [Gender Index](#), [World Health Organization](#), Disparities Among Indian States in Health Infrastructure.

**For Mains:** Potential of India's Healthcare Sector, [Issues Associated with India's Healthcare](#) Sector, [Recent Government Initiatives Related to Healthcare](#).

[Source: TH](#)

### Why in News?

Ministry of Health data reveals that 40% of districts in India lack any nursing colleges. Moreover, five States in the south have 42% of the country's nursing institutions, while three States in the west have 17%.

### What are the New Findings?

- India currently has close to **35 lakh nurses**, but its nurse to population ratio is **only 2.06:1000 against a global benchmark of 3:1000**.
- There has been a **36% growth in the number of institutions offering undergraduate nursing** education since 2014-15, resulting in a **40% growth in nursing seats**.
  - But About **64% of the nursing workforce is currently trained in just eight States**.
- **42% of nursing institutions are concentrated** in five southern States namely, Andhra Pradesh, Karnataka, Kerala, Tamil Nadu, and Telangana.
  - **17% are in the western States** of Rajasthan, Gujarat, and Maharashtra.

- **Only 2% of nursing colleges are in the northeastern State.**
- The growth of nursing colleges also lags far behind the 81% growth rate of medical colleges, with the number of undergraduate and postgraduate medical seats surging at 110% and 114%, respectively, since 2014-15.

## Global Statistics:

- According to the **WHO, approximately 27 million men and women** make up the global nursing and midwifery workforce, accounting for nearly 50% of the global health workforce.
- There is a global shortage of health workers, in particular nurses and midwives, who represent more than 50% of the current shortage of health workers.
- The largest shortages of nurses and midwives are in Southeast Asia and Africa.

## What is the Reason Behind the Shortage of Colleges?

- **Minimal health budget:** India's expenditure on the health sector has risen meagerly from 1.2% of the GDP in 2013-14 to 1.35% in 2017-18. The National Health Policy 2017 had aimed for this to be 2.5% of GDP.
- **Inadequate Infrastructure:** Massive shortages in the supply of services (human resources, hospitals and diagnostic centers in the private/public sector) which are made worse by grossly inequitable availability between and within States. For **example, even a well-placed State such as Tamil Nadu has an over 30%** shortage of medical and non-medical professionals in government facilities.
- **Workload and Staffing Issues:** Nurses in India often faced heavy workloads, long working hours, and staff shortages. This situation not only affected patient care but also resulted in burnout and job dissatisfaction among nurses.
- **Low Compensation and Job Insecurity:** Nurses were typically paid lower salaries compared to other healthcare professionals, despite the demanding nature of their work.
- **Gender Norms and Social Stigma:** Nursing has traditionally been seen as a female-dominated profession in India, which has perpetuated certain gender norms and social stigmas.
- **Rural-Urban Disparities:** The nursing infrastructure in rural areas lagged that of urban centers. Rural healthcare facilities often faced more challenges in attracting and retaining skilled nursing staff.

## What should be done to Increase Nursing Colleges in India?

- **Investment in Healthcare:** The National Health Policy 2017 had aimed for this to be 2.5% of GDP.
- **Nursing Education and Training:** Enhance the quality of nursing education by updating the curriculum, adopting modern teaching methods, and providing adequate training facilities.
- **Scholarship Programs and Incentives:** Introduce scholarship programs and financial incentives for aspiring nurses to attract more individuals to the profession.
- **Public Awareness Campaigns:** Launch public awareness campaigns to promote the nursing profession and its significance in the healthcare system.
- **Recruitment and Retention:** Implement strategies to recruit and retain nursing professionals in the healthcare workforce. Offer competitive salaries, benefits, career growth opportunities, and a supportive work environment to encourage nurses to stay in the profession.
- **Telemedicine and Technology:** Embrace telemedicine and digital health solutions to improve healthcare access and delivery.
- **Collaboration with Nursing Organizations:** Foster collaboration between government bodies, healthcare institutions, and nursing organizations to develop and implement effective policies and initiatives for nursing infrastructure growth.

## What are the Government's Efforts?

- **157 new nursing colleges will be established** in co-location with the existing 157 medical colleges established since 2014 as per Budget 2023-24.
- Centre directs States to correct regional disparity with a new scheme to open nursing colleges.

## What are the Recent Government Initiatives Related to Healthcare?

- [National Health Mission](#)
- [Ayushman Bharat](#)
- [Pradhan Mantri Jan Arogya Yojana \(AB-PMJAY\)](#)
- [National Medical Commission](#)
- [PM National Dialysis Programme](#)
- [Janani Shishu Suraksha Karyakram \(JSSK\)](#)
- [Rashtriya Bal Swasthya Karyakram \(RBSK\)](#)

### Way Forward:

By implementing these measures, India can bolster its nursing infrastructure, strengthen the healthcare system, and better address the healthcare needs of its population. It will ultimately lead to improved healthcare outcomes and a more robust nursing workforce.

## UPSC Civil Services Examination, Previous Year Questions (PYQ)

### Mains

Q. "Besides being a moral imperative of a Welfare State, primary health structure is a necessary precondition for sustainable development." Analyse. (2021)

## India-US Strategic Clean Energy Partnership

**For Prelims:** India US [Strategic Clean Energy Partnership](#), Renewable Energy Technologies Action Platform

**For Mains:** India-US Relations

[Source: PIB](#)

### Why in the News?

The Ministerial meeting of the US-India [Strategic Clean Energy Partnership \(SCEP\)](#) was held between Indian Minister of Petroleum and Natural Gas and US Energy Secretary in New Delhi.

- Both sides noted the critical importance of bilateral clean energy engagement and the achievements of the SCEP in **strengthening energy security, creating opportunities for clean energy innovation**, addressing climate change and creating employment generation opportunities.

### What are the Key Highlights of the Meeting?

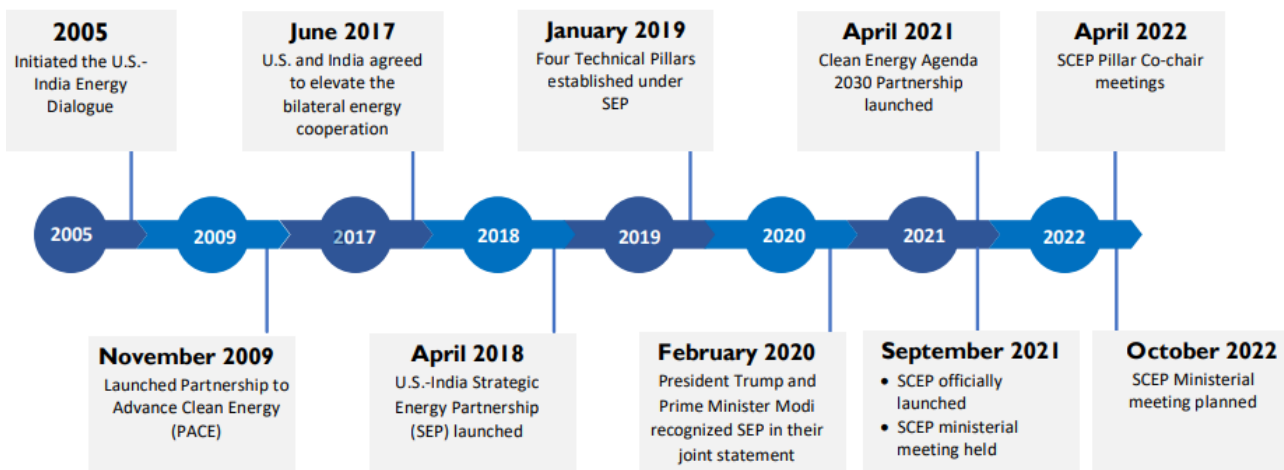
- **Review of the Ambitious and Dynamic SCEP Mandate:**
  - Collaboration across a wide breadth of clean energy work streams, including clean and

- renewable energy, energy efficiency
- Emerging technologies like battery storage and swapping technologies, gas hydrates, **advanced biofuels, and hydrogen and electrolyzed production.**
- **Commitments:**
  - Agreed to work toward development of **Net zero village in India** to support the clean energy transition.
  - Establishment of the **public-private Energy Storage Task Force** to support the clean energy transition;
  - Deployment of **hydrogen technologies** through the public-private Hydrogen Task Force.
  - Launch of the U.S.-India New and Emerging **Renewable Energy Technologies Action Platform (RETAP)** to accelerate development of key technologies to advance common ambitious clean energy goals.
- **Affirmed Global Biofuels Alliance:**
  - This Alliance will be aimed at facilitating cooperation and intensifying the use of sustainable biofuels, including in the transportation sector.
    - **Brazil, India and US** as leading biofuel producers and consumers, with other interested countries.
  - The Alliance shall work in collaboration with the Clean Energy Ministerial Biofuture Platform, the Mission Innovation Bioenergy initiatives, and **the Global Bioenergy Partnership (GBEP).**
- **South Asia Group for Energy (SAGE):**
  - Both sides launched the SAGE to deepen the engagement between Indian agencies and US national laboratories **to support research, analysis and capacity building activities** such as building modelling capacity in Life Cycle Assessment of low carbon technologies and analytics on energy consumption in building sector.
- **Other Concerns:**
  - The addition of Carbon Capture, Utilization and Storage as a work stream under the **Emerging Fuels and Technology Pillar.**
  - The collaboration of US Agency for International Development (**USAID**) with various **Indian agencies** including Indian Railways, NTPC Green National Skills Development Corporation, Skills Council for Green Jobs, and the Forum of Regulators.

## What is Strategic Clean Energy Partnership?

- The SCEP was launched in **accordance with the US - India Climate and Clean Energy Agenda 2030 Partnership** announced by both countries at the Leaders' Summit on Climate held in 2021.
- The SCEP advances energy security and innovation with greater emphasis **on electrification and decarbonization of processes and end uses;** scaling up emerging clean energy technologies; finding solutions for hard-to-decarbonize sectors; and deploying technical solutions.
- The SCEP was earlier established **as the Strategic Energy Partnership in 2018 and had replaced the U.S.-India Energy Dialogue,** the previous intergovernmental engagement for energy cooperation.

## THE JOURNEY SO FAR



## STRATEGIC CLEAN ENERGY PARTNERSHIP PILLARS



## UPSC Civil Services Examination, Previous Year Questions (PYQs)

### Mains:

**Q.** What is the significance of Indo-US defence deals over Indo-Russian defence deals? Discuss with reference to stability in the Indo-Pacific region. **(2020)**

**Q.** 'What introduces friction into the ties between India and the United States is that Washington is still unable to find for India a position in its global strategy, which would satisfy India's National self-esteem and ambitions'. Explain with suitable examples. **(2019)**

## East Asia Summit

**For Prelims:** [East Asia Summit](#), [ASEAN](#), [Act East Policy](#)

**For Mains:** Role of the EAS in addressing regional issues of common interest and concern

**Source:** [TH](#)

**Why in News?**



Recently, India's External Affairs Minister attended the **13<sup>th</sup> East Asia Summit Foreign Ministers' Meeting** and utilized the opportunity to engage in discussions with China's top diplomat, on the sidelines of the event.

- They discussed outstanding issues along the **Line of Actual Control (LAC)**, emphasizing the **importance of peace and the disengagement of troops**.

## What is the East Asia Summit?

### ▪ About:

- The EAS was established in **2005 as an Association of Southeast Asian Nations (ASEAN)-led initiative**.
- The EAS is the **only leader-led forum in the Indo-Pacific** that brings together all key partners to discuss political, security and economic issues of strategic importance.
- The EAS operates on the principles of **openness, inclusiveness, respect for international law, ASEAN centrality, and ASEAN's role as the driving force**.
- The idea of an East Asia Grouping was first proposed by then **Malaysian Prime Minister Mahathir Mohamad in 1991**.
  - The first summit was held in **Kuala Lumpur, Malaysia on 14 December 2005**.

### ▪ Members:

- The EAS comprises **18 members**: the **10 ASEAN countries** (Brunei, Cambodia, Indonesia, Laos, Malaysia, Myanmar, Philippines, Singapore, Thailand, and Vietnam) and **eight dialogue partners** (Australia, China, India, Japan, New Zealand, Republic of Korea, Russia and the United States).

### ▪ EAS Meetings and Processes:

- The EAS is usually held alongside **ASEAN Leaders' meetings in the fourth quarter of every year**.
- The EAS Leaders' Summit is supported by **various ministerial and senior officials' meetings**, such as the **Foreign Ministers' Meeting, the Economic Ministers' Meeting, the Defence Ministers' Meeting, and the Education Ministers' Meeting**.
- The EAS has **six priority areas of cooperation**: environment and energy; education; finance; global health issues and **pandemic diseases**; natural disaster management; and ASEAN connectivity.
- The EAS also covers other topics of common interest and concern, such as trade and investment, regional architecture, maritime security, non-proliferation, counterterrorism, and **cyber security**.

### ▪ India and East Asia Summit:

- **India has been a founding member of the EAS since 2005** and has actively participated in all its meetings and activities.
- India views the EAS as a key platform for enhancing its **Act East Policy** and strengthening its strategic partnership with ASEAN and other regional countries.
- At the **East Asia Summit in Bangkok in November 2019**, India had unveiled India's **Indo-Pacific Oceans Initiative (IPOI)**, which is aimed at forging partnerships to create a secure and stable maritime domain.
- India has contributed to the EAS cooperation in various fields, such as disaster management, renewable energy, education, health, connectivity, maritime security and counterterrorism.

## UPSC Civil Services Examination, Previous Year Questions (PYQs)

### Prelims

#### Q. India is a member of which among the following? (2015)

1. Asia-Pacific Economic Cooperation
2. Association of South-East Asian Nations
3. East Asia Summit

Select the correct answer using the code given below:

- (a) 1 and 2 only
- (b) 3 only
- (c) 1, 2 and 3
- (d) India is a member of none of them

Ans: (b)

---

## Rapid Fire Current Affairs

### Ensuring Accountability and Safety in AI Development

During the **first [United Nations Security Council](#) meeting on [Artificial Intelligence \(AI\)](#)**, concerns were raised regarding the **safety and responsible development of AI**.

AI leverages computers and machines to mimic the **problem-solving and decision-making capabilities of the human mind**. Therefore, the international community emphasized the need to develop methods to test AI systems for **capabilities, misuses, and safety flaws to avoid chaotic or unpredictable behavior**.

**UN Secretary-General** stressed the importance of **adopting standards and best practices** at the UN to address issues such as **bias, discrimination, and authoritarian surveillance that can be amplified by AI**. The development of AI should be consistent with **democratic values and human rights** to ensure **human-centric and trustworthy AI systems**.

Read more: [United Nations Security Council](#) , [Artificial Intelligence \(AI\)](#)

---

### International Moon Day 2023

**International Moon Day, observed on July 20**, commemorates the **historic [Apollo 11 mission's landing on the Moon in 1969](#)**. Astronauts **Neil Armstrong and Buzz Aldrin** made history by **stepping onto the lunar surface** at the site named **Tranquility Base**, while **Michael Collins piloted the Columbia Command Module in lunar orbit**. The **[United Nations General Assembly](#)** declared it as an international day to be observed in its resolution 76/76 on "International cooperation in the peaceful uses of outer space" in 2021.

Read more: [Apollo 11 mission](#)

---

### Mangal Pandey Birth Anniversary

**Mangal Pandey**, born on **July 19, 1827**, in Nagwa village, Uttar Pradesh, played a pivotal role in the **First Indian War of Independence**. On March 29, 1857, at the Barrackpore military cantonment near Calcutta, **he defiantly rebelled against British officers by refusing to use the controversial Enfield rifle cartridges** greased with animal fat.

This courageous act served as a **catalyst**, inspiring countless others to rise against British colonial rule, ultimately leading to the widespread **[Indian Rebellion of 1857](#)**. His arrest and subsequent execution on April 8, 1857, by British authorities only further fueled public outrage and united various communities in opposition to British rule.

Read more: [Indian Rebellion of 1857](#)

---

## Gomti River: Controversy Over Perennial Status and Protection

The **Gomti River**, a significant tributary of the **Ganga River**, has become the center of a contentious issue surrounding its perennial status and protection.

The Irrigation department of the Uttar Pradesh government in September 2020 declared the Gomti as a "**non-perennial river**," drawing criticism from water experts and river rights activists. Moreover, the Gomti plays a vital role in replenishing the **Ganga during monsoons**, making it indispensable to the region's ecosystem.

The river's dire need for protection is further highlighted by a report from the **Central Pollution Control Board (CPCB)**, ranking the Gomti as the fifth most polluted river in the country as of 2022.

**Read more:** [Ganga River](#), [Central Pollution Control Board](#)

---

PDF Reference URL: <https://www.drishtias.com/current-affairs-news-analysis-editorials/news-analysis/20-07-2023/print>

