

# 1. China Pakistan Economic Corridor

**Topic: International Relations**



**In News:** China and Pakistan has invited third country to join the CPEC amid inordinate delays and deepening fund crisis.

### More on the Topic:

- **The CPEC is the central focus of China’s ambitious Belt and Road Initiative (BRI)**, which aims to reintroduce historic trade networks by creating a modern-day Silk Road that links it to the south and southeast Asia, the Middle East, Africa, and Europe
- It refers to a clutch of major infrastructure works currently under way in Pakistan, intended **to link Kashgar in China’s Xinjiang province to Gwadar deep sea port close to Pakistan’s border with Iran.**
- Several other road, rail and power projects are associated with the corridor, and the **project seeks to expand and upgrade infrastructure across the length and breadth of Pakistan**, and to widen and deepen economic ties with its “all-weather friend”, China.

### How Pakistan benefits from CPEC?

- Besides the **potential for growth, power and jobs**, Pakistan also expects the CPEC to bind it in an even tighter embrace with close friend China, giving it greater **strategic leverage with both India and the United States in the Indian Ocean region.**

### How China will Benefit from CPEC?

- Gwadar lies close to the **Strait of Hormuz**, a key oil shipping lane. It could open up an energy and trade corridor from the Gulf across Pakistan to western China, that could also be used by the Chinese Navy.
- The CPEC will give **China land access to the Indian Ocean, cutting the nearly 13,000 km sea voyage from Tianjin to the Persian Gulf through the Strait of Malacca and around India, to a mere 2,000 km road journey from Kashgar to Gwadar.**

- For Chinese companies, the massive scale of the CPEC **provides investment opportunities** for several years to come.
- The development of Kashgar as a trade terminus will **reduce the isolation of the restive Xinjiang province**, deepen its engagement with the rest of China.

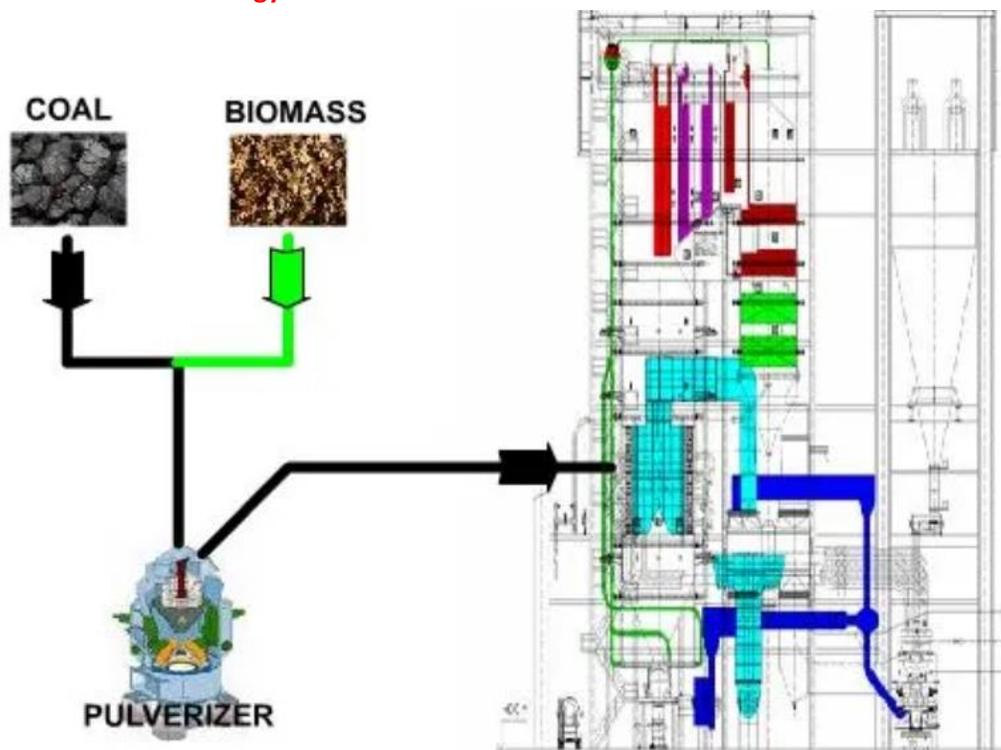
**India’s Reaction:**

- India has always opposed the CPEC, since it passes through Pakistan Occupied Kashmir (PoK) breaching Indian Sovereignty as it is an integral part of India.

Source: Indian Express

## 2. Biomass co-firing in power plants

Topic: Environment and Ecology



**In News:** Ministry of Power has asked states to formulate time-bound plans to ensure the utilisation of biomass for co-firing in thermal power plants ahead of the Kharif harvest season.

**More on the Topic:**

- Biomass co-firing is **the practice of substituting a part of the fuel with biomass at coal thermal plants.**



- Biomass co-firing stands for **adding biomass as a partial substitute fuel in high efficiency coal boilers.**
- **Coal and biomass are combusted together in boilers** that have been designed to burn coal. For this purpose, the existing coal power plant has to be partly reconstructed and retrofitted.
- Co-firing is **an option to convert biomass to electricity**, in an efficient and clean way, and to reduce GHG (Green house Gases) emissions of the power plant.

#### **Significance of Biomass Co firing:**

- **It will reduce stubble burning related air pollution.**
- This assumes significance because the air pollution level rises after the Kharif harvest season in autumn and winters. The stubble burning by farmers contributes to pollution to a great extent.
- The move is also intended to reduce **carbon footprint of thermal power generation.**
- **Biomass co-firing is a globally accepted cost-effective method for decarbonising a coal fleet.**
- Owing to the rising prices of imported coal, biomass co firing will reduce the economic burden as well.

#### **Challenges:**

- **Existing infrastructure of thermal power plants are not suited** for biomass co-firing.
- Around 95,000-96,000 tonnes of biomass pellets are required per day for co-firing, But India's pellet manufacturing capacity is 7,000 tonnes per day at present despite a surplus 228 million tonnes of agricultural residue available in the country.
- **It is challenging to store biomass pellets** for long durations at the plant sites since they absorb moisture from air quickly and become useless.

#### **Way Ahead:**

- There is need for infrastructure upgradation.
- The supply demand mismatch of bio mass pellets has to be systematically solved.
- Platforms need to be established to ensure farmers have an intrinsic role in this business model of pellet manufacturing and co-firing in power plants.

**Source: Indian Express**

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### 3. Monkeypox declared as Public Health Emergency

**Topic: Health**



**In News:** Monkey pox is declared as public health emergency of international concern (PHEIC) recently.

#### **More on the Topic:**

- The PHEIC is WHO's highest level of alert and the announcement can unlock funding and global efforts to collaborate on sharing vaccines and treatments.
- Once it spreads internationally, it is declared as a Pandemic. So far this year, there have been 15000 cases of monkeypox in more than 60 countries.

#### **About Monkey pox:**

- It is a **viral disease** that spreads via close contact and tends to cause flu-like symptoms and pus-filled skin lesion.
- The current outbreak is unlike any previous one outside of Africa in that there is sustained person-to-person transmission of the infection.
- **Monkeypox is not a novel disease.** It was first isolated in the late 1950s from a colony of monkeys.
- The virus is in **the same genus as variola** (causative agent of smallpox) and vaccinia viruses (the virus used in one of the available smallpox vaccines).
- There is a significant role of animals in the spread of monkeypox. Man and monkeys are both accidental hosts and wild rodents are usually seen harbouring this virus.

**Source: Hindu**

## 4.Modhera Temple

Topic: Art and Culture



**In News:** Kalupur railway station in Ahmedabad will be renovated and modelled on Modhera Sun temple in five years.

### More on the Topic:

- The Sun Temple is a Hindu temple dedicated to the solar deity **Surya located at Modhera village of Mehsana district, Gujarat, India.**
- It is situated on the bank of the river Pushpavati. It was built after 1026-27 CE during the reign of **Bhima I of the Chaulukya dynasty.**
- It is a UNESCO world heritage site.
- It is designed in such a way that **during every equinox, the first ray of the rising sun would fall on a diamond placed on the head of the Sun God.**
- The temple complex has three components: **Gudhamandapa, the shrine hall; Sabhamandapa, the assembly hall and Kunda, the reservoir.**
- The halls have intricately carved exterior and pillars. The reservoir has steps to reach bottom and numerous small shrines.

**Source:** Indian Express

## 5. Snow Leopard

**Topic: Environment and Ecology**



**In News:** A recent study by the Zoological Survey of India (ZSI) on snow leopard (Panthera uncia) has thrown up interesting insights into its relationship with its prey species.

### **More on the Topic:**

- The study under National Mission on Himalayan Studies revealed a strong link between habitat use by Snow Leopard and its prey species Siberian ibex and blue sheep.
- Predators such as snow leopards regulated the populations of herbivores such as the blue sheep and Siberian ibex, **thereby safeguarding the health of grasslands.**
- A long-term absence of snow leopards could cause trophic cascades as ungulate populations would likely increase, **leading to depletion of vegetation cover.**

### **About Snow Leopard:**

- **Classified as 'Vulnerable'** by the International Union for Conservation of Nature (IUCN) Red list and listed **in Schedule-I species** of the Indian Wildlife (Protection) Act, 1972, snow leopards are elusive mountain cats.

**Source: Business Standard**

## 6. Lumpy Skin Disease

**Topic: Health**



**In News:** Lumpy Skin Disease has killed 999 Cattle In Gujarat.

**More on the Topic:**

- Lumpy skin is a **viral disease spread by mosquitoes, flies, lice, wasps**, by direct contact among the cattle, and through contaminated food and water.
- The main symptoms are fever in animals, discharge from eyes and nose, salivation from mouth, soft blisters like nodules all over the body, reduced milk production, difficulty in eating, which sometimes lead to the animal's death.
- Lumpy skin disease virus is **capable of infecting humans with direct transmission without the need for an insect vector**; most probably by inhalation and certainly by direct contact with infected materials, infected persons [man to man], and as laboratory-acquired infection.

**Source: Business Standard**

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## 7. Kargil Vijay Diwas

Topic: Miscellaneous



**In News:** 26 July is marked as the Kargil Vijay Diwas to show respect and gratitude to the armed forces personnel who sacrificed their lives during the war.

### More on the Topic:

- The 1999 Kargil war was fought by the Indian Army to recapture the Indian territories from Pakistan intruders in the Kargil-Drass sector in 1999.
- In the war, India came out victorious on July 26, 1999.
- On 3rd May 1999, Pakistan started this war when it had infiltrated into the high altitudes in the rocky mountainous region of Kargil with around 5000 soldiers and captured it.
- When the Indian Government got the information about it, '**Operation Vijay**' was **launched** by the Indian army to throw back the intruders who had treacherously occupied Indian Territory.
- The 60-day-long war resulted in the loss of several lives on both sides; India eventually won the war by regaining control of all the previously held territory.

**Source: Business Standard**