

Illegal Sand Mining | Madhya Pradesh | 06 May 2024

Why in News?

Recently, a police officer was hit by a tractor transporting illegally mined sand in Madhya Pradesh.

Key Points

- The <u>illegal sand mining</u> is rampant in Madhya Pradesh, with hundreds of dumpers transporting sand from the banks of the **Son river**.
- Sand mining is the removal of primary natural sand and sand resources (mineral sands and aggregates) from the natural environment (terrestrial, riverine, coastal, or marine) for extracting valuable minerals, metals, crushed stone, sand and gravel for subsequent processing.
- This activity, driven by various factors, poses serious threats to ecosystems and communities.

Son River

- The Son River, a perennial river in central India, is the Ganges' 2nd-largest southern tributary.
- Originating near Amarkantak Hill in Chhattisgarh, it flows through Chhattisgarh, Madhya Pradesh, Uttar Pradesh, and Bihar, forming waterfalls at the Amarkantak plateau.
 - It merges with the Ganges near Patna, Bihar.
- Tributaries include Ghaghar, Johilla, Chhoti Mahanadi, Banas, Gopad, Rihand, Kanhar, and North Koel River.
- Prominent dams include the Bansagar Dam in Madhya Pradesh and the Rihand Dam near Pipri in Uttar Pradesh.



Kuno Cheetah Captured in Rajasthan | Madhya Pradesh | 06 May 2024

Why in News?

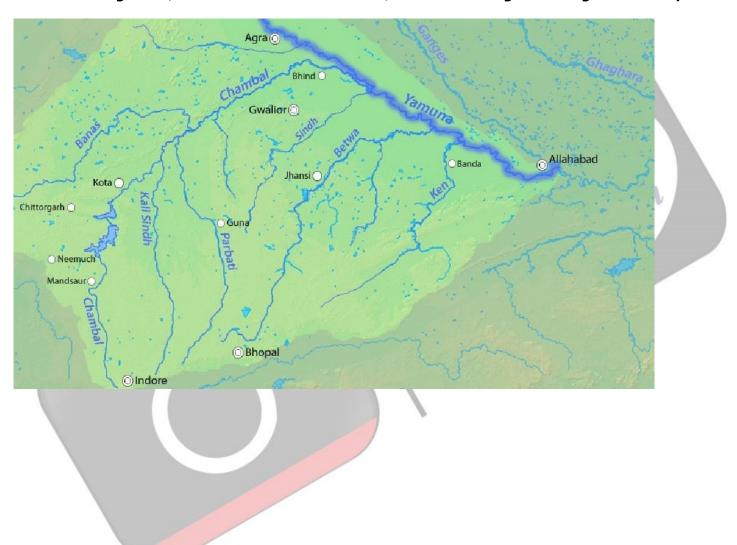
One of the <u>Cheetahs</u> from <u>Kuno National Park</u> in Madhya Pradesh wandered around 50km and ended up in **Karauli, Rajasthan.**

• However, it was tranquilized and safely returned the same evening.

Key Points

- According to forest department officials, the cheetah may have followed a route along the <u>Chambal river</u>, which flows through Madhya Pradesh and Rajasthan's Karauli.
 - Chambal river is one of the most **pollution-free rivers** of India.

- It's 960 km. long river that originates at the Singar Chouri peak in the northern slopes of the Vindhya mountains (Indore, Madhya Pradesh). From there, it flows in the North direction in Madhya Pradesh for a length of about 346 km and then follows a north-easterly direction for a length of 225 km through Rajasthan.
- It enters UP and flows for about 32 km before joining the **Yamuna River** in Etawah District.
- It is a rainfed river and its basin is bounded by the Vindhyan mountain ranges and the Aravallis. The Chambal and its tributaries drain the Malwa region of northwestern Madhya Pradesh.
- **Tributaries:** Banas, Kali Sindh, Parbati.
- Main Power Projects/ Dam: Gandhi Sagar Dam, Rana Pratap Sagar Dam, Jawahar Sagar Dam, and Kota Barrage.
- The National Chambal Sanctuary is located along river Chambal on the tri-junction of Rajasthan, Madhya Pradesh and Uttar Pradesh. It is known for critically endangered gharial, the red-crowned roof turtle, and the endangered Ganges river dolphin.

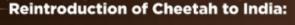


Cheetah

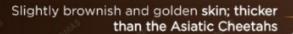
Common Name - Cheetah

Scientific Name - Acinonyx jubatus

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



- 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.



More prominent spots and lines on the face

Found all over the African continent

IUCN Red List Status - Vulnerable



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





Naxalites Surrender in Dantewada | Chhattisgarh | 06 May 2024

Why in News?

Recently, 35 <u>Naxalites</u> surrendered in Chhattisgarh 's Dantewada district. These cadres were tasked with digging roads, felling trees to block roads and putting up posters and banners during shutdowns called by **Naxalites**.

Key Points

- According to the officials, these naxalites were part of Bhairamgarh, Malanger and Katekalyan area committees of the <u>Maoists</u> in south Bastar.
 - They were impressed by the police's rehabilitation drive 'Lon Varratu' (return to your home) and disappointed with the hollow **Maoist ideology.**
 - Maoism is a form of communism developed by Mao Tse Tung. It is a doctrine to capture State power through a combination of armed insurgency, mass mobilization and strategic alliances.
- These Naxalites will be provided facilities as per the government's surrender and rehabilitation policy.
- With this, 796 Naxalites, including 180 carrying rewards, have so far joined the mainstream in the district under the police's Lon Varratu campaign launched in June 2020.

Lone Varratu

- This campaign means 'Come back home'.
- This campaign was launched for those Naxalites who intended to leave the path of red terror and join the mainstream of society.
- Under this campaign many Naxalites left the path of terrorism.

Naxalism

- The term **Naxalism** derives its name from the village Naxalbari of West Bengal.
- It originated as rebellion against local landlords who bashed a peasant over a land dispute.
- The movement soon spread across Eastern India in less developed areas of states such as Chhattisgarh, Odisha and Andhra Pradesh.
- Left-wing extremists (LWE) are popularly known as Maoists worldwide and as Naxalites in India.
- Objective:
 - They advocate for the overthrow of the Indian government through **armed revolution** and the establishment of a **communist state** based on **Maoist principles**.
 - They view the state as oppressive, exploitative, and serving the interests of the ruling elite, and seek to address socio-economic grievances through armed struggle and people's war.

Chhattisgarh Self-Help Groups Boost Voter Turnout | Chhattisgarh | 06 May 2024

Why in News?

An initiative in **Balrampur district of Chhattisgarh to increase voter turnout** in the third phase of the 2024 Lok Sabha elections is attracting attention.

Key Points

- Women's <u>Self-help groups</u> are utilizing traditional methods by going door-to-door to meet with voters, distributing tamarind leaves and yellow rice, in order to encourage greater public engagement.
- The effort has not only sparked enthusiasm among villagers but has also demonstrated the power of community involvement in promoting democratic values.
 - This initiative is also fully supported by the district administration.

Self-Help Groups (SHGs)

- Self-Help Groups (SHGs) are informal associations of people who choose to come together to find ways to improve their living conditions.
- It can be defined as a self-governed, peer-controlled information group of people with similar socio-economic backgrounds and having a desire to collectively perform a common purpose.
- SHG relies on the notion of "Self Help" to encourage self-employment and poverty alleviation.
- Objectives:
 - To build the functional capacity of the poor and the marginalized in the field of employment and income generating activities.
 - To resolve conflicts through collective leadership and mutual discussion.
 - To provide collateral free loans with terms decided by the group at the market driven rates.
 - To work as a collective guarantee system for members who propose to borrow from organised sources.
 - The poor collect their savings and save it in banks. In return they receive easy access to loans with a small rate of interest to start their micro unit enterprise.

Uttarakhand Wildfires: Threat To Glaciers | Uttarakhand | 06 May 2024

Why in News?

In Uttarakhand, the **wildfires** have taken a toll on the region's forests. From November 2023, 1,107 hectares of forest cover have succumbed to 886 separate incidents of wildfires, sparking concerns about the **profound impact on the local ecosystems.**

Key Points

- The <u>Forest Survey of India (FSI)</u> has issued multiple fire alerts to Uttarakhand, emphasising the severity of the ongoing crisis.
- A former scientist from the Wadia Institute of Himalayan Geology, sheds light on the increased concentration of <u>Black Carbon</u> in the atmosphere, particularly during summer due to forest fires, exacerbates <u>glacier melting</u> and disrupts the delicate balance of the entire ecosystem.
- A recent study conducted by the **World Bank** underscores the role of black carbon in accelerating glacier melt.
 - According to the report, the accumulation of black carbon not only diminishes the reflectance of glacier surfaces, leading to increased absorption of solar radiation, but also elevates air temperatures, further accelerating glacier retreat.
- The <u>World Meteorological Organisation (WMO)</u> warns of accelerated glacier retreat in <u>the Himalayas</u> and heightened risks of natural disasters like <u>Glacial Lake Outburst Floods</u>.
 - Their recent study states the need for concerted efforts to mitigate the impacts of black carbon emissions and safeguard the fragile ecosystems of the Himalayan region.

Wadia Institute of Himalayan Geology (WIHG)

- The Wadia Institute of Himalayan Geology is an autonomous research Institute of the Department of Science & Technology.
- Established in June, 1968 as a small nucleus in two rooms of the Botany Department, Delhi University, the Institute was shifted to Dehradun during April, 1976.

Glacial Lake Outburst Flood (GLOF)

- It is a type of catastrophic flood that occurs when the dam containing a glacial lake fails, releasing a large volume of water.
- This type of flood is typically caused by rapid melting of glaciers or the buildup of water in the lake due to heavy precipitation or the inflow of meltwater.
- In February 2021, Chamoli district in Uttarakhand witnessed flash floods which are suspected to have been caused by GLOFs.
- Causes:
 - These floods can be triggered by a number of factors, including changes in the volume of the glacier, changes in the water level of the lake, and earthquakes.
 - According to NDMA (National Disaster Management Authority), glacial retreat due
 to climate change occurring in most parts of the Hindu Kush Himalayas has given rise to
 the formation of numerous new glacial lakes, which are the major cause of GLOFs.

Black Carbon's Arctic Impact

Black carbon, commonly known as soot, is a particulate pollutant that negatively affects both the climate and human health. Soot particles suspended in the atmosphere absorb sunlight, adding to global warming. And when it collects on ice and snow, it hastens melting.



NEGATIVE IMPACTS OF BLACK CARBON

Particulates trapped in lungs leads to illness



Clean clouds reflect sunlight

Sooty clouds absorb sunlight, creating changes in cloud and rain patterns

Clean snow and ice reflect sunlight particles absorb sunlight, warming the snow and ice, increasing melting

Black carbon

Sunlight

CAUSES

- ▼Smoke from –
 open burning
- ▼Industry and coalfired power plants
 - Engine emissions (diesel, ships, trains)

Note: Illustration is diagramatic and not to scale.

Uttarakhand Forest Fires Halt Air Services | Uttarakhand | 06 May 2024

Why in News?

Air services to **Pithoragarh and Munsiyari towns** in the border district were halted for the due to low visibility at the **Naini-Saini airport** caused by smoke from the **forest fires**.

Key Points

- Visibility in the vicinity of the airport was below 1000 meters, whereas air traffic requires a
 minimum of 5000 meters of visibility to operate safely.
 - Apart from the Saur valley, there are forest fires spreading in Quirala valley of Champawat and the forests of Lohaghat, Jhoolaghat, and Gaurihat.
 - According to healthcare professionals at community and primary health centers in different locations within the district, a growing number of patients are visiting hospitals with concerns of breathing difficulties and eye irritation.
- Naini Saini Airport otherwise called Pithoragarh Airstrip is situated in Pithoragarh, Uttarakhand. The airstrip was built in 1991 for authoritative use and got ready for the operations of the Dornier 228 sort flying machine.

