

Current Affairs search results for tag: Environment

### **1. IMD issue warning of formation of Cyclone Mandous over Bay of Bengal ( Dec. 6, 2022 )**

IMD issue warning of formation of Cyclone Mandous

According to the India Meteorological Department (IMD), a new tropical cyclone is likely to form over the Bay of Bengal and is going to impact **Tamil Nadu, Puducherry and Andhra Pradesh** on 6-8 December 2022. The cyclonic storm has been named '**Cyclone Mandous**' which means a treasure box in the Arabic language. The name of the cyclone has been given by the **United Arab Emirates**.

According to the IMD a low pressure area that has formed over the south Andaman Sea is likely to concentrate into a depression over Southeast Bay of Bengal.

The coastal areas are going to receive heavy rainfall due to the formation of the cyclonic storm.

'Cyclone Mandous' will be the **third** tropical storm to rise in Bay of Bengal this year after '[Cyclone Sitrang](#)' which hit the Bangladesh coast in the month of October. The name Sitrang was given by Thailand.

The first cyclonic storm of the season was **Asani** which formed in the Bay of Bengal in May month. The **Asani** name was given by Sri Lanka to the cyclonic storm.

#### **What is a Cyclone?**

A cyclone is a large system of winds that circulates about a centre of **low atmospheric pressure** in a **counter clockwise direction** north of the Equator and in a **clockwise direction** to the south.

Cyclonic winds move across nearly all regions of the Earth **except the equatorial belt** and are generally associated with heavy rain or snow.

### **2. India - France Partnership on Kaziranga Project ( Dec. 6, 2022 )**

#### **India - France Partnership on Kaziranga Project**

**India and France** are collaborating under the **Kaziranga Project** in the **Kaziranga National Park in Assam**.

#### **Important facts**

- With France and India technical and financial support, the Indo-Pacific Parks Partnership will facilitate partnership activities for natural parks of the Indo-Pacific region.
- These activities include biodiversity conservation, wildlife management and engagement with local communities.

#### **About the Kaziranga project**

- The Kaziranga project is a part of a larger **Assam Project on Forest and Biodiversity Conservation (APFBC)** for which the **Agence Française de Développement (AFD)** has committed funding of €80.2 million for a 10-year period, between **2014-2024**.
- The project envisages afforestation of 33,500 hectares of land by 2024 and training of 10,000 community members in alternative livelihoods.
- The AFD program has been most effective in skill development in the area, especially in the forest dwelling communities.
- The Assam government has started a massive reforestation drive with the help of AFD.

### **About Kaziranga National Park**

- It is a national park in the state of **Assam**, India. It is a **UNESCO World Heritage Site**. It is spread over an area of **42,996 hectares**.
- Two-thirds of the world's **one-horned rhinoceros** are found in this sanctuary.
- Kaziranga is home to the **highest density of tigers** among protected areas in the world, and was declared a **Tiger Reserve** in 2006.
- It is the largest undivided representative area of **Brahmaputra valley** floodplain grassland.
- It has been recognized by BirdLife International as an **Important Bird Area**.

### **3. Only CNG and Electric autos to ply in Delhi NCR from 1 January 2027; Air Quality Panel ( Dec. 5, 2022 )**

Only CNG and Electric autos to ply in Delhi NCR from 1 January 2027

The Central government's air quality panel has directed **Uttar Pradesh, Rajasthan** and **Haryana** to register only CNG (Compressed Natural Gas) and electric autos from **1 January 2027** and to completely phase out the diesel autos in the National Capital Region by the end of 2026.

The Commission for Air Quality Management has said that only CNG and e-autos will ply in the NCR from January 1, 2027.

The NCR covers Delhi, 14 districts of Haryana, eight districts of Uttar Pradesh and two districts of Rajasthan.

Delhi had launched a programme in 1998 to convert its fleet of diesel auto rickshaws into CNG ones. No diesel-run auto is registered in Delhi at present.

In 1998, Delhi introduced a campaign to transfer its fleet of diesel auto rickshaws to CNG vehicles. At the moment, no diesel-powered vehicle is registered in Delhi. In October of last year, the Delhi Transport Department launched a program for the enrollment of 4,261 e-autos.

**Delhi National Capital Region (Delhi NCR)**

The Delhi National Capital Region was set up in 1985 under the National Capital Region Planning Board Act 1985 by the Central government.

Delhi NCR was set up to deal with uncontrolled migration of people to Delhi. It aims to develop surrounding areas of Delhi so that people's migration to Delhi can be controlled.

Delhi NCR includes Delhi (**all 11 districts**), areas of Uttar Pradesh (**8 districts**), Haryana (**14 districts**) and Rajasthan (**2 districts**).

Region	Name of Districts	Areas in sq. Km
Haryana	Faridabad, Gurugram, Nuh, Rohtak, Sonapat, Rewari, Jhajjar, Gurugram, Panipat, Palwal, Bhiwani, Charkhi Dadri, Mahendragarh, Jind and Karnal ( <b>fourteen districts</b> ).	25,327
Uttar Pradesh	Meerut, Ghaziabad, Gautam Budh Nagar, Bulandshahr, Baghpat, Hapur, Shamli and Muzaffarnagar ( <b>Eight districts</b> ).	14,826
Rajasthan	Alwar and Bharatpur ( <b>two districts</b> ).	13,447
Delhi	Whole of NCT Delhi.	1,483
		55,083 sq. kms.

**4. Indonesia raises volcano warning to highest after Semeru erupts ( Dec. 4, 2022 )**

Indonesia raises volcano warning to highest after Semeru erupts

The Indonesian authorities raised the warning on **Semeru volcano** to the highest level on 4 December 2022 after an eruption spewed a column of ash high into the air.

The eruption in the Semeru volcano located in the East Java province follows a series of earthquakes on the west of the island, including one last month that killed more than 300 people.

The eruption started on 3 December 2022 and the plume from the volcano reached a height of 50,000 feet (15 km).

The Indonesian authorities have started the evacuation of people including children and seniors, living near the volcano.

Mount Semeru last erupted in December 2021, killing at least 69 people. At that time the eruption had left entire streets filled with mud and ash, swallowing homes and vehicles, with nearly 10,000 people seeking refuge.

Indonesia sits on the Pacific Ring of Fire, where the meeting of continental plates causes high volcanic and seismic activity.

Indonesia has around 142 volcanoes and it has the largest population (86 lakh) in the world living within 10 km close range to volcanoes.

## **5. Sumangalam Panchmahabhoot National Youth Conference on 'Vayu: The Vital Life Force' starts in Bhubaneswar ( Dec. 2, 2022 )**

Sumangalam Panchmahabhoot National Youth Conference on 'Vayu

The second conference in the Sumangalam Panchmahabhoot series, titled '**Vayu - The vital life force**' started at the Siksha O Anusandhan University, **Bhubaneswar**, and Odisha on 2 December 2022. The first conference in the Sumangalam Panchmahabhoot series '**Akash for Life**' was held in **Dehradun** in November 2022.

The Conference will be formally inaugurated by the Odisha Governor **Ganeshi Lal** and the Union Minister of Environment, Forest & Climate Change, **Bhupender Yadav** at Bhubaneswar on 3 December 2022.

The conference in Bhubaneswar is being organized by the Union Ministry of Environment, Forest and Climate Change, along with Central Pollution Control Board from 2 -4 December 2022.

The Conference is focused on varied air quality issues ranging from scientific discussions on climate change and pollution control to enriching our understanding on air quality from ancient scriptures and texts.

### **Sumangalam Panchmahabhoot**

The Government of India is organizing a campaign "Sumangalam" across the country for finding solutions to the environmental issues with an Indian perspective based on traditional knowledge .

In a blend of the modern and the traditional knowledge, the government of India is going to organise five national conventions across the country on the Panchmahabhoot- the five elements for solving environmental issues for the betterment of society. In the traditional knowledge system the human body or the universe is made of Panchmahabhoot. **It consists of Aakash, Vaayu Jal, Prithvi and Agni.**

## **6. Supreme Court seeks government's response on 'Project Great Indian Bustard' conservation programme ( Dec. 2, 2022 )**

'ProjectGreat Indian Bustard'

The Supreme Court on November 28 sought the government's response on developing a conservation program called '**Project [Great Indian Bustard](#)**' to address the crisis faced by the critically endangered bird species.

### **Important facts**

- A public interest litigation was filed in the country's top court, in which an appeal was made to give directions to **save the Godavan i.e. Great Indian Bustard bird**.
- In fact, many Great Indian Bustards or Godavan have died due to **criss-crossing of power transmission lines** in Gujarat and Rajasthan.
- While hearing the petitions filed in this context, the court sought answers from the government and advised to start Project Great Indian Bustard.
- The Supreme Court has advised to start '**Project Great Indian Bustard**' on the lines of '**Project Tiger**' for the rescue of an endangered bird Great Indian Bustard.

### **About Great Indian Bustard**

- It is considered India's most **critically endangered bird** species and especially found in **Rajasthan and Gujarat**.
- It is one of the heaviest flying birds **endemic to the Indian subcontinent**.
- It is the state bird of Rajasthan.
- These birds are on the verge of extinction, with barely 50 to 249 surviving, according to a 2021 report by the **International Union for Conservation of Nature (IUCN)**.
- It is a large bird with brown-and-white feathers with black crown and wing markings. It is one of the heaviest birds in the world.
- Its habitat is Arid **grasslands**.
- IUCN Status - **Critically Endangered**.
- Listed in Wildlife Protection Act's **Schedule 1**.
- The cause of the decline in numbers is Hunting, Intensification of agriculture, Power lines.

## **7. Greener cooling pathway can create a \$1.6 trillion investment opportunity in India: World Bank ( Dec. 2, 2022 )**

Greener cooling pathway can create a \$1.6 trillion investment opportunity in India

Recently, a report titled "**Climate Investment Opportunities in India's Cooling Sector**" was released by the [World Bank](#). The report states that an investment opportunity of **\$1.6 trillion** could open up in **India by 2040**.

### **Highlight of the report**

- India also has the potential to reduce **greenhouse gas emissions** significantly and create nearly **3.7 million jobs**.
- The report states that India is experiencing higher temperatures every year. India is likely to see a drastic reduction in the expected **carbon-dioxide (CO2) levels** over the next **two decades**.
- The report states that **by 2030**, more than **160-200 million people across the country** could be exposed to **deadly heat waves** annually if alternative and innovative energy-efficient technologies are not adopted.
- The report states that around **34 million people in India will face job losses** due to loss of productivity related to heat stress.
- The World Bank has said that by **2037 the demand for cooling** is expected to exceed the current level by **eight times**.
- The current food loss due to heat during transportation of food items is close to **\$13 billion annually**.
- Thus, there is a need to shift towards a more energy-efficient route that can lead to a substantial reduction in the expected CO2 levels.
- Recognizing this challenge, the World Bank said India is already implementing new strategies to help people adapt to rising temperatures.

### **Suggestions by the report**

- The report proposes a roadmap to support India **Cooling Action Plan (ICAP) 2019**, through new investments in three major sectors like Building construction, Cold chains and Refrigerants.
- The report recommends large-scale adoption of the **Pradhan Mantri Awas Yojana (PMAY)**, India's affordable housing program for the poor.
- It has also been proposed to create a **policy for cooling** that can consume 20-30% less electricity than efficient conventional cooling solutions.
- The report recommends improving the gap in the **cold chain distribution network** to avoid wastage of food and medicines.

### **8. Jeypore Ground Gecko included in Appendix II of the CITES ( Nov. 30, 2022 )**

Jeypore Ground Gecko included in Appendix II of the CITES

The **Jeypore ground gecko (Cyrtodactylus jeyporensis)**, an **endemic reptile** of India, has been included in **Appendix II** of the Convention on International Trade in Endangered Species (**CITES**).

### **About Jeypore Ground Gecko**

- It is a wild reptile species endemic to India.
- It is a **rare species** and was first described in 1878 by Colonel Richard **Henry Beddom**, a British officer and naturalist.
- It was rediscovered by a team of researchers in 2011 after a gap of over **130 years**.
- It is found in the **Eastern Ghats** and is known to be present in four locations including southern **Odisha** and northern **Andhra Pradesh**.
- The inclusion of this species in Appendix II was **proposed by India** at the recently concluded 19th Conference of the Parties (COP19) to CITES in Panama City.
- IUCN Status: **Endangered**

### **Threats to this species**

- Habitat loss and degradation, poaching for domestic and international trade, forest fires, tourism, quarrying and mining activity.
- This species is not included in the protection list mentioned under the **Wild Life (Protection) Act, 1972**.

## **9. NITI Aayog releases study report on 'Carbon Capture to achieve net zero emission target by 2070 ( Nov. 29, 2022 )**

NITI Aayog releases study report on 'Carbon Capture'

National Institution for Transforming India (NITI) Aayog has released a report titled '**Carbon Capture, Utilisation, and Storage Policy Framework and its Deployment Mechanism in India**' on 29 November 2022.

The report explores the importance of Carbon Capture, Utilisation, and Storage as an emission reduction strategy to meet the Net Zero target of India by 2070. The report outlines broad level policy interventions needed across various sectors for its application.

India's has **committed** through its updated nationally determined contributions (NDC) to achieve **50% of its total installed** capacity from non-fossil-based energy sources, **45% reduction in emission intensity by 2030** and taking steps towards achieving **Net Zero by 2070**,

It means India has to reduce the consumption of fossil fuels like coal, oil and gas. However the recent study suggests that India's reliance on fossil fuel especially coal for power generation is likely to increase rather than reduce.

According to the Niti Aayog Vice Chairman **Suman Bery**, the Carbon Capture, Utilisation, and Storage (CCUS) can enable the production of clean products while still utilizing our rich endowments of coal.

### **Possible benefits of the CCUS**

The report indicates that CCUS can provide a wide variety of opportunities to convert the captured CO<sub>2</sub> to different value-added products like green urea, food and beverage form application, building materials (concrete and aggregates), chemicals (methanol and ethanol), polymers (including bio-plastics).

CCUS projects will also lead to a significant employment generation. It estimates that about 750 Million tonnes per annum of carbon capture by 2050 can create employment opportunities of about **8-10 million** on full time equivalent (FTE) basis in a phased manner

### Carbon Capture and Storage and Utilisation

Carbon Capture and Storage is the process of capturing the carbon dioxide which is released due to industrial activities/power generation using fossil fuels, before it is released in the atmosphere.

- The captured carbon- dioxide can be used to make commercially marketable products. This is called Capture Storage and Utilisation (CCSU). Normally it is used in enhanced oil extraction where carbon dioxide is injected in oil fields to increase their extraction efficiency.
- The first large-scale CCSU project began operating at Sleipnerin Norway in 1996.

### Other Initiatives of the government in the field of CCSU

The Government of India is setting up two National Centres of Excellence in Carbon Capture and Utilisation for long-term research, design development, collaborative and capacity-building hubs for state-of-the-art research and application-oriented initiatives in the field of Carbon capture.

#### The two centres are:

- National Centre of Excellence in Carbon Capture and Utilisation (NCoE-CCU) at Indian Institute of Technology (IIT) Bombay,
- ational Centre in Carbon Capture and Utilisation (NCCCU) at Jawaharlal Nehru Centre for Advanced Scientific Research (JNCASR), Bengaluru .

## 10. A UN panel has recommended that Australia's Great Barrier Reef be listed as a World Heritage Site ( Nov. 29, 2022 )

Australia's Great Barrier Reef be listed as a World Heritage Site

A **United Nations panel** recommended on November 29, 2022 that **Australia's Great Barrier Reef** should be listed as a **World Heritage Site** that is "in danger".

### Important facts

- The world's largest coral reef ecosystem has been greatly affected by climate change and ocean warming.
- Frequent bleaching events and **La Nina** are threatening the reef.
- Bleaching occurs when water gets too warm, causing corals to expel the colourful algae living in their tissues and turn white.



- **Australia's** recently elected government has pledged to spend A\$1.2 billion (\$800 million) over the coming years to protect the reef.

### **What are Coral reefs?**

- Coral reefs are one of the most **biologically diverse marine ecosystems on Earth**.
- They play an important role in marine ecosystems and support habitats for **flora and fauna** in the ocean.
- Each coral is called a **polyp** and thousands of such polyps live together to form a colony.

### **About Great Barrier Reef**

- It extends for **1400 miles** along the **north-east coast of Queensland, Australia** and is the world's most extensive and rich coral reef ecosystem.
- It is made up of more than **2,900 reefs and more than 900 islands**.
- It is the largest single structure in the world made by living organisms.
- This reef was selected as a **World Heritage Site in 1981**.