

## DAILY CURRENT AFFAIRS (DCA)

Time: 45 Min

Date: 24-10-2024

### Table of Content

Cyclone Dana to Hit Odisha and West Bengal

Adoption of Kazan Declaration at 16th BRICS Summit

SC Upholds State's Power to Regulate Industrial Alcohol

Stubble Burning Violates Article 21: SC

#### News In Short

PM YASASVI Scheme

PM SHRI Scheme

E. coli Outbreak

United Nations Peacekeeping Mission in Lebanon

First Dry Port in Bihar

Pink Cocaine

Snow Leopard (*Panthera Uncia*)

Breeding Great Indian Bustard Using Artificial Insemination

Lahore Declared the World's Most Polluted City

## CYCLONE DANA TO HIT ODISHA AND WEST BENGAL

### Context

- According to the Indian Meteorological Department Cyclone Dana will intensify into a **severe cyclonic storm** and make landfall in West Bengal and Odisha coast.

### What is a Cyclone?

- A cyclone is a large-scale system of air that rotates around the center of a **low-pressure area**.
  - ♦ It is usually accompanied by violent storms and bad weather.
- A cyclone is characterized by **inward spiraling winds** that rotate anticlockwise in the Northern Hemisphere and clockwise in the Southern Hemisphere.
- **The National Disaster Management Authority (NDMA)** classifies cyclones broadly into two categories: **extratropical cyclones and tropical cyclones**.

### What are Extratropical Cyclones?

- Extratropical cyclones also known as **mid-latitude cyclones** occur outside of the tropics.
- They have **cold air at their core**, and derive their energy from the release of potential energy when cold and warm air masses interact.
- Such cyclones always **have one or more fronts** — a weather system that is the boundary between two different types of air masses.
  - ♦ One is represented by warm air and the other by cold air — connected to them, and can occur over land or ocean.

### What are Tropical Cyclones?

- Tropical cyclones are those which develop in the regions between the **Tropics of Capricorn and Cancer**.
  - ♦ They are the most devastating storms on Earth.
- **Such cyclones develop when** thunderstorm activity starts building close to the center of circulation, and the strongest winds and rain are no longer in a band far from the center.
- The core of the storm turns warm, and the **cyclone gets most of its energy from the “latent heat”** released when water vapor that has evaporated from warm ocean waters condenses into liquid water, the agency added.

- ♦ Moreover, warm fronts or cold fronts aren't associated with tropical cyclones.
- Tropical cyclones have **different names depending on their location and strength**.
  - ♦ **Hurricanes:** Caribbean Sea, the Gulf of Mexico, the North Atlantic Ocean, and the eastern and central North Pacific Ocean.
  - ♦ **Typhoons:** In the western North Pacific.

### Favorable Conditions for Tropical Cyclones

- **Very Large Body of water:** It provides a continuous source of water to the storm.
- **Presence of Coriolis force:** It is caused by the Earth's rotation, and is responsible for giving the cyclone its characteristic circular motion.
  - ♦ This force deflects the winds, making them spiral towards the low-pressure center of the storm.
- **Pre-existing low-Pressure circulation:** Tropical cyclones are defined by a low-pressure center, commonly referred to as the Eye of the Cyclone.
  - ♦ Surrounding this eye, air converges, rises, and cools, leading to the formation of clouds and heavy rainfall.
  - ♦ **Warm Sea temperature:** The warm surface water (above 26°C) heats the air above it, causing the air to rise and form the core of the storm.

### IMD Classification of Cyclones

- **The India Meteorological Department (IMD)** classifies cyclones based on the sustained wind speeds associated with them
  - ♦ **Cyclonic Storm:** 62-88 kmph
  - ♦ **Severe Cyclonic Storm:** 89-117 kmph
  - ♦ **Very Severe Cyclonic Storm:** 118-167 kmph
  - ♦ **Extremely Severe Cyclonic Storm:** 168-221 kmph
  - ♦ **Super Cyclonic Storm:** Greater than 222 kmph

Source: IE

## ADOPTION OF KAZAN DECLARATION AT 16TH BRICS SUMMIT

### Context

- The Summit in **Kazan, hosted by Russia**, focused on Strengthening Multilateralism for Just Global Development and Security.

### Key Points of the Summit

- The **Kazan Declaration**, issued at the summit, is a comprehensive document that emphasizes the need for **enhanced cooperation** among the participating countries and presents the **bloc's unified stance on key global issues**.
- The **Kazan Declaration** emphasized **"Strengthening Multilateralism for Just Global Development and Security"** with commitment to fostering peace, ensuring a fairer international order, and promoting sustainable development.
- Russia emphasized a **BRICS-led payment system against SWIFT**, an international financial network that Russian banks were cut off from in **2022**, as well as the escalating situation in West Asia.
- The BRICS nations agreed to explore initiatives, such as **BRICS Grain Exchange and BRICS (Re)Insurance Company**.
- The summit also endorsed the creation of a **BRICS Partner Country category**, which would allow other nations to collaborate with BRICS on various projects.
- **BRICS R&D Vaccine Center** was announced for fostering research in vaccine development.
- India's initiative to create an **International Big Cats Alliance** was recognized during the summit.

### What is BRICS?

- It is an acronym that refers to a group of five major emerging national economies: **Brazil, Russia, India, China, and South Africa**.
- **Origin:** The term **BRIC** was coined by **British economist Jim O'Neill** in **2001** to represent emerging economies.
  - ♦ The group began holding annual meetings starting in **2006** on the sidelines of the **UN General Assembly (UNGA)**, and its success led to formal summits.
  - ♦ BRICS nations have met annually at formal summits since **2009**.
  - ♦ **South Africa** was inducted in **2010**.

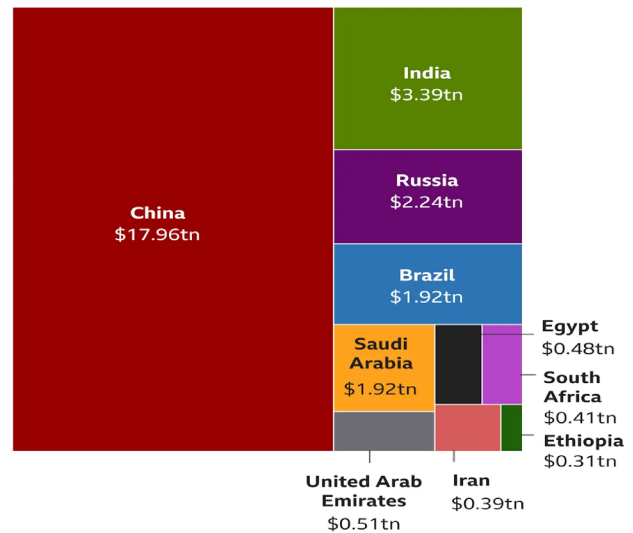
■ Founding member ■ New member ■ Prospective member



- **Expansion of BRICS:** **Argentina, Ethiopia, Egypt, Iran, Saudi Arabia, and the UAE** are the six new additions to the BRICS.
- **It brings together five of the largest developing countries** of the world, representing around **41%** of the global population, around **24%** of the global GDP and around **16%** of global trade.

### Brics countries and their GDPs

GDP in trillions of US dollars



Source: World Bank/OECD

B B C

### Significance of BRICS for India

- **Strengthening South-South Cooperation:** India views BRICS as a platform for fostering collaboration among developing countries, amplifying their voices in global institutions like the UN and World Bank.
- **Balancing Global Power:** BRICS serves as a counterbalance to Western-dominated alliances such as the G7. For India, this helps in diversifying its foreign relations and reducing dependency on Western powers.
- **Trade Diversification:** BRICS promotes economic cooperation, trade, and investment between member countries.
- **New Development Bank (NDB):** It provides BRICS nations with access to funding for infrastructure and sustainable development projects, aligning with India's growth objectives.

### Challenges

- **Varying Agendas:** India's concerns over terrorism and border security may differ from other members like China and Russia, who may prioritize their regional and geopolitical interests over these issues.

- **Geopolitical Rivalry:** China's growing influence within BRICS, especially with the inclusion of countries like **Iran and Saudi Arabia** (which have strong ties with China), raises concerns about BRICS tilting towards a pro-China bloc.
- **Balancing Middle Eastern Alliances:** The inclusion of Iran, Saudi Arabia, and the UAE introduces complexities in India's relationships within the Middle East.
- **Trade Barriers:** Intra-BRICS trade barriers such as tariffs, regulatory differences, and currency issues persist, limiting India's ability to fully capitalize on trade opportunities within the group.

### Way Ahead

- **India's participation in BRICS is crucial**, both for advancing its national interests and for shaping global governance in an increasingly dynamic geopolitical environment.
- **As one of the founding members**, India has consistently played a key role in ensuring that BRICS remains a collaborative platform for emerging economies to assert their influence on the global stage.
- BRICS presents India with a unique opportunity to diversify its trade networks, attract foreign investments, and engage in joint infrastructure and development initiatives.
- In this context, India should strategically utilize the resources of the **New Development Bank (NDB)** to finance critical projects that align with its long-term growth goals.

Source: TH

## SC UPHOLDS STATE'S POWER TO REGULATE INDUSTRIAL ALCOHOL

### Context

- The Supreme Court (SC) upheld that **States** have the **power to tax** not just alcoholic beverages, but also '**industrial**' alcohol.

### About

- Industrial alcohol is not meant for **human consumption**. The key interpretative question before the court was whether "**intoxicating liquor**" can be defined to also include "**industrial alcohol**".
- And **whether states can regulate it** or whether the Centre has exclusive control on the subject.

### Dispute

- The dispute arises from two "**overlapping**" entries in the **Seventh Schedule of the Constitution**, which lays down the **division of lawmaking powers** between the Centre and the states.
  - ♦ **Entry 8 of List II (State List)** gives states the power to regulate "the production, manufacture, possession, transport, purchase and sale of intoxicating liquors".
  - ♦ **Entry 52 of List I (Union List)** allows the Centre to regulate industries as a whole to the extent.
- The Centre argued that it "**occupied the field**" when it comes to industrial alcohol, and that **states could not regulate the subject**.
- States, on the other hand, argued that **industrial alcohol can be misused to produce consumable alcohol illegally**, which required them to enact legislation.

### Industrial Alcohol

- Industrial alcohol is **impure alcohol** that is used as an industrial solvent.
- **Mixing chemicals** such as benzene, pyridine, gasoline, etc. in ethanol, which is produced by fermenting grains, fruit, molasses, etc., — a process that is called '**denaturation**' — turns it into industrial alcohol.
- This makes the alcohol **unfit for human consumption**, and significantly lowers its price.
- It is used to manufacture a **range of products** including pharmaceuticals, perfumes, cosmetics, and cleaning liquids.
- It is sometimes **used to make illicit liquor, cheap and dangerous intoxicants** whose consumption poses severe risks, including blindness and death.

### SC Ruling

- SC noted that the tax levied on alcohol is a **key component of a state's revenue**, with state governments often adding an additional excise duty on alcohol consumption to further drive up incomes.
- The verdict also provides **clarity on Centre-state relations** when it comes to control over industries.
  - ♦ It **affirms the power of states** to pass laws on subjects in the State List, even in the **face of the wide powers granted to the Centre** regarding the control of 'Industries' as a whole.

- The ruling also set aside the **SC's 1990 judgment** in *Synthetics & Chemicals Ltd. v State of Uttar Pradesh*, which held that “**intoxicating liquor**” **refers only to potable alcohol** and, therefore, states could not tax industrial alcohol.
- The SC also held that “when there are two possible interpretations of the entries, the **Court must choose the one that maintains the federal balance**”.

#### Seventh Schedule

- **Article 246** of Indian Constitution plays a crucial role in defining the **distribution of powers** between the Union government and the State governments.
- It prevents **overlapping or conflicting legislation**.
- **Three Lists:**
  - ♦ **Union List:** Contains subjects on which only the Parliament can legislate. Examples include defense, foreign affairs, and atomic energy.
  - ♦ **State List:** Contains subjects on which only the State Legislatures can legislate. Examples include police, public health, and agriculture.
  - ♦ **Concurrent List:** Contains subjects on which both the Parliament and the State Legislatures can legislate. In case of a conflict, the **Union law prevails**. Examples include education, marriage, and bankruptcy.

**Source: TH**

## STUBBLE BURNING VIOLATES ARTICLE 21: SC

### Context

- The Supreme Court emphasized that stubble burning violates citizens' fundamental right to live in a pollution-free environment, guaranteed under **Article 21** of the Constitution.

### About

- The court raised concerns regarding the actions taken by the **Commission for Air Quality Management (CAQM)**.
- It also pointed out that a proper machinery for collection of fines under Section 15 of the **Environment (Protection) Act, 1986** had not been formulated.

### What is Stubble Burning?

- It is the practice of **intentionally setting fire to the crop residue (stubble)** that remains in the fields after the harvest of grains like rice, wheat, and other cereals.
- The method is commonly used in North India, especially in **Punjab and Haryana** to quickly clear their fields and prepare them for the next sowing season.
- The smoke from stubble burning contains harmful pollutants like **particulate matter (PM2.5 and PM10), carbon monoxide, and greenhouse gases**, contributing significantly to air pollution.

### Reasons for Stubble Burning

- **Cost-effectiveness:** It is a quick and cheap method of clearing large fields.
- **Time-saving:** Especially in areas with short windows between harvesting and sowing seasons.
- **Limited Alternatives:** Farmers may lack access to affordable machinery that can remove stubble effectively.

### Why is Delhi more Polluted than other Metropolitan cities?

- First, Delhi's location in the **Indo-Gangetic plain traps pollutants** due to its geography and surrounding mountains prevent dispersal of pollutants.
- Second, **Stubble burning** by the nearby states releases massive amounts of smoke, which drifts towards Delhi and worsen air quality during late autumn and early winter.
- Third, **Industrial and vehicular emissions** worsen the atmosphere more.
- Fourth, Delhi experiences **temperature inversion during winters**, where cooler air traps pollutants close to the ground.

### Commission for Air Quality Management (CAQM)

- **CAQM** was constituted under the **Commission for Air Quality Management in National Capital Region and Adjoining Areas Act, 2021**.
- **Objective:** The Act provides for the constitution of a Commission for better coordination, research, identification, and resolution of problems related to air quality in the National Capital Region (NCR) and adjoining areas.

- **Powers** of the Commission include;
  - ♦ **Restricting activities** influencing air quality,
  - ♦ **Preparing codes and guidelines** to prevent and control air pollution,
  - ♦ **Issuing directions** on matters including inspections, or regulation **which will be binding** on the concerned person or authority.
  - ♦ The Commission **may impose and collect environmental compensation** from farmers causing pollution by stubble burning prescribed by the central government.
  - ♦ The Commission issues orders to combat air pollution in NCR under the **Graded Response Action Plan (GRAP)**.
- In case of **any conflict**, the orders or directions of the Commission will prevail over the orders of the respective state governments, the Central Pollution Control Board (CPCB), state PCBs, and state-level statutory bodies.

Source: TH

## NEWS IN SHORT

### PM YASASVI SCHEME

#### In News

- PM YASASVI Scheme empowers students to reach their full potential and contribute to society.

#### About PM YASASVI

- The **PM Young Achievers Scholarship Award Scheme for Vibrant India (PM-YASASVI)** aims to uplift students from Other Backward Classes (OBC), Economically Backward Classes (EBC), and Denotified Tribes (DNT) by providing access to quality education.
- It was launched by the Ministry of Social Justice and Empowerment, it integrates previous scholarship initiatives to create a streamlined support system for disadvantaged students.
- **Selection Process:** Candidates are selected based on the YASASVI Entrance Test (YET), conducted by the National Testing Agency (NTA).

#### Scholarship Types

- **Pre-Matric Scholarships:** For students in classes 9 and 10, offering an annual allowance of 4,000

for families earning below 2.5 lakh.

- **Post-Matric Scholarships:** For higher education, with allowances ranging from 5,000 to 20,000 based on the course.
- **Top Class Education:** Support for meritorious students in top schools and colleges covering tuition and other expenses.
- **Hostel Construction:** Facilities for OBC students to improve access to education.

#### Objectives

- It promotes educational empowerment and helps vulnerable groups overcome financial barriers.
- It addresses financial constraints, providing a pathway for educational growth from school to higher education, thus contributing to a more inclusive society.
- It plays a crucial role in empowering marginalized communities and promoting their participation in the vision of a prosperous India by 2047.

Source :PIB

### PM SHRI SCHEME

#### In News

- The Delhi Government has officially adopted the PM-SHRI (Prime Minister's Schools for Rising India) scheme.

#### About PM SHRI School

- The PM SHRI School initiative is a centrally sponsored scheme by the Government of India aimed at establishing over 14,500 schools managed by various government bodies, including KVS and NVS.
- It aligns with the **National Education Policy (2020)**, falls under the **Samagra Shiksha scheme**
- It focuses on creating welcoming and safe learning environments that provide diverse educational experiences and quality infrastructure.
- **Key objectives** include nurturing students to become engaged citizens and promoting inclusivity, as outlined in the National Education Policy 2020.
  - ♦ It is expected to benefit more than 20 lakh students directly and will inform policies and practices in school education. Implementation is planned over five years, from 2022-23 to 2026-27, with lessons learned to be scaled up to other schools across the country.

Source:TH

## E. COLI OUTBREAK

### In News

- Several people were hospitalized in the US due to an **E.coli infection** after eating McDonald's burgers.

### About Escherichia coli (E. coli)

- E. coli are germs called bacteria. They are found in many places, including in the environment, foods, water, and the intestines of people and animals.
  - ♦ Most E. coli strains are harmless. Some strains, like Shiga toxin-producing E. coli (STEC), can cause severe foodborne illnesses.
- **Transmission:** Primarily spread through contaminated foods, including:
  - ♦ Raw or undercooked ground meat
  - ♦ Raw milk
  - ♦ Contaminated raw vegetables and sprouts
- **Symptoms:** Fever, vomiting, diarrhea.
- **Treatment:** E. coli infections are treated with antibiotics. There has been a notable decline in E. coli's susceptibility to strong antibiotics, from 81.4% in 2017 to 62.7% in 2023.
  - ♦ The FSSAI is establishing a network of 34 microbiology labs to test food products for pathogens, including E. coli, to improve food safety across India.

Source:IE

## UNITED NATIONS PEACEKEEPING MISSION IN LEBANON

### Context

- UNIFIL, the United Nations peacekeeping mission in Lebanon, has accused the **Israel Defense Forces (IDF) of deliberate violations in recent days.**
  - ♦ Several of its positions have come under fire, prompting interventions from the UN security council.

### About

- The United Nations Interim Force in Lebanon was established **to patrol the country's southern frontier after Israel invaded in 1978.**
- The agency seeks to keep the **peace in areas between Lebanon and Israel.**
- It monitors any movements of Israeli or Lebanese forces across the "**blue line**", a 75-mile (120km)

UN-mapped line that has become a de facto border.

- It is also tasked with helping the **Lebanese national army** keep the area free of **militants.**
  - ♦ This has not worked because Hezbollah, Lebanon's most powerful political and military force, **effectively controls the south of the country.**
- India has had a presence in UNIFIL since **1998.**
- **Indonesia is the biggest contributor,** followed by India, Ghana, Nepal and Italy.

Source: IE

## FIRST DRY PORT IN BIHAR

### Context

- Bihar got its **first dry port** at Bihta, a town near state capital Patna.

### About

- A **dry port, or inland container depot (ICD),** provides a logistics facility away from a seaport or airport for cargo handling, storage, and transportation.
  - ♦ It acts as a bridge between sea/air ports and inland regions, facilitating efficient movement of goods.
- **Significance:** It was much needed for Bihar as its export goods mainly agro-based, garments and leather products are **manufactured in diverse locations.**
  - ♦ **Bihar is a major producer of fruits and vegetables** such as potato, tomato, banana, litchi and makhana (fox nuts).

Source: IE

## PINK COCAINE

### In News

- Pink Cocaine, also **known as 'tusi'**, is a recreational drug making headlines for its use among celebrities.

### About Pink Cocaine

- Despite its name, pink cocaine typically **does not contain actual cocaine.**
- It is a concoction of drugs, primarily **ketamine,** combined with other substances like **methamphetamine, MDMA,** and even opioids, often with a pink dye added.

- Pink cocaine is primarily used within the clubbing culture, either as a powder snorted or taken in pill form.
- The drug is linked to serious health risks, such as **heart attacks, stroke, psychosis, and addiction.**

Source: LM

## SNOW LEOPARD (PANTHERA UNCIA)

### In News

- International Snow Leopard Day was observed on October 23.

### About Snow Leopard (Panthera Uncia)

- The snow leopard has a beautiful, spotted coat, thick enough to insulate them from the cold. It is often termed as **Ghost of Mountain.**
- **Rosettes are large rings enclosing smaller spots.** WWF relies on spot patterns to identify individual snow leopards when conducting camera trap research.
- **Distribution:** They are sparsely distributed across 12 countries in central Asia, from southern Russia down to the Tibetan plateau, including Mongolia, China, Afghanistan, Pakistan, India and Nepal.
- **Threats:** Loss of natural prey species, retaliatory killing due to conflict with humans and illegal trade of its fur and bones.
- **Conservation:** 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.**
- It is the state animal of **Himachal Pradesh and Ladakh.**

Source: TH

## BREEDING GREAT INDIAN BUSTARD USING ARTIFICIAL INSEMINATION

### In News

- The Sudasari Great Indian Bustard Breeding Centre in Jaisalmer, Rajasthan, successfully bred a great Indian bustard (GIB) using artificial insemination (AI).

### Bustard Recovery Program

- The breeding center, part of the **Bustard Recovery Program initiated in 2016,** focuses on captive breeding to eventually reintroduce the GIB into the wild.

## Great Indian Bustard

### About:

- **One of the heaviest flying birds endemic to the Indian subcontinent.**
- omnivorous
- **State Bird of Rajasthan**
- **Habitat:**
  - Untamed, Arid grasslands.
  - A Maximum number of GIBs were found in Jaisalmer and the Indian Army-controlled field firing range near Pokhran, Rajasthan.
  - **Other areas:** Gujarat, Maharashtra, Karnataka and Andhra Pradesh.
- **Protection Status:**
  - **IUCN Status:** Critically Endangered.
  - Listed in **Wildlife Protection Act's Schedule 1.**
- **Threats to the Bird:**
  - Hunting, Intensification of agriculture, Power lines.

### Indian Initiatives for Protection of GIB

- **Habitat Improvement and Conservation Breeding** of Great Indian Bustard-An Integrated Approach.
- A **Bustard conservation breeding** centre in Rajasthan.
- **Project Great Indian Bustard** launched by the Rajasthan government

Source: HT

## LAHORE DECLARED THE WORLD'S MOST POLLUTED CITY

### Context

- Lahore was named the world's most polluted by air quality monitor IQAir, with an Air Quality Index (AQI) level of **394.**

### About

- **IQAir measures air quality** levels based on the concentration of the hazardous airborne PM2.5 particles.
- The AQI value exceeds 55.6 times the **World Health Organisation (WHO) air quality guideline** value in Lahore.
- An AQI over 100 is considered unhealthy, with levels exceeding 150 classified as 'very unhealthy'.



**Actions to fight against pollution**

- **Artificial rain:** Planned as an emergency measure to mitigate the impact of smog.
- **Anti-smog squad:** Educating farmers on sustainable practices to reduce crop burning.

**WHO Air Quality Guideline**

- They **serve as a reference for governments and organizations** to set national air quality standards and are **not legally binding**.
- Recommended Limits of Particulate Matter (PM2.5 and PM10);
  - ♦ **PM2.5:** WHO recommends an annual average limit of  $5 \mu\text{g}/\text{m}^3$  and a 24-hour limit of  $15 \mu\text{g}/\text{m}^3$ .
  - ♦ **PM10:** The guideline suggests an annual average limit of  $15 \mu\text{g}/\text{m}^3$  and a 24-hour limit of  $45 \mu\text{g}/\text{m}^3$ .

Source: IE

