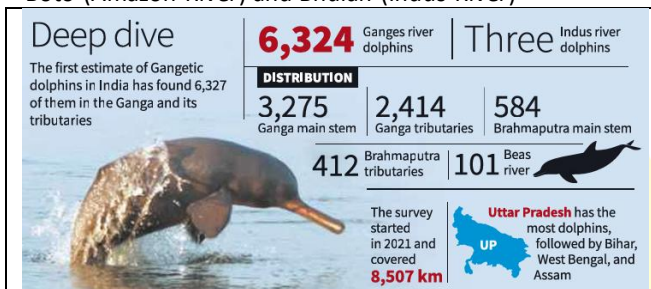


Gangetic Dolphin (*Platanista gangetica gangetica*):

- According to report by Environment Ministry, there were **6,324 Ganges River dolphins** & three Indus River dolphins.
- **Habitat:** Ganges river dolphins once lived in the Ganges-Brahmaputra-Meghna and Karnaphuli-Sangu river systems of **Nepal, India, and Bangladesh.**
- **Common name - Susu**
- It can only **live in freshwater.**
- They are **essentially blind**, and they hunt by emitting **ultrasonic sounds (echolocation).**
- Females are larger than males and give birth once every two to three years to only one calf.
- IUCN Status: **Endangered**
- **Schedule-I of WPA, 1972.**
- **Other river dolphins in world** – Baiji (Yangtze River, China), Boto (Amazon River) and Bhulan (Indus River)



Polarimeter to Unify Corona & Heliosphere (PUNCH):

- **Solar Mission** launched by **NASA.**
- First-of-its-kind solar mission that will study solar corona — outermost layer of Sun’s atmosphere.
- Four identical suitcase-sized satellites will continuously image Sun’s inner corona and provide origins of solar flares.
- **Why are so many solar missions getting launched now? (Aditya L1, India: Launched in September, 2023 and Proba-3, European Space Agency: Launched in December, 2024)**
- **Every 11 years or so, Sun’s magnetic field completely flips**, meaning its north and south poles switch places. This periodic change is known as **solar cycle.**
- Sun is at its most active when magnetic field flips. This phase is called **solar maximum. During this period, star can send out more frequent and intense bursts of radiation** and particles into space.
- **During solar maximum, Sun’s surface has the most number of sunspots** - small, dark and cooler areas where the **magnetic field is particularly strong.**
- Solar maximum is best possible window available for physicists to both launch and observe sun. This is precisely why there has been a spike in missions to observe star.

Copper reserves:

- Demand for copper, led by electric vehicle (EV) batteries and clean energy technologies is increasing.
- Copper is listed as a **critical mineral in India.**
- **Chile, Peru and DRC are 1st, 2nd, and 3rd respectively in copper production.**
- India has been looking to secure both greenfield and brownfield mineral assets in copper-rich countries such as Zambia, Chile, and the DRC.

Cities Coalition for Circularity (C-3):

- Launched **by India.**

- A **multi-nation alliance** for city-to-city collaboration, knowledge sharing, and private sector partnerships for **sustainable urban development.**
- It will act as **forum for sustainable solutions for waste management and resource efficiency** in economies of the **Asia-Pacific region.**

12th Regional 3R and Circular Economy Forum in Asia and the Pacific inaugurated in Jaipur, India:

- **Organized by:** Ministry of Housing and Urban Affairs (India), United Nations Centre for Regional Development (UNCRD) & Institute for Global Environmental Strategies.
- It was **launched in 2009 to promote sustainable waste management, resource efficiency, and circular economy principles** across region.
- The last Forum was hosted in 2023 by Cambodia.
- **India has previously hosted Forum in 2018** (8th edition, **Indore**).
- **Hanoi 3R Declaration (2013-2023)**, which outlined 33 voluntary goals for shifting towards a more resource efficient and circular economy.

CITIIS (City Investments to Innovate, Integrate and Sustain):

- It is a **sub-component of the Government of India's Smart Cities Mission.**
- **CITIIS 2.0 has been conceived by MoHUA**, in collaboration with AFD, German Development Bank (KfW), EU, and NIUA.
- It is providing financial & technical assistance for **promoting a circular economy through integrated waste management projects at city level**, climate-oriented reform actions at state level, and institutional strengthening & knowledge management at national level.

Godavari Pushkaram:

- It is a Hindu tradition as sociated with **worship of the Godavari and is observed once in 12 years.**

Orans:

- They are **sacred forests** for local communities in **Rajasthan.**
- **Every oran is presided by a local deity** whose idol is placed inside it.

Virtual Digital Assets (VDAs) will be taxed in India:

- **For first time in India, Income Tax Bill, 2025 explicitly treats Virtual Digital Assets (VDAs)** (like crypto assets, Non-Fungible Tokens (NFTs)) as **property & capital assets.**
- By defining them as such, India gains ability to tax, regulate, and seize crypto assets when necessary, preventing their misuse for illicit financial activities.
- Their sale, transfer, or exchange will be taxed **under Capital Gains Tax.**

Bose metal:

- It is a **kind of anomalous metallic state (AMS).**
- At critical temperature, electrons of superconductors ‘pair up’ without getting closer and together behave in a way that individual electrons can’t. These pairs are called **Cooper pairs.**
- Below critical temperature, their electrons experience the net attractive force and pair up — but then they don’t yet condense to form a superconductor. That is, the **material doesn’t become a superconductor but just a better conductor, and it conducts electricity with Cooper pairs,**

not electrons. In this state, the material is said to have become a **Bose metal**.

Places In News:

- **Ofunato, Japan:** Japan's biggest forest fire in three decades.
- **Parandur airport project:** Proposed second airport for Chennai.
- **Sita Rama Lift Irrigation Project and Sammakka Sagar Project** taken up on Godavari River in Telangana.

India's Agriculture Trade:

- India is a **net agri-commodities exporter**. However, the trade surplus has been fluctuating largely due to exports.
- **India's marine exports — of which frozen shrimp accounts for roughly two-thirds** — are mainly to US

(34.5% share in 2023-24), China (19.6%), and the European Union (14%).

- India's **agricultural imports** are dominated by two commodities: **Edible oils and pulses**.
- India is today a **net importer of cotton**.

PRACTICE MCQs

Q1. Consider the following pairs of river dolphins and the river systems with which they are associated:

1. Susu – Ganga
2. Bhulan – Indus
3. Baiji – Yangtze
4. Boto – Congo

How many of them are correctly matched pairs?

- a) Only one
- b) Only two
- c) Only three
- d) All four

Answer: C

Q2. Parandur Airport project recently seen in the news is coming up near which of the following cities?

- a) Bengaluru
- b) Chennai
- c) Cochin
- d) Vijayawada

Answer: B

Q3. Which of the following is correct reason for launching multiple solar missions by different countries in last two years?

- a) The ongoing solar maximum is the best time to both launch and observe sun.
- b) Sun is near to the Earth in its revolution orbit during this time period.
- c) Sun has lower magnetic field activity during this time period of the year.
- d) No other planet will obstruct the view of Sun during this time period.

Answer: A

Q4. Consider the following statements about the CITIIS initiative:

1. It is a sub-component of the Government of India's Swachh Bharat Mission.
2. It promotes a circular economy through integrated waste management projects at city level.

Which of the statements given above is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

Answer: B

Q5. Consider the following statements about Cities Coalition for Circularity (C-3):

1. Multi-nation alliance for city-to-city collaboration, knowledge sharing, and private sector partnerships for sustainable urban development.
2. It is launched by World Economic Forum.

Which of the statements given above is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

Answer: A