

DAILY CURRENT AFFAIRS (DCA)

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Table of Content

Antarctic Cryosphere
One Year of National Cooperation Policy
Money Laundering
Updation of the ICI Index

News In Short

‘Angen’ wins National Award
Batukeshwar Dutt
Nifty500 Ahimsa Index
Karlapat Bauxite Block
Exoplanet Beta Pictoris d
White-bellied Heron

ANTARCTIC CRYOSPHERE

Context

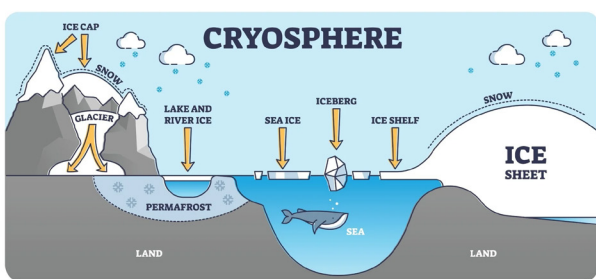
- The world's largest iceberg, A23a, has disappeared after nearly four decades.

About

- Once covering an area almost **twice the size of London** and weighing nearly **one trillion tonnes**, its final fragments have broken apart and melted, becoming too small to be detected by satellites.
- A23a originally calved from Antarctica's **Filchner-Ronne Ice Shelf in 1986** and remained grounded on the seafloor for decades before beginning to drift in recent years. Its breakup was influenced by the interaction of **ocean currents, warmer waters, wave action and meltwater processes**.
- This climatic event provides an opportunity to understand the changing **Antarctic cryosphere** and its wider implications for global climate systems.

What is the Cryosphere?

- The **cryosphere** refers to all parts of the earth where water exists in solid form like ice sheets, glaciers, icebergs, and Permafrost.
- And, the Antarctic cryosphere is particularly important because Antarctica contains the world's largest ice sheet. The ice sheet covers nearly 14 million square kilometres of size and contains enough ice to raise global mean sea level by approximately 58 metres if it were to melt completely.



What are the factors driving changes in the antarctic cryosphere?

- Rising ocean temperatures:** Warm ocean water can reach the underside of ice shelves and cause basal melting. This is particularly important because ice-shelf melting from below may occur even when surface air temperatures remain extremely low.
- Atmospheric warming:** Higher air temperatures can increase:
 - Surface melting

- Formation of meltwater ponds
- Hydrofracturing
- Ice-shelf weakening

- Changing ocean currents and winds:** Ocean currents transport heat towards ice shelves and glaciers. Changes in winds can also alter the movement of warm water beneath floating ice shelves.
- Iceberg calving and wave action:** Calving is a natural process, but warmer waters, weakening ice structures and wave action can influence the rate at which icebergs break apart. The case of **A23a** illustrates how an iceberg can remain grounded for decades and later undergo rapid movement and fragmentation due to changing oceanic and physical conditions.
- Changes in snowfall and precipitation:** The Antarctic ice sheet gains mass primarily through snowfall and loses it through: Iceberg calving, Surface melting and Ice discharge into the ocean. Thus, the net change depends on the balance between **accumulation and loss**.

Impacts of Changes in the Antarctic Cryosphere

- Changes in Ocean Circulation:** Large quantities of freshwater entering the ocean can alter: Ocean salinity, Water density, Deep-water formation, and Global ocean circulation.
 - Antarctic Bottom Water is an important component of the global ocean circulation system. Changes in Antarctic freshwater and ice processes can therefore have consequences beyond the polar region.
- Marine Ecosystems:** Changes in sea ice can affect: Krill, Penguins, Seals, Whales and Other marine organisms. For example, changes in the distribution and accessibility of prey under sea ice can affect the feeding behaviour and survival strategies of penguins.
- Ice-Albedo Feedback:** Snow and ice reflect a significant proportion of incoming solar radiation. When ice and snow cover decline:
 - Less ice → lower albedo → more solar energy absorbed → further warming. This creates a positive feedback loop that can accelerate warming.
- Threat to Coastal Regions:** Rising sea levels can increase coastal flooding, shoreline erosion, saltwater intrusion, and damage to coastal infrastructure. For India, sea-level rise poses risks to densely populated coastal regions, including parts of **Mumbai, Kolkata and the Sundarbans**.

India's Initiatives Related to Antarctica and Polar Research

- **Indian Antarctic Programme:** It began in 1981, has completed 40 scientific expeditions and built three permanent research base stations in Antarctica. Dakshin Gangotri (1983), Maitri (1988) and Bharati (2012). Currently, Maitri and Bharati are fully operational.
- **National Centre for Polar and Ocean Research:** It is an autonomous institute under the Ministry of Earth Sciences which manages the entire Indian Antarctic programme. It is based in Goa.

Conclusion

- The disappearance of A23a should not, by itself, be treated as direct proof of climate change, since iceberg calving and melting are also natural processes. However, it provides a useful case study for understanding the dynamic nature of the **Antarctic cryosphere**.
- The key concern is not simply whether an individual iceberg disappears, but how the **combined changes in ice sheets, glaciers, ice shelves and sea ice** affect the global climate system.
- Thus, the Antarctic cryosphere is not merely a frozen region at the southern end of the world. It is a critical component of the global climate system, influencing sea levels, ocean circulation, ecosystems and the future of vulnerable coastal regions.

Source: DTE

ONE YEAR OF NATIONAL COOPERATION POLICY

In News

- Recently, the National Cooperative Policy completed one year of implementation.

Background

- The cooperative movement in India is based on the **philosophy of "Vasudhaiva Kutumbakam" (the world is one family)** which emphasises collective welfare, cooperation, and community-led development.
- With the guiding vision of '**Sahkar Se Samridhi**', the Government has strengthened the cooperative sector through supportive policies, institutions and grassroots outreach.

- The movement was legally recognised by the **Cooperative Credit Societies Act, 1904**, and it blossomed to become a major pillar of decentralised development after Independence.
- The creation of institutions like the **National Cooperative Development Corporation (1963) and NABARD (1982)** strengthened cooperative financing and rural development.

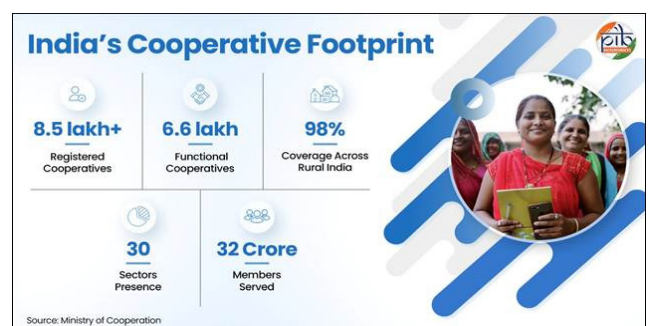
What is Cooperatives?

- It is an autonomous association of persons, united voluntarily to meet their common economic, social, and cultural needs and aspirations through a jointly owned and democratically member-controlled enterprise.
- Cooperatives in India are guided by core cooperative principles and they are owned by members, operated by members, and for the benefit of members.



Present Status

- Indian cooperatives today operate in agriculture, banking, credit, housing and women's welfare and represent more than one-fourth of the world's cooperatives.



Importance of Cooperatives

- **Socio-economic upliftment:** The Indian cooperative movement has been the flag bearer of a participatory, people-led development model aimed at socio-economic upliftment at the grassroots level for more than a century.

- **Job Creation and Local Income:** Co-operatives create jobs through their community-owned business model in which they employ people locally and share the work among members.
 - ♦ Unlike large corporations, co-ops invest back into their communities, building skills and livelihoods.
- **Fair Prices and Risk Sharing:** By aggregating produce and bypassing middlemen, co-operatives help members get better prices.
 - ♦ Amul and SOFA members earn higher-than-market rates. Co-operatives also distribute profits and reduce risk during crises, as seen during the COVID-19 lockdown when many supported members with interest-free loans.
- **Women's Empowerment and Social Inclusion:** Co-operatives give ownership and decision-making roles to women and marginalised groups.
 - ♦ Lijjat's model, for example, allows women to earn at home while gaining full control over their enterprise.
- **Infrastructure and Services in Villages:** Thousands of Primary Agriculture Cooperative Credit Societies (PACS) now function as multi-service centres.
 - ♦ Co-operative banks issue Kisan Credit RuPay cards, ATMs, and mobile banking to members, boosting rural financial inclusion.
- **Self-Reliance and Localised Economies:** Co-operatives build self-sufficiency. They stabilise prices, offer better bargaining power, and ensure that economic value stays within the community.
 - ♦ This aligns the vision of Atmanirbhar Bharat, a version of self-reliant India grounded in village-level strength.
- **Low adoption of digital technologies,** modern production techniques and supply chain systems results in lower productivity, operational efficiency and market outreach.

Various Initiatives taken by the government

- **Constitutional Provisions:** The 97th Constitutional Amendment Act, 2011 provided the impetus to the cooperative movement by inserting Part IXB in the Constitution and recognising the right to form cooperative societies under Article 19(1)(c) as a Fundamental Right.
 - ♦ It also inserted **Article 43B into the Directive Principles of State Policy**, directing the State to promote the voluntary, autonomous, democratic, and professional management of cooperative societies.
 - ♦ Even though the Constitution makes cooperatives a State subject, multi-state cooperative societies (with members and operations spread across more than one state) are governed by the **Multi-State Co-operative Societies (Amendment) Act, 2023**.
- **National Cooperation Policy (NCP) 2025:** It was launched in July 2025 to replace the 2002 Policy, which had become obsolete in the face of rapid changes owing to globalisation, digitisation and socio-economic transformation.
 - ♦ It marks a strategic roadmap for revitalizing India's cooperative sector to meet the nation's goal of becoming "Viksit" by 2047.
 - ♦ It is rooted in the ethos of **Sahkar-se-Samridhi**, and it aims to build on the unique strengths of India's cooperative tradition, promote economic democratization, and uplift rural economies through collective participation.
- **Computerization of Primary Agricultural Credit Societies (PACS):** It is a Centrally Sponsored Scheme approved in 2022 to transform PACS into digitally enabled institutions by 31 March 2027
- **Bharat Taxi:** An initiative of Sahakar Taxi Cooperative Limited. Sahakar Taxi Cooperative Limited is a driver-centric mobility platform based on the cooperative model. It aims to economically empower drivers while offering affordable, safe, and reliable transport services to the public.
- **Tax Relief & Ease of Doing Business:**
 - ♦ Policy reforms have also improved the financial health of cooperatives. Key tax relief measures introduced for cooperatives are:

Challenges Faced by Co-operatives

- **Over-regulation,** political interference, democratic functioning, and lack of professional management affect the efficiency and autonomy of co-operatives.
- **Long-term financial viability** is hampered by poor financial management, lack of access to capital, reliance on government support, and weak internal oversight.
- **Outdated laws, multiple regulatory regimes,** complex registration processes and high compliance costs create hurdles for cooperatives.
- **Small-scale operations,** poor infrastructure, weak marketing and growing competition from private and global players are hampering the growth and competitiveness of cooperatives.

- ♦ Surcharge reduced from 12% to 7% for cooperatives having income between ₹1-10 crore
- ♦ Minimum Alternative Tax (MAT) reduced from 18.5% to 15%
- ♦ TDS cash withdrawal limit raised from ₹1 crore to ₹3 crore
- ♦ Higher cash transaction limits for PACS & Primary Cooperative Agriculture and Rural Development Banks
- **White Revolution 2.0:** Aimed at expanding cooperative coverage, employment generation and women's empowerment with the target of increasing the milk procurement of dairy cooperatives by 50% from the present level over the next five years.
- **Multi-State Cooperative Societies (MSCS) (Amendment) Act & Rules, 2023:** To strengthen governance, enhance transparency, increase accountability and reform electoral process in the Multi-State Cooperative Societies.
- **Establishment of Ministry of Cooperation:** It was created in July 2021 to oversee the work of cooperative societies and agriculture credit societies

Conclusion

- Cooperatives have the potential to play a transformative role in India's socio-economic development.
- By addressing key challenges such as governance issues, financial sustainability, regulatory hurdles, and technological gaps, cooperatives can be better equipped to contribute to inclusive growth.
- With the right reforms, capacity-building initiatives, and support, cooperatives can foster economic empowerment, especially for marginalized and rural communities, and play a crucial role in achieving sustainable and equitable development in India.

Source : PIB

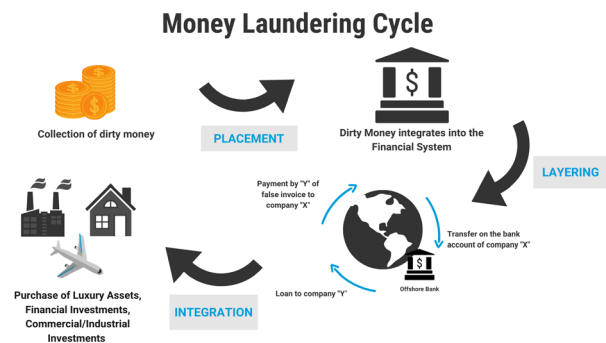
MONEY LAUNDERING

Context

- The **Directorate of Enforcement (ED)** has launched a **money-laundering investigation** into an alleged \$35 million cryptocurrency over-the-counter (OTC) trading scam.

Money Laundering

- Money laundering **disguises financial assets** while protecting the illegal activity that produced them.
- The prevention of money laundering has become an international effort that includes terrorist funding among its targets.
- **3 Stages of Money Laundering:**



How Does Money Laundering Impact?

- **Impact on Economy:** Money laundering undermines the integrity of the financial system by **introducing unaccounted and illegal funds into formal channels**.
 - ♦ This can lead to **distortions in interest rates, exchange rates, and capital markets**.
 - ♦ It also **discourages foreign direct investment (FDI)**, as investors perceive higher risks in economies affected by weak financial transparency.
- **Impact on Public Welfare:** Money laundering results in **significant loss of tax revenue for the government**, increasing fiscal pressure and reducing funds available for public welfare programs.
 - ♦ Corruption supported by illicit funds erodes public trust in democratic institutions and governance.
 - ♦ Illicit money often **flows into sectors such as real estate**, causing **artificial inflation of asset prices** and making housing unaffordable for genuine buyers.
- **Role in Crime and Corruption:** Laundered money fuels **organized crime, drug trafficking, terrorism financing, and large-scale corruption**.
 - ♦ It enables criminal networks to expand and operate with greater financial strength.

Emerging Challenges

- **Digital Banking:** With the rise of online banking, digital payment platforms, and peer-to-peer transactions, it has become **harder to spot illegal financial activity**.
 - ♦ As financial services become faster and more interconnected, identifying suspicious behavior requires monitoring patterns across multiple channels rather than individual transactions.
- **Cryptocurrencies:** Cryptocurrencies are not completely anonymous, but they can offer more privacy than regular payment systems.
 - ♦ Because of this, regulators have increased oversight and reporting rules for digital asset service providers to prevent misuse while still allowing legal innovation.

The Prevention of Money-Laundering Act (PMLA)

- It was enacted under **Article 253 of the Constitution in 2002** to prevent money laundering and provide for the confiscation of property derived from or involved in money laundering.
- It came into force from **2005**, and it was further amended in **2009 and in 2012**.
- **The offence under the PMLA** mainly involves money laundering obtained through criminal activities (e.g., drug trafficking, terrorism, corruption).

About Directorate of Enforcement (ED)

- **Established:** It was established in **1956** with the formation of an **'Enforcement Unit'** under the aegis of the **Department of Economic Affairs** and handles Exchange Control Laws violations under **Foreign Exchange Regulation Act, 1947 (FERA 1947)**.
 - ♦ A year later, the Enforcement Unit was renamed the Enforcement Directorate.
- It is a **multi-disciplinary organization** mandated with **investigation of the offence of money laundering and violations of foreign exchange laws**.

The statutory functions of the Directorate include enforcement of following Acts:

- **The Prevention of Money Laundering Act, 2002 (PMLA):** It is a **criminal law** enacted to prevent money, ED has been given the responsibility to enforce the provisions of the PMLA.
- **The Foreign Exchange Management Act, 1999 (FEMA):** It is a **civil law** enacted to consolidate

and amend the laws relating to facilitate **external trade and payments**.

- **The Fugitive Economic Offenders Act, 2018 (FEOA):** This law was enacted to **deter economic offenders from evading the process of Indian law** by remaining outside the jurisdiction of Indian courts.

Conclusion

- India has taken significant steps to combat money laundering through the Prevention of Money Laundering Act (PMLA), 2002, and the work of enforcement agencies such as the Enforcement Directorate.
 - ♦ Despite these efforts, challenges remain, including complex financial structures, cross-border transactions, lengthy legal processes, and relatively low conviction rates.
- Strengthening investigation mechanisms, improving coordination among agencies, and enhancing judicial efficiency are crucial to addressing these gaps.

Source: TH

UPDATION OF THE ICI INDEX

Context

- The Union Government has released an **updated series of its Index of Core Industries (ICI)**.

The Monthly Index of the ICI

- It is a **production volume index** to provide an **advance indication on production performance of industries of 'core' nature** before the release of **Index of Industrial Production (IIP)** by the Central Statistics Office.
- ICI measures collective and individual performance of production in **selected eight core industries viz.** Coal, Crude Oil, Natural Gas, Petroleum Refinery Products, Fertilizers, Steel, Cement and Electricity.
- The Index is compiled and released by **Office of the Economic Adviser (OEA), Department of Industrial Policy & Promotion (DIPP)**, Ministry of Commerce & Industry.
- The Eight Core Index broadly has a combined weight of **37.90% in the Index of Industrial Production (IIP)** and is published about **12 days prior to IIP**.

Index of Industrial Production (IIP)

- IIP measures the **volume of production** in the **industrial sector**, including mining, manufacturing, and electricity.
 - ♦ It is a volume-based index, not value-based like GDP.
 - ♦ Indicates industrial activity, helping assess the short-term economic momentum.
 - ♦ **Published monthly** and the base year currently is to **2022–23**.
 - ♦ **Released By:** NSO, MoSPI.

Updation of the Index

- **Change in Base Year:** The new series of the index brings forward the base year to **2022-23**. This makes the data more reflective of current reality, and thus makes it a **more useful gauge of industrial activity**.
 - ♦ The previous ICI had a base year of **2011-12**, which was significantly outdated.
- **Change in Number of Sectors:** It has **increased the number of sectors** covered to nine from the previous eight.
 - ♦ Owing to the intensive use of **iron ore in industrial production**, it has been added to the list of core industries.
- **Other Updations:** Other sectoral changes include **calculating steel production on a gross output basis** rather than a net output basis so as to bring this in line with the IIP.
 - ♦ In the coal sector, the updated series **will only measure raw coal**, and has **excluded middling and washed coal**.
 - ♦ This change was made to **eliminate the double counting** that occurred in the previous series, as both middling and washed coal are made using raw coal.
- **Redistribution Weightage of the Sectors in Index:** Iron ore sector has been assigned a weight of 4.905% in the index, the coal sector has come down from 10.33% to 5.596%.
 - ♦ The natural gas sector revised from 6.88% to 3.841%, refinery products weightage reduced from 28.04% to 22.572%.
 - ♦ The electricity sector now makes up 30.932% of the entire index, up from the earlier 19.85%.
 - ♦ The fertilizers sector saw its weightage increase marginally to 2.731% from 2.63%.

Significance

- **Updated Base Year:** Updating the base year to 2022–23 makes the index more representative of the current industrial structure, production patterns, and technological changes.
- **Greater Accuracy and Comparability:** Calculating steel production on a gross output basis aligns the ICI methodology with the Index of Industrial Production (IIP), ensuring consistency and improving comparability across industrial indicators.
- **Elimination of Double Counting:** Restricting the coal sector to raw coal and excluding middling and washed coal removes duplication in production estimates.
- **Enhanced Reliability of Industrial Indicators:** The methodological revisions improve the precision, credibility, and statistical robustness of the index, making it a more reliable indicator of industrial growth and economic performance.

Source: TH

NEWS IN SHORT**‘ANGEN’ WINS NATIONAL AWARD****Context**

- **Jharkhand’s Santali Film ‘Angen’** has won the **72nd National Film Award for Best Debut Film of a Director in the Non-Feature category**.

About

- It is the **first Santali film** to receive a **National Film Award**.
- It is directed by Ravi Raj Murmu, it is a short film running for 12 minutes and 10 seconds inspired by a **mystical folktale of Jharkhand**.
- **Santali is among the 22 languages** included in the Eighth Schedule of the Constitution
 - ♦ The Eighth Schedule to the Constitution of India lists the **official languages of the Republic of India**.
 - ♦ **Bodo, Dogri, Maithili and Santali** were added by the **92nd Amendment Act of 2003**.

Santals

- **Major States:** Jharkhand, West Bengal, Odisha, Bihar, and Assam. They are also found in Bangladesh, Nepal, and Bhutan.

- **Language:** Santali, which belongs to the Munda branch of the Austroasiatic language family.
- **Script:** Ol Chiki (Ol Cemet'), developed by **Pandit Raghunath Murmu in 1925.**
- The Santals led the **Santhal Hul (Santhal Rebellion) of 1855–56** against British colonial rule, oppressive landlords (zamindars), and moneylenders.

National Film Awards

- **The National Film Awards (NFA)** were established in **1954** to promote cinematic excellence in India.
- They are presented **every year** by the Government to celebrate **excellence in filmmaking.**
 - ♦ These awards recognise the **best films, performances, and technical achievements** across various languages and genres.
- **Eligibility:** Films certified by the **Central Board of Film Certification (CBFC)** between January 1 and December 31 of the previous year are eligible.
- The awards are announced by a **jury appointed by the Directorate of Film Festivals** and are **presented by the President of India.**
- **The first Best Actor and Best Actress awards** were given to Uttam Kumar and Nargis, respectively, in **1968.**
 - ♦ The Best Actress award was initially called **'Urvashi'** and the Best Actor award was called **'Bharat'.**

Source: IE

BATUKESHWAR DUTT

Context

- The government paid tribute to revolutionary and freedom fighter **Batukeshwar Dutt on his death anniversary.**

About

- Batukeshwar Dutt was an **Indian revolutionary in the early 1900s.**
- He was born on **November 18, 1910**, in the Burdwan district of **Bengal.**
- He was a member of the **Hindustan Socialist Republican Association.**
- He was convicted in the Delhi Assembly Bomb Case on June 12, 1929, he spent nine years in prisons across India.

- ♦ In each jail he resorted to hunger strikes, twice fasting for over a month, demanding humane treatment for political prisoners.
- After his release, he participated in the **Quit India Movement of Mahatma Gandhi** and was again jailed for four years.
- He died on **20 July 1965** in the AIIMS in Delhi after his long illness.
- He was cremated in Hussainiwala near Firozpur in Punjab where Bhagat Singh, Rajguru and Sukhdev were also cremated many years ago.

About Hindustan Republican Association (HRA)

- **Founded:** Kanpur, 1924.
- **Founders:** Ram Prasad Bismil, Ashfaqullah Khan, Sachindra Nath Bakshi, Sachindranath Sanyal, Jogesh Chandra Chatterjee.
- **Core Principle:** Establishment of a federal republic through armed struggle and people's participation.

About Hindustan Socialist Republican Association (1928)

- **Founded:** Feroz Shah Kotla, Delhi, 1928.
- **Key Leaders:** Bhagat Singh, Sukhdev, Shiv Verma, Chandrashekhar Azad, Vijay Kumar Sinha.
- **Core Principle:** Building a Socialist Republic of India; combining political liberation with socio-economic transformation.

Source: AIR

NIFTY500 AHIMSA INDEX

In News

- **NSE Indices Limited (NSE's index-building arm)** has rolled out the **Nifty500 Ahimsa Index**, a stock market index built entirely around the idea of non-violence towards animals.

About

- The Nifty500 Ahimsa Index picks companies from the **Nifty 500** that don't profit from harming animals, and tracks their combined stock performance. Instead of just screening for environment or governance scores like a typical ESG index, this one asks a simpler question: does this company's business hurt animals or not? As of now, it holds **326 companies.**
- The idea is to give investors a ready-made way to put their money only into "cruelty-free" businesses.

- It's a joint effort between **NSE Indices Limited** and the **Ahimsagain Foundation**.

How Companies Get Sorted?

Every company gets a colour band under the AIM framework:

- Green:** Business is aligned with Ahimsa. These are the only ones that make it into the index.
- Orange:** Limited or indirect involvement in animal-related harm (think hotels serving non-vegetarian food, some FMCG or apparel firms, and most financial companies). Excluded.
- Red:** Direct involvement in meat, dairy, leather, animal testing — and interestingly, also alcohol, tobacco, weapons, and gambling, since these fall foul of the broader non-violence principle the Foundation follows.
- Exclusions:** Excludes companies involved in meat, dairy, poultry, leather, cosmetics, fashion using wool/leather, and pharmaceutical firms engaging in animal testing.

Why it Matters?

- It also stretches the definition of ESG itself. Until now, ethical investing in India has largely meant environment, governance, and labour practices. This index adds animal welfare as a screening criterion in its own right, something closer to **Gandhi's idea of Ahimsa** as a lived principle, not just a strategy, extended here into how people choose to put their money to work.

Source: TH

KARLAPAT BAUXITE BLOCK

In News

- Some of India's biggest industrial groups are eyeing Odisha's Karlapat bauxite block.

About Karlapat Bauxite Block

- Karlapat is among **Odisha's largest bauxite deposits. It accounted for 41 per cent of India's bauxite resources.**
 - Odisha is the largest **bauxite-producing state in India**, accounting for over **70% of the country's total output**. Other major bauxite-producing states include Jharkhand, Gujarat, Maharashtra, Chhattisgarh, Madhya Pradesh, and Andhra Pradesh.
- According to the Directorate of Geology, Government of Odisha, it has an estimated

resource of about 207 million tonnes, comprising 153 million tonnes of proved reserves and 54 million tonnes of possible reserves.

- Karlapat bauxite deposit is a **greenfield mining block**, which means it has not previously been commercially mined.

Why is it important?

- Bauxite is the only commercial ore used to **produce aluminium.**
 - Bauxite here is formed through millions of years of **chemical weathering (laterisation)** which slowly broke down the original Precambrian rocks, mainly **khondalites (garnet-sillimanite-graphite gneisses) and charnockites**, leaving behind an aluminium-rich residue.
- Aluminium is the **second most abundant metal** used by industry after silica-based materials and finds applications across transport, construction, power, chemicals and manufacturing.

Source: BS

EXOLANET BETA PICTORIS D

In News

- NASA's James Webb Space Telescope (JWST) has identified a new **exoplanet named Beta Pictoris d.**
 - Exoplanets or extrasolar planets**, are any planets orbiting stars outside our solar system.

Beta Pictoris

- Beta Pictoris is located in the easel-shaped southern constellation Pictor and 63 light-years from Earth.
- It is a **nearby system in the Milky Way** offering a rare glimpse of the interactions between newborn planets and the disk of dust and debris left behind from their formation.
- Beta Pictoris d** is the third known planet orbiting the star **Beta Pictoris**, after **Beta Pictoris b** and **Beta Pictoris c.**
 - This makes Beta Pictoris only the second planetary system known to have three directly imaged exoplanets.
- It is slightly bigger than Jupiter and takes 91 years to orbit its star, a little longer than it takes Uranus to orbit our Sun.

James Webb Space Telescope

- It is the **world's premier space science observatory**. Webb is solving mysteries in our solar system, looking beyond distant worlds around other stars, and probing the mysterious structures and origins of our universe and our place in it.
- It is an international program led by NASA with its partners, ESA (European Space Agency) and CSA (Canadian Space Agency).

Source: TH

WHITE-BELLIED HERON**In News**

- The Forest Advisory Committee has in-principle approved the 1,200 MW Lohit Hydroelectric Project, which can threaten the **White-bellied Heron habitat**.

White-bellied Heron (*Ardea insignis*)

- It is among the world's most elusive birds, nesting along fast-flowing rivers lined with old-growth forests.
- **Habitat:** It is primarily recorded from small or large rivers, usually with sand or gravel bars, often within or adjacent to subtropical/tropical

broadleaved forest, from the lowlands up to at least 1,500 m, and marshes/lakes near wet grasslands

- ♦ It is known to inhabit Himalayan river systems up to elevations of about 1,500 m above sea level.
- ♦ It depends on fast-flowing, shallow rivers and old-growth riparian forests for hunting fish, nesting, and roosting.
- **Distribution in India:** India has only 6-9 individuals found in the Noa-Dehing, Lahm and Lohit rivers of Arunachal Pradesh.
- ♦ The basin of the Lohit River harbours nearly 70% of the species population of India.
- **Threats:** The main threats are presumed to be widespread loss, degradation and disturbance of forest and wetlands.
- ♦ The species is also very sensitive to human disturbance
- **Protection status:** It has been listed as Critically Endangered on the IUCN Red List since 2007.
- ♦ It is also protected under Schedule I of the Wildlife Protection Act, 1972.

Source:TH