



DAILY CURRENT AFFAIRS

Time: 45 min

Date: 01-12-2023

Contents

First-ever Auction for Critical Minerals.....	2
Terms of Reference of 16th Finance Commission.....	4
New Drone Scheme for women SHGs.....	6
XPoSat	7
Air Pollution & Mortality	9
Parthenon Sculptures.....	11
World AIDS Day.....	11
Loss and Damage Fund.....	12
Off Budget Borrowings.....	13
Index of Eight Core Industries (ICI)	14
Press Mud.....	14

FIRST-EVER AUCTION FOR CRITICAL MINERALS

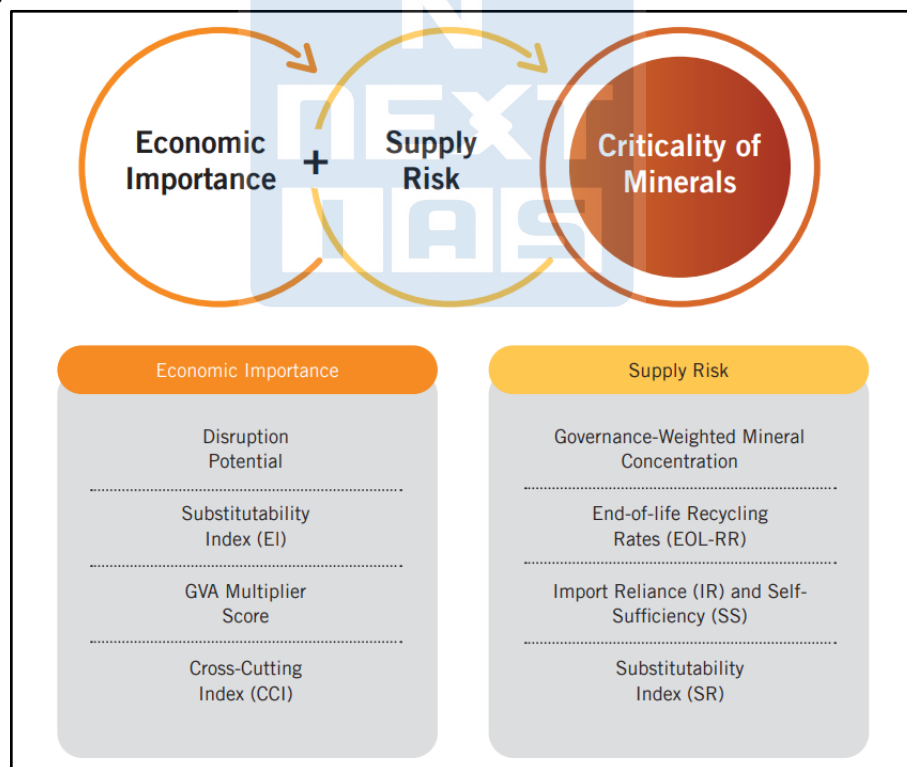
Context: The **Ministry of Mines** has launched the first tranche auction of **Critical and Strategic Minerals**.

About

- **Twenty blocks** of critical and strategic minerals being auctioned are spread across the country.
- This is going to be a landmark initiative that will **boost the economy, enhance national security and support transition to a clean energy future**.

What are Critical Minerals?

- A mineral is labelled as critical when the **risk of supply shortage and associated impact on the economy is relatively higher** than the other raw materials.
- The risk of supply shortage would ideally capture **import dependence, recycling potential, and substitutability** of these minerals.
- The **Centre for Socio and Economic Progress (CSEP)** in its paper **“Assessing the Criticality of Minerals in India” (2023)** evaluated the criticality of minerals in India based on two dimensions:
 - a) **economic importance for the Indian economy and**
 - b) **supply risks.**



Significance of Critical Minerals

- Critical minerals are essential for our **country’s economic development and national security**.
- The lack of availability of these minerals or concentration of their extraction or processing in a few countries may lead to **supply chain vulnerabilities**.
 - The net import reliance for critical minerals of India has been shown below:

Sl. No.	Critical Mineral	Percentage (2020)	Major Import Sources (2020)
1.	Lithium	100%	Chile, Russia, China, Ireland, Belgium
2.	Cobalt	100%	China, Belgium, Netherlands, US, Japan
3.	Nickel	100%	Sweden, China, Indonesia, Japan, Philippines
4.	Vanadium	100%	Kuwait, Germany, South Africa, Brazil, Thailand
5.	Niobium	100%	Brazil, Australia, Canada, South Africa, Indonesia
6.	Germanium	100%	China, South Africa, Australia, France, US
7.	Rhenium	100%	Russia, UK, Netherlands, South Africa, China
8.	Beryllium	100%	Russia, UK, Netherlands, South Africa, China
9.	Tantalum	100%	Australia, Indonesia, South Africa, Malaysia, US
10.	Strontium	100%	China, US, Russia, Estonia, Slovenia
11.	Zirconium(zircon)	80%	Australia, Indonesia, South Africa, Malaysia, US
12.	Graphite(natural)	60%	China, Madagascar, Mozambique, Vietnam, Tanzania
13.	Manganese	50%	South Africa, Gabon, Australia, Brazil, China
14.	Chromium	2.5%	South Africa, Mozambique, Oman, Switzerland, Turkey
15.	Silicon	<1%	China, Malaysia, Norway, Bhutan, Netherlands

Table.1 The net import reliance for critical minerals of India (2020) (Source: A report on 'Unlocking Australia-India Critical Minerals Partnership Potential' by Australian Trade and Investment Commission, July 2021)

- The future global economy will be underpinned by **technologies that depend on minerals** such as lithium, graphite, cobalt, titanium and rare earth elements (REE).
- India has committed to achieve **50% of cumulative electric power installed capacity from non-fossil sources by 2030.**
 - Such an ambitious plan for energy transition is set to drive the demand for electric cars, wind and solar energy projects.
- Critical minerals cater to the needs of sectors like **renewable energy, defence, agriculture, pharmaceutical, high-tech electronics, telecommunications, transport, creation of gigafactories** etc.

Recent Developments

- Through an amendment in the **MMDR Act, 24 minerals were notified as Critical and Strategic minerals.**
 - Antimony, Arsenic, Barium, Beryllium, Bismuth, Boron, Chromium, Cobalt, Copper, Gallium, Germanium, Graphite, Hafnium, Indium, Lithium, Magnesium, Molybdenum, Niobium, Nickel, Platinum Group Metals (PGMs), Rare Earth Elements (REEs), Rhenium, Selenium and Silicon.
- The amendment **confers the power to grant mineral concession of these minerals to the Central Government** so that Central Government can prioritise auction of these minerals looking at the requirements of the country.
- The **revenue generated from these auctions shall accrue to State Governments.**

Domestic and global outreach by India

- The Geological Survey of India has carried out a mineral exploration during Field Season 2020-21 and 2021-22 in **Salal-Haimna areas of Reasi district, Jammu & Kashmir**, and estimated an inferred resource of 5.9 million tonnes of lithium ore.

- In addition, a joint venture company namely **Khanij Bidesh India Ltd. (KABIL)** has been mandated to identify and acquire overseas mineral assets of critical and strategic nature such as lithium, cobalt and others.
- India has recently been inducted into the **Mineral Security Partnership (MSP)**.

Mineral Security Partnership (MSP):

- It is a **US-led collaboration of 14 countries** that would focus on the **supply chains of minerals** such as Cobalt, Nickel, Lithium, and also the 17 'rare earth' minerals.
- **Members:** Australia, Canada, Finland, France, Germany, India, Italy, Japan, the Republic of Korea, Norway, Sweden, the UK, U.S., and the EU.
- **Mandate:** To catalyse public and private investment in critical mineral supply chains globally.
- The MSP directly addresses four major critical minerals challenges:
 - Diversifying and stabilizing global supply chains;
 - Investment in those supply chains;
 - Promoting high environmental, social, and governance standards in the mining, processing, and recycling sectors; and
 - Increasing recycling of critical minerals.

Way Ahead

- This auction process is poised to play a pivotal role in supporting India's economy, fortifying national security, and bolstering efforts towards a sustainable and clean energy trajectory.
- Further, India needs to **diversify its import sources** for critical minerals to reduce reliance on a single supplier, **form strategic partnerships** with countries rich in critical minerals and **collaborate with developed countries for research and development**.

Source: [PIB](#)

TERMS OF REFERENCE OF 16TH FINANCE COMMISSION

Context: The Union Cabinet has approved Terms of Reference (ToR) for the **Sixteenth Finance Commission**.

About the Terms of Reference

- The **distribution and the allocation** of the net proceeds of taxes between the Union and the States and between States are to be, or may be, divided between them under **Chapter I, Part XII of the Constitution of India**.
- The **16th Finance Commission's** recommendations would cover the period of **five years commencing April 1, 2026**.
 - The Finance Commission shall make its report available by 31st day of October, 2025 covering a period of five years commencing on the 1st day of April, 2026.
 - The **Advance Cell of the 16th FC** was formed in the Ministry of Finance to oversee preliminary work, pending formal constitution of the Finance Commission.
- The principles which should govern the grants-in-aid of the revenues of the States out of the **Consolidated Fund of India** and the sums to be paid to the States by way of **grants-in-aid**

of their revenues under **Article 275 of the Constitution** for the purposes other than those specified in the provisos to clause (1) of that article.

- The measures needed to **augment the Consolidated Fund of a State** to supplement the resources of the Panchayats and Municipalities in the State on the basis of the recommendations made by the Finance Commission of the State.
- The Commission **may review the present arrangements** on financing Disaster Management initiatives, with reference to the funds constituted under the Disaster Management Act, 2005, and make appropriate recommendations thereon.

Fresh formulation

The 16th Finance Commission will have time until Oct. 31 2025, to recommend the tax sharing math between Centre and States

■ Panel will also prescribe measures to augment Consolidated Fund of a State to supplement resources of panchayats, local bodies



■ An Advance Cell was set up in the Finance Ministry last November to oversee preliminary work

■ Panel may review existing arrangements on financing Disaster Management initiatives

Finance Commission

- It is a **Constitutionally mandated body** that is at the centre of fiscal federalism.
- It is constituted by the President of India **under Article 280** of the Constitution that requires a Finance Commission (FC) **to be set up every five years**.
- The Finance Commission **normally takes about two years** to make their recommendations.
 - As per the **clause (1) of Article 280** of the Constitution, the Finance Commission is to be constituted every fifth year or earlier.
- The 1st FC was constituted vide Presidential Order under the chairmanship of Shri K.C. Neogy on 6th April 1952.

Features:

1. **Redressing the vertical imbalances** between the taxation powers and expenditure responsibilities of the centre and the States respectively, and;
2. **Equalisation of all public services** across the States.

The Fifteenth Finance Commission (15th FC) (Chaired by NK Singh)

- It was constituted for making recommendations for a five-year period of 2020-21 to 2024-25.
- The ToR of the 15th FC was amended in 2019 requiring the Commission to submit two reports:
 - For the **financial year 2020-21** and;
 - **Final report** for an extended period of **2021-22 to 2025-26**.
- As a result, the 15th FC made its recommendations **for a six-year period from 2020-21 to 2025-26**.

Source: TH

NEW DRONE SCHEME FOR WOMEN SHGS

Context: Cabinet approved providing drones to women Self Help Groups (SHGs).

About

- The Union Cabinet has approved a Rs 1,261 crore to provide drones to 15,000 women's SHGs for two years beginning 2024-25.
- It will help in infusing advanced technology in agriculture for improved efficiency, enhance crop yield and reduce cost of operation for the benefit of farmers.
 - The Women SHGs are trained to give the drones on rent for spraying pesticides and fertilisers.
- The scheme would have a financial outlay of ₹1,261 crore for two years beginning 2024-25.

Background: The Lakhpati Didi Scheme

- It was announced by the Prime Minister of India in his Independence Day speech of 2023.
- It has been initiated by the **Deendayal Antyodaya Yojana- National Rural Livelihoods Mission (DAY-NRLM)**, wherein each SHG household is encouraged to take up multiple livelihood activities coupled with value chain interventions, resulting in **a sustainable income of Rupees One Lakh or more per year.**

Key Highlights of the Scheme

- **Empowerment and Training:** Identified clusters conducive to drone usage will be targeted and comprehensive training programs will equip members with drone piloting skills and agricultural expertise, enabling them to provide rental services and support.
- **Financial Support: Central Financial Assistance** covering 80% of the drone cost, up to a maximum of Rs. Eight Lakh, will be extended to the SHGs.
 - The remaining amount can be raised through **National Agriculture Infra Financing Facility (AIF)**, with an interest subvention of 3% on the AIF loan.
 - Every woman in SHG is considered as a '**drone pilot**', and they will be paid *Rs 15,000 every month*, while her assistant will be paid *Rs 10,000* and both will undergo training.
- **Innovative Roles:** Members of SHGs will be trained as drone pilots and technicians, facilitating not just drone operation but also repairs and maintenance, bridging the gap between suppliers and SHGs.
- **Nano Fertilizer Adoption:** The scheme **promotes the use of Nano Fertilisers** like Nano Urea and Nano DAP through drone services, facilitating efficient pesticide application and fertiliser distribution.
- **Economic Empowerment:** Envisioned as a means of sustainable business and livelihood support, the scheme aims to enable 15,000 SHGs to earn an additional income of at least Rs. One lakh per annum.
- **Technological Leap in Agriculture:** With the infusion of advanced drone technology, the scheme is poised to enhance agricultural efficiency, increase crop yields, and reduce operational costs, thereby benefiting farmers at large.
- **Implementation:** Fertiliser companies are being roped in to implement the scheme.
 - The lead fertiliser companies (LFCs) will act as a bridge between drone supplier companies and SHGs.

Self Help Groups (SHGs)

- These are **informal groups** of poor people having **similar problems**. They help each

other to solve their problems.

- SHGs **promote small savings** among their members that are kept with the bank as a **common fund** in the name of the SHG.
 - The SHG gives small loans to its members from its common fund.
- **Registration** under any Societies Act, State cooperative Act or a partnership firm is not mandatory.

Drones in the Agriculture Sector

- **Benefits:** Crop mapping, soil analysis, irrigation, and pest management, improved efficiency and accuracy, enhanced crop yields, and reduced costs are the major benefits of using drones.
- **Challenges:** Fear of job loss, lack of knowledge and training, cost, and regulatory barriers are major challenges.

For more about the **Drone & its regulation in India**, Kindly refer '**Use of Drones**' Article
Source: TOI

XPOSAT

In News: Indian Space Research Organisation (ISRO) has announced that India is set to launch its first X-Ray Polarimeter Satellite (XPoSat).

About

- The XPoSat will be launched by the **Polar Satellite Launch Vehicle (PSLV)**, from the Satish Dhawan Space Center in Sriharikota.
- It is aiming to investigate the **polarisation of intense X-Ray sources**.

What is Polarisation of X-Ray Sources?

- Polarisation is regarded as one of the intrinsic properties of light.
 - The information on polarization provides a deeper insight to the processes, as well as the local anisotropies of the fields (electric/magnetic/gravitational).
- X-Ray polarization serves as a crucial diagnostic tool for examining the **radiation mechanism and geometry of celestial sources**.

X-Ray Polarimeter Satellite (XPoSat) Mission

- XPoSat (X-ray Polarimeter Satellite) is **India's first dedicated polarimetry mission**.
- The XPoSat spacecraft is designated for observation from **Low Earth Orbit** (non-sun synchronous orbit of ~650 km altitude, low inclination of approximately six degree), **carrying two scientific payloads**.
 - **POLIX:** POLIX (Polarimeter Instrument in X-rays) is designed to measure polarimetry parameters —specifically the degree and angle of polarization — in the medium X-ray energy range of 8-30 keV photons.
 - **XSPECT:** The secondary payload is the XSPECT (X-ray Spectroscopy and Timing) payload, which will provide spectroscopic information within the energy range of 0.8-15 keV.
- The payloads will observe the X-Ray sources during the spacecraft's transit through the Earth's shadow, i.e., **during the eclipse period**.
- The mission life is expected to be approximately **five years**.

Significance

- Analyzing X-Ray polarization signatures enables measurements of the mass and spin of accreting black holes, comprehension of the source's geometric arrangement and local properties.
- The emission mechanism from various astronomical sources such as black holes, neutron stars, active galactic nuclei, etc. originates from complex physical processes and are challenging to understand.
- The polarimetry measurements add two more dimensions to our understanding, the **degree of polarization and the angle of polarization** and thus is an excellent diagnostic tool to understand the emission processes from astronomical sources.

Launch Vehicles

- Launchers or Launch Vehicles are **used to carry spacecraft to space**.
- **India has three active operational launch vehicles:** Polar Satellite Launch Vehicle (PSLV), Geosynchronous Satellite Launch Vehicle (GSLV), Geosynchronous Satellite Launch Vehicle Mk-III (LVM3).
- **PSLV:** PSLV has been a versatile launch vehicle deployed for launching all the three types of payloads viz. **Earth Observation, Geo-stationary and Navigation**. It has got highest success rate and considered as work horse of ISRO.
- **GSLV** with indigenous Cryogenic Upper Stage has enabled the launching up to 2 tonne class of communication satellites.
- **The LVM3** is the next generation launch vehicle capable of launching 4 tonne class of communication satellites and 10 tonne class of payloads to LEOs.
 - The vehicle was developed with completely indigenized technologies including the C25 cryo stage.
 - The launch vehicle has a track record of all successful launches even from the first development flight.
 - The Human rated LVM3 is identified as the launch vehicle for Gaganyaan mission, which is named as HRLV.
- **The Small Satellite Launch Vehicle (SSLV)** is being developed with complete indigenous technologies to meet the small satellite launch market on demand driven basis.

Upcoming Missions of ISRO

- **Gaganyaan:** Gaganyaan project envisages demonstration of human spaceflight capability by launching a crew of 3 members to an orbit of 400 km for a 3 days mission and bring them back safely to earth, by landing in Indian sea waters.
- **NASA-ISRO SAR (NISAR):** It is a Low Earth Orbit (LEO) observatory being jointly developed by NASA and ISRO.
 - NISAR will map the entire globe in 12 days and provide spatially and temporally consistent data for understanding changes in Earth's ecosystems.
- **SPADEX:** SPADEX or Space Docking Experiment is a twin spacecraft mission being developed by ISRO to mature technologies related to orbital rendezvous, docking, formation flying, with scope of applications in human spaceflight, in-space satellite servicing and other proximity operations.

Source: **TH**

AIR POLLUTION & MORTALITY

In News: Outdoor air pollution from all sources accounts for **2.18 million deaths** per year in India according to a study published in **The British Medical Journal (BMJ)**.

Major Highlights

- **Mortality:** Air pollution from using fossil fuels in industry, power generation, and transportation accounts for **5.1 million extra deaths** a year worldwide.
 - This equates to **61%** of a total estimated 8.3 million deaths worldwide, which could potentially be avoided by replacing fossil fuels with clean, renewable energy sources.
- **Region Wise:** Attributable deaths to all sources of ambient air pollution were highest across South and East Asia, particularly in China followed by India.
- **Recommendation:** Phasing out fossil fuels would result in 80-85% of potentially preventable deaths from all anthropogenic sources of ambient air pollution in South, South East and East Asia.

What is Air Pollution

- When harmful substances (pollutants) – particles, gases, or matter – are released into the air and reduce its quality, the air is polluted.
- **Common air pollutants include:** Particulate Matter (PM), Nitrogen Dioxide (NO₂), Sulfur Dioxide (SO₂), Ozone (O₃), Carbon Monoxide (CO), Volatile Organic Compounds (VOCs), Lead etc.

Effects of Air Pollution

- **Health Related:** Respiratory issues, cardiovascular problems, reduced lung function.
- **Environmental:** Ecosystem damage, Biodiversity loss, Water pollution, climate change, crop damage.
- **Healthcare Costs:** The health impacts of air pollution result in increased healthcare costs, including expenses related to the treatment of respiratory and cardiovascular diseases.

Air Pollution in India

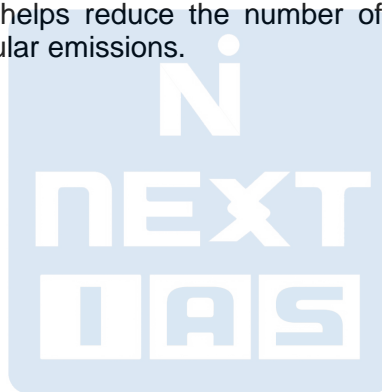
- According to the World Air Quality Report 2023, India is ranked **eighth in the list of countries with the worst air quality index**.
 - **Delhi** ranks **fourth** among the 50 most polluted cities in the world.
- **Causes:** The transport industry is responsible for 20–35% of PM_{2.5} pollution in the country.
 - The use of biomass fuels, industrial plants, and coal-fired power plants also contributes to the deterioration of air quality.

Steps Taken by Government of India to combat Air Pollution

- **National Clean Air Programme (NCAP):** Launched in 2019, NCAP is a comprehensive initiative with the goal of reducing air pollution in identified cities and regions across India.
 - The program focuses on improving air quality monitoring, implementing stricter emission standards, and promoting public awareness.
- **Bharat Stage VI (BS-VI) Emission Standards:** The government implemented BS-VI emission standards for vehicles nationwide in 2020.
 - These standards aim to reduce vehicular emissions by mandating the use of cleaner fuel and more advanced emission control technologies.
- **Pradhan Mantri Ujjwala Yojana (PMUY):** The PMUY scheme aims to provide clean cooking fuel to households by promoting the use of liquefied petroleum gas (LPG) as an alternative to traditional biomass-based cooking methods.
- **FAME (Faster Adoption and Manufacturing of Hybrid and Electric Vehicles) Scheme:** The FAME scheme promotes the adoption of electric and hybrid vehicles to reduce air pollution caused by vehicular emissions.

- Incentives are provided to both manufacturers and consumers to encourage the use of electric vehicles.
- **Green Initiatives for Sustainable Habitat (GRIHA):** GRIHA is an initiative to promote sustainable and environmentally friendly practices in the construction and operation of buildings.
 - It encourages the use of energy-efficient technologies and materials to reduce pollution.
- **Waste Management Programs:** Proper waste management is crucial to prevent the burning of waste, which contributes to air pollution.
 - Various waste management initiatives, including the Swachh Bharat Abhiyan, aim to address solid waste issues and promote cleaner disposal methods.
- **Commission for Air Quality Management:** The Commission has been set up for Air Quality Management in the National Capital Region and Adjoining Areas for better coordination, research, identification, and resolution of problems surrounding the air quality index.
- **Graded Response Action Plan (GRAP):** It is a set of emergency measures that kick in to prevent further deterioration of air quality once it reaches a certain threshold in the Delhi-NCR region.
- **Promotion of Public Transportation:** Encouraging the use of public transportation, such as buses and metro systems, helps reduce the number of individual vehicles on the road, consequently lowering vehicular emissions.

Source: TH



FACTS IN NEWS

PARTHENON SCULPTURES

In News: The UK PM Rishi Sunak cancelled a scheduled meeting with his Greek counterpart Kyriakos Mitsotakis after the latter called for the **return of the Parthenon sculptures to Athens.**

About

- The sculptures, also known as the **Elgin marbles**, are named after Thomas Bruce — the 7th Earl of Elgin and 11th Earl of Kincardine (Lord Elgin) — who transported them from Greece to the United Kingdom in **1803**.
- They have been part of the British Museum's collection since 1816 and have long been demanded by the Greeks to complete their series at the Acropolis Museum in Athens.

About Parthenon Sculptures

- The Parthenon Sculptures are more than **30 ancient stone sculptures** from Greece that are **more than 2,000 years old**.
- Most of them originally adorned the walls and grounds of the **Parthenon temple** on the rocky Acropolis hill in Athens.
 - Completed in **432 BC**, the temple is dedicated to the **goddess Athena** and is seen as the crowning glory of Athens' Golden Age.
- While one notable sculpture, which is 75 metres long, depicts a procession for the birthday of Athena, others show gods, heroes or mythical creatures.



Source: [IE](#)

WORLD AIDS DAY

In News: Every year, on **1 December**, the world commemorates **World AIDS Day**.

About the Day

- It was first observed in 1988 by WHO.
- **Aim:** To spread awareness about the disease
- **Theme (2023):** Let communities lead (Role of communities in ending AIDS)

Acquired immunodeficiency syndrome (AIDS)

- It is a chronic, potentially life-threatening health condition caused by the **human immunodeficiency virus (HIV)** which damages the **human immune system**.
- **Transmission:** Through direct contact with certain body fluids (blood, semen, rectal fluid, vaginal fluid or breast milk) from a person infected with HIV.
- **Symptoms:**
 - **Stage 1:** Flu-like illness (Fever, chills, rashes, night sweats)
 - **Stage 2:** Clinical latency (No particular symptoms)
 - **Stage 3:** AIDS (Weakening of Immune System)
- **Prevention:** Prevention is better than cure, using protective techniques, non-contaminated needles & preventing mother to child transmission.

HIV Facts & Figures

- The 2022 HIV Estimates indicate that around 2.47 million people are living with HIV in India. AIDS-related deaths in 2022 stood at approximately 39,000.
- UNAIDS Report 2023, approximately 9.2 million people, including 660,000 children living with HIV.

Steps taken by Government of India

- **National AIDS Control Programme (NACP)** (Central Sector Scheme)
- India has achieved the **6th MDG** of halting and reversing the **HIV epidemic**.
- **Prevention from Parent to Child Transmission (PPTCT)** programme
- **HIV/AIDS Act 2017** (Prohibits discrimination against HIV-infected people on any grounds)
- **PALS (PPTCT ART Linkages Software) System** (Repository of HIV+ pregnant women)
- **90:90:90 strategy** as adopted by **UNAIDS** (90% (diagnosed, treatment (by anti-retroviral treatment (ART)) & suppression)) by 2020.
 - Extended by 10 years with the goal post of 95-95-95.
- **Project ACCELERATE (John Hopkin & NACO initiative):** To provide HIV Services Safe Zindagi online portal.

Challenges

- **Removing Social Stigma, Inequalities** that drive AIDS, social exclusion
- **Shortage of medicines** for HIV like lopinavir/ritonavir & **dearth** of financial resources.

Way Ahead

- Action against inequalities to end AIDS by 2030, Centre and States coordination, involvement of NGOs & enhance budget allocation.

Source: TH

LOSS AND DAMAGE FUND

News: On the first day of the **COP 28 Climate Summit** in Dubai (UAE), member countries agreed to make operational a Loss and Damage (L&D) fund.

Loss and damage

- Loss and damage means different things to different groups and there is **no agreed upon definition** within the United Nations Framework Convention on Climate Change (UNFCCC).
- It is often categorized as either economic or non-economic.

- **Economic loss** and damage are negative impacts that we can assign a monetary value to. These are things such as the costs of rebuilding infrastructure that has been damaged due to a flood etc.
- **Non-economic loss** and damage are negative impacts where it is difficult or infeasible to assign a monetary value. These are things such as trauma from experiencing a tropical cyclone, loss of community due to displacement of people, or loss of biodiversity etc.

What is the Loss and Damage Fund?

- It is a global financial package to ensure the rescue and rehabilitation of countries facing the cascading effects of climate change.
- The term refers to the **compensation that rich nations** (whose industrial growth has resulted in global warming and driven the planet into a climate crisis), **must pay to poor nations**, whose carbon footprint is low but are facing the consequences of climate change.
- The loss and damage fund was first announced during **COP27 in Sharm el-Sheikh, Egypt**.

Funds and its Operation

- The initial funding is estimated to be around **\$475 million** — host UAE pledged \$100 million, \$17.5 million from the US, and \$10 million from Japan and \$100 million from Germany etc.
- **The World Bank** will be the “**interim host**” of the fund for a period of four years.

Source: [IE](#)

OFF BUDGET BORROWINGS

News: The central government is worried about the increased level of Off-budget borrowings of states.

About

- **Off-budget borrowing** also known as extra budget financing is used by the government to finance its expenditures while keeping the debt off from its annual statement. It is **not counted in the calculation of the fiscal deficit**.
- Governments across the world use this to **escape budget controls** as the liability of the loan is not formally on the Centre.
- Hence off-budget financing is not part of the calculation of the fiscal indicators despite fiscal implications.

How does the Centre raise off-budget borrowings?

- The government can ask an implementing agency to raise the required funds from the market through loans or by issuing bonds.
- Public sector undertakings are used to borrow the funds for the government. For instance, public sector oil marketing companies were asked to pay for subsidized gas cylinders for **Pradhan Mantri Ujjwala Yojana** beneficiaries in the past.

Concerns

- In India, the off-budget financing is **excluded from the Fiscal Responsibility and Budget Management (FRBM) Act**, which intends to bring transparency and accountability to the monetary actions of the government.
 - FRBM Act sets a target for the Centre to establish fiscal discipline, strengthen fiscal prudence, and reduce its fiscal deficits.
- **The CAG's report** on the FRBM compliance for 2016-17 stated that the Central government has "increasingly resorted to off-budget financing" for revenue spending.

Source: [Mint](#)

INDEX OF EIGHT CORE INDUSTRIES (ICI)

Context: The production of **all eight core industries** recorded **positive growth** in October 2023 over the corresponding month of last year.

About

- The ICI measures combined and individual performance of production of **eight core industries** viz. **Cement, Coal, Crude Oil, Electricity, Fertilizers, Natural Gas, Refinery Products and Steel.**
- **Released by:** The Office of Economic Adviser, Department for Promotion of Industry and Internal Trade (DPIIT), Ministry of Commerce and Industry.
- **Base year:** 2011-2012
- **Periodicity:** Monthly basis

Sector	Coal	Crude Oil	Natural Gas	Refinery Products	Fertilizers	Steel	Cement	Electricity	Overall Index
Weight	10.33	8.98	6.88	28.04	2.63	17.92	5.37	19.85	100.00

Weightage:

- The Eight Core Industries comprise **40.27 percent of the weight** of items included in the **Index of Industrial Production (IIP).**

Index of Industrial Production (IIP)

- The IIP is an index which shows the **growth rates in different industry groups of the economy** in a stipulated period of time.
- It is a composite indicator that **measures the growth rate of industry groups** classified under:
 - **Broad sectors:** Mining, Manufacturing, and Electricity.
 - **Use-based sectors:** Basic Goods, Capital Goods, and Intermediate Goods.
- **Released by:** The Central Statistical Organisation (CSO) , Ministry of Statistics and Programme Implementation.
- **Base year:** 2011-2012
- **Periodicity:** Monthly basis

Source: [PIB](#)

PRESS MUD

Context: Press mud, a byproduct of sugarcane, can be a sweet spot for India's compressed biogas sector.

About the Press Mud

- Press Mud, also known as **Filter Cake**, is a **by-product of the sugar industry**. It is produced during the filtration of cane juice and is a soft, spongy, amorphous, and dark brown solid.
- **Composition:** Press Mud contains sugar, fibre, coagulated colloids including cane wax, albuminoids, inorganic salts, soil particles, and mineral elements.

Advantages of Press Mud

- **Energy Production:** Press Mud has a high potential for the **production of renewable energy** through the **anaerobic digestion process.**

- **Agricultural Uses:** Press Mud can be used as a **soil reclamation and conditioner**. It prevents soil erosion, crusting, and cracking, adjusts soil pH, improves drainage, and promotes normal bacterial and microbial growth in the soil.
- **Industrial Uses:** The wax extracted from Press Mud can potentially **substitute for costly carnauba wax**, which is widely used in cosmetics, food, and pharmaceutical industries.
- **Environmental Impact:** The utilisation of Press Mud can help alleviate environmental pressure brought about by the consumption of natural resources.
 - It can be used to create new products from readily available but less-valued materials.

Do you know?

- India has assumed a key position in the worldwide sugar economy, emerging as the foremost sugar producer since 2021-22, **surpassing Brazil**, and it stands as the **second-largest sugar exporter globally**.
- The **expansion of the ethanol biofuel sector** over the past five years has strengthened the sugar industry and contributed to the improved financial standing of sugar mills.

Source: DTE

