



# **Factly Compilation**

**23<sup>rd</sup> to 28<sup>th</sup> October, 2023**

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### 1. ₹2.9-crore project to improve amenities around Edakkal Caves

**Source:** The post is based on the article “₹2.9-crore project to improve amenities around Edakkal Caves” published in “The Hindu” on 23rd October 2023

#### What is the News?

Kerala Tourism has launched a project to improve civic amenities around the Edakkal Caves in Wayanad.

#### Where is Edakkal Caves?

**Located in:** Wayanad, Kerala

**Hills:** The caves are located 3,900 feet above sea level in the Ambukuthi Hills.

**Meaning:** Edakkal Caves are not actually caves. They are part of a prehistoric rock shelter formed naturally when one huge boulder got wedged between two bigger ones. That’s why the name Edakkal itself means “a stone in between”.

**Features:** The caves feature Neolithic-era pictorial writings dating back to at least 6,000 BCE.

- The cave has engravings of human and animal figures besides symbols and letters.
- The Muniyaras or ancient burial sites have been discovered in these caves. This has yielded a rich collection of ancient earthenware and pottery.

### 2. Canada’s actions are in violation of Vienna Convention, says Jaishankar

**Source:** The post is based on the article “Canada’s actions are in violation of Vienna Convention, says Jaishankar” published in “The Hindu” on 23rd October 2023

#### What is the News?

India had recently sent back 41 diplomats of Canada from India citing disparity in the number of diplomats between the two countries .

However, Canada has accused India of violating the Vienna Convention by forcing it to downsize its mission in India.

On this, the Indian Foreign Minister has said that Canada has only violated the Vienna Convention by not ensuring the safety of Indian diplomats.

#### What is the Vienna Convention?

[Click Here to read](#)

**Members:** 193 countries have ratified the convention.

Ratification means that a country should seek approval for the treaty on the domestic level and enact a law in their country to give effect to it.

India ratified it through the Diplomatic Relations (Vienna Convention) Act of 1972.

#### What does the 1961 Vienna Convention say about recalling diplomats?

**Article 9:** It says that the receiving State (host country) has the right to declare a diplomat or a member of their staff as “persona non grata” or unwelcome. This decision can be made at any time.

- The host country is not required to provide a detailed explanation for this decision.

**Article 11:** If there is no specific agreement on the number of diplomats allowed in a mission, the receiving State (host country) can set limits.

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- The host country can determine the reasonable and normal size of a diplomatic mission.
- This determination can be made based on the circumstances and conditions in the host country and the specific needs of the mission.

### Are there any past instances of recalling diplomats?

In 2017, Russia and the United States asked for each other's diplomats to be recalled on the principle of parity.

In August, 2023 Moldova demanded a reduction of diplomats from Russia on the grounds of parity.

### 3. Army to start phasing out Cheetah, Chetak helicopters from 2027

**Source:** The post is based on the article "Army to start phasing out Cheetah, Chetak helicopters from 2027" published in "The Hindu" on 23rd October 2023

#### What is the News?

The Army will start phasing out the Cheetah and Chetak helicopters from 2027.

They plan to replace these helicopters with indigenous light utility helicopters (LUHs).

#### What is Chetak Helicopter?

The Chetak Helicopter is a two-ton class helicopter. It is a versatile, multi-role, multi-purpose and spacious helicopter.

It is designed for seven seaters (two pilots and five passengers).

**Manufactured by:** Hindustan Aeronautics Limited (HAL).

#### What is a Cheetah?

Cheetah is a five-seater helicopter. It is a high-performance helicopter designed for operation over a very wide range of weight, center of gravity and altitude conditions.

It holds the world record in high altitude flying among all categories of Helicopters.

**Manufactured by:** Hindustan Aeronautics Limited (HAL).

#### What is Indigenous light utility helicopters (LUHs)?

LCH is the first indigenous Multi-Role Combat Helicopter.

**Designed and developed by:** Hindustan Aeronautics Limited (HAL).

#### Specifications:

- **Maximum take-off weight:** 3,100 kg.
- **Can carry a useful load** of 1,500 kg.
- **Maximum speed:** 220 km/h, cruise speed: 200 km/h.
- **Service ceiling (maximum altitude it can reach):** 6,500 meters.

**Range:** Approximately 500 km.

**Features:** It has potent ground attack and aerial combat capability.

- Equipped with a 3-axis autopilot for stable and controlled flight in various conditions.
- Features a modern glass cockpit with digital avionics and instrumentation.



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- Includes a weather radar system for real-time weather information.
- Cockpit lighting works with night-vision goggles for low-visibility conditions.

### 4. Geologist unearths coral reef fossils in Ladakh Himalayas

**Source:** The post is based on the article “Geologist unearths coral reef fossils in Ladakh Himalayas” published in “Deccan Herald” on 23rd October 2023

#### What is the News?

Geologists have discovered coral reef fossils in the Burtse region, Eastern Ladakh.

#### What is the significance of the discovery of coral reef fossils in Ladakh?

Coral reefs are often associated with tropical, shallow waters.

They are the last thing one expects to find in the Himalayan region of Ladakh which is known for its rugged mountains and high-altitude terrain.

However, this discovery of coral reef fossils in the Burtse area of Ladakh provides information on the region’s ancient underwater world and biodiversity.

It suggests that Ladakh may have been home to vibrant marine life, coral reefs and beaches in the past.

#### What are Corals?

Corals are marine invertebrates or animals which do not possess a spine. They are the largest living structures on the planet.

Corals have a symbiotic relationship with microscopic algae called zooxanthellae that live in their tissues. These algae are the coral’s primary food source and give them their color.

#### Types of Corals:

**Hard corals:** They are also known as scleractinian and stony coral. They produce a rigid skeleton made of calcium carbonate (CaCO<sub>3</sub>) in crystal form called aragonite.

- They are the primary reef-building corals. Hard corals that form reefs are called hermatypic corals.

**Soft corals:** They are also known as Alcyonacea and ahermatypic coral. They do not produce a rigid calcium carbonate skeleton and do not form reefs, though they are present in reef ecosystems.

The Great Barrier Reef is the world’s largest and longest coral reef system. It is located in Australia.

### 5. Union Textiles Minister launches Website of “Kasturi Cotton Bharat”

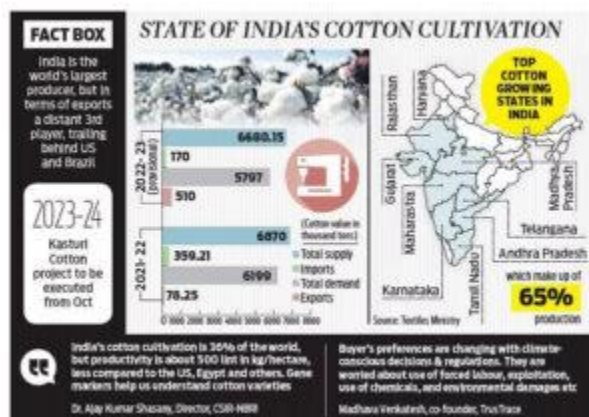
**Source:** The post is based on the article “Union Textiles Minister launches Website of Kasturi Cotton Bharat” published in “PIB” on 23rd October 2023

#### What is the News?

The Union Minister of Textile has launched a website of Kasturi Cotton Bharat.

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### What is Kasturi Cotton Bharat?



**Source:** Indian Express

**Launched by:** Ministry of Textiles, the Cotton Corporation of India, trade organizations, and the industry.

**Aim:** To boost the global competitiveness of Indian cotton by taking charge of branding, traceability, and certification, with a focus on sustainability and benefiting all involved stakeholders.

**Designated agency:** Cotton Textiles Export Promotion Council (TEXPROCIL) has been designated as the implementing agency for Traceability, Certification and Branding of “KASTURI Cotton India”.

**To provide complete traceability of Kasturi Cotton Bharat across the supply chain,** QR based certification technology will be used at each stage of the processing and a blockchain based software platform will provide end to end traceability and transaction certificate.

### What is the data on Cotton Production in India?

Cotton is one of the most important commercial crops cultivated in India. It accounts for around 25% of the total global cotton production.

**India is the country to grow all four species of cultivated cotton** G. arboreum and Herbaceum (Asian cotton), G. barbadense (Egyptian cotton) and G. hirsutum (American Upland cotton).

**India has the largest area under cotton cultivation** and is also the largest producer and second largest consumer of cotton.

## 6. Defence Minister launches 'Project UDBHAV'

**Source:** The post is based on the article “Defence Minister launches ‘Project UDBHAV’” published in “**PIB**” on **23rd October 2023**

### What is the News?

The Defence Minister has launched ‘Project UDBHAV’.

### What is Project UDBHAV?

**Launched by:** Indian Army and the United Service Institution of India (USI), a defence services think tank.

**Aim:** To revive and integrate India’s ancient military wisdom with contemporary military practices.

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### Objectives of the project:

- Understanding ancient military systems and India's indigenous military culture.
- Studying the evolution of the Indian military system and strategic ideas.
- Educating junior and senior military leaders about concepts in classical texts.
- Creating a knowledge resource for scholars and defense personnel.
- Considering the inclusion of historical military concepts in modern practices.

**Features:** The project involves organizing events and workshops focusing on various aspects of India's strategic culture.

– It will culminate in a publication scheduled for January 2024, which will document and institutionalize this knowledge.

**What are the major military practices Project UDBHAV takes inspiration from?**

**Chanakya's Arthashastra:** It emphasizes strategic partnerships, alliances, and diplomacy. This aligns with modern military practices like international cooperation and soft power projection.

**Thirukkural:** It is authored by Tamil philosopher Thiruvalluvar. It promotes ethical conduct in all endeavors, including warfare. This aligns with modern military codes of ethics and principles of the Geneva Convention.

**Prominent Military Campaigns and Leaders:** The project examines historical examples like the empires of Chandragupta Maurya, Ashoka and the Cholas.

**Clever Diplomacy and Military Intelligence:** Explores instances of clever diplomatic negotiations, psychological warfare and military intelligence. The Naval [Battle of Saraighat](#) in 1671, led by Lachit Borphukan, exemplifies these strategies.

**What is the significance of Project UDBHAV?**

By combining ancient wisdom with contemporary military education and operations, Project UDBHAV is preparing a strong, forward-looking Indian Army.

### 7. **Navy gets delivery of Imphal, its first warship with separate living spaces for women sailors**

**Source:** The post is based on the article "**Navy gets delivery of Imphal, its first warship with separate living spaces for women sailors**" published in "**Hindustan Times**" on **23rd October 2023**

**What is the News?**

The Indian Navy has received its latest stealth destroyer named INS Imphal.

**What is INS Imphal?**

INS Imphal is the third ship to be launched under [Project 15-B](#).

**Designed by:** Indian Navy's Warship Design Bureau

**Built by:** Mazagon Dock Shipbuilders Limited (MDL)

**Features:**

— The ship has indigenous content of around 75%.



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- The ship is armed with supersonic Surface-to-Surface 'Brahmos' missiles and 'Barak-8' Medium Range Surface to Air Missiles. T
- It can accommodate a crew of 312 persons. It has an endurance of 4,000 nautical miles and can carry out a typical 42-day mission.
- It is propelled by a powerful Combined Gas and Gas Propulsion Plant (COGAG), consisting of four reversible gas turbines, which enables Imphal to achieve a speed of over 30 knots (approximately 55 kilometers per hour).

**Significance:** INS Imphal is the first warship with separate accommodation for women sailors.

### 8. CBI launches Operation Chakra-II: What it is and why Microsoft and Amazon are part of this

**Source:** The post is based on the article “CBI launches Operation Chakra-II: What it is and why Microsoft and Amazon are part of this” published in “TOI” on 25th October 2023

**What is the News?**

The Central Bureau of Investigation (CBI) has launched Operation Chakra-II.

**What is Operation Chakra-II?**

**Launched by:** Central Bureau of Investigation (CBI)

**Aim:** To fight against transnationally organized cyber-enabled financial crimes in India.

**For the operation,** CBI has partnered with Microsoft and Amazon as well as with national and international agencies to combat and dismantle infrastructure of illegal call centers.

**Why Microsoft and Amazon are part of Operation Chakra-II?**

Most of the illegal call centers raided by CBI posed as Microsoft and Amazon customer support.

These call centers target vulnerable individuals and defraud thousands annually.

That is why, Microsoft and Amazon have collaborated with CBI to share critical information and help Indian law enforcement agencies in their investigations.

### 9. Delhi govt to use dust suppressants to combat poor AQI: what are they and do they work?

**Source:** The post is based on the article “Delhi govt to use dust suppressants to combat poor AQI: what are they and do they work?” published in “Indian Express” on 25th October 2023

**What is the News?**

Dust suppressants are being used in Delhi to reduce pollution from dust.

**What are Dust suppressants?**

Dust suppressants are used to reduce pollution from dust.

They are typically salts of calcium or magnesium. They have the ability to absorb moisture.

In Delhi, dust suppressant powder would be mixed along with water and sprayed on roads to keep dust levels lower.

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### Are Dust suppressants effective in reducing pollution from dust?

**CPCB Study:** In 2019, Central Pollution Control Board (CPCB) had found that using dust suppressants along with water is more effective in controlling pollution compared to just spraying water.

– It conducted a study which showed a 30% reduction in dust concentration (PM10, PM2.5, and PM1) for up to six hours when dust suppressants were used on construction sites and roads.

**Delhi PWD Advisory:** In 2019, the Delhi Public Works Department (PWD) had issued an advisory supporting the use of dust suppressants.

– It said that using dust suppressants with bio-additives can reduce dust for five to six hours, compared to plain water sprinkling which is effective for only 15 to 30 minutes.

### 10. Food labels to have QR code to help the visually disabled

**Source:** The post is based on the article “Food labels to have QR code to help the visually disabled” published in “The Hindu” on 24th October 2023

#### What is the News?

The Food Safety and Standards Authority of India(FSSAI) has recommended the use of Quick Response(QR) codes on food products.

#### What is Food Safety and Standards (Labelling and Display) Regulations,2020?

Food Safety and Standards (Labelling and Display) Regulations,2020 has comprehensively outlined the information to be included on the labels of food products.

This includes product name, shelf life, nutrition facts, vegetarian/non-vegetarian logos, ingredient lists, allergen warnings, and other product-specific labelling requirements.

The information is aimed at empowering consumers to make informed choices when selecting food products.

#### Why has FSSAI recommended the use of QR code on food products?

The Rights of Persons with Disabilities Act 2016 recognises the rights and needs of individuals with disabilities.It emphasizes on the accessibility and the promotion of health for persons with disabilities.

One effective means to achieve this on food products is by incorporating Quick Response(QR) codes on product labels.

These QR codes will have comprehensive details about the products ingredients, nutritional information, allergens, manufacturing date among others.

**Note:** The inclusion of a QR code for the accessibility of information does not replace the requirement to provide mandatory information on the product label.

### 11. Understanding the components of a SIM card, its functions and working

**Source:** The post is based on the article “Understanding the components of a SIM card, its functions and working” published in “The Hindu” on 25th October 2023

#### What is the News?

Over the years, the SIM card has shrunk from the SIM to the mini SIM to the micro SIM to the nano SIM.The latest on this path is the eSIM card.

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### What is a SIM Card?

SIM stands for 'subscriber identification module'. It is an integrated circuit or a microchip that identifies the subscriber on a given network.

In order for a mobile phone to connect to any cellular network that follows the Global System for Mobile Communications (GSM) standard, a SIM card is mandatory.

This relationship is established using a unique authentication key — a piece of data that you need to 'unlock' access to the network.

Every SIM card stores this data and it is designed such that you can't access it through your phone.

Instead, signals sent by your phone into the network are 'signed' by the key and the network uses the signature to understand whether your phone's connection is legitimate.

**Note:** It is possible to duplicate a SIM card by accessing its key and putting it into another card. This is known as SIM cloning.

### What information does a SIM card store?

The SIM card contains important information that identifies the user to the mobile network and allows the device to connect to the network.

This information includes its own ID number (the integrated circuit card identifier), the International mobile subscriber identity (IMSI), the subscriber's location area identity (i.e. their current location), a list of preferred networks (to whom the subscriber can connect when roaming) and emergency numbers.

### What is eSIM?

An eSIM, or embedded SIM is a digital or electronic SIM card that is built into a device, such as a smartphone, tablet, or smartwatch, rather than being a physical, removable card.

It serves the same purpose as a traditional SIM card, which is to identify a user to a mobile network and enable connectivity.

### Advantages of eSIM:

**Firstly**, it is considered to be environmentally friendlier than a physical SIM. Its reprogrammability means no need for more plastic and metal for a new SIM.

**Secondly**, if a malicious person gains access to your phone, they won't be able to separately access the SIM application nor be able to duplicate it.

### Disadvantages of eSIM:

**Firstly**, in some countries, including the U.S, eSIMs can be programmed by subscribers themselves. But this process might be difficult for those with low digital literacy such as the elderly.

**Secondly**, an eSIM can in theory allow network operators to track subscribers data including inside apps on the device, especially in the absence of data privacy laws.

## 12. Centre to introduce DNA, face matching systems at police stations across country

**Source:** The post is based on the article "Centre to introduce DNA, face matching systems at police stations across country" published in "The Hindu" on 25th October 2023

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### What is the News?

The Government of India is all set to implement the “DNA and face-matching” systems at 1,300 police stations across the country.

### Which act allows the government to implement DNA and face matching systems at police stations?

The Government of India is implementing DNA and face-matching systems at police stations across the country as per Criminal Procedure Identification Act,2022.

The act allows the police and the Central investigating agencies to collect, store and analyze physical and biological samples including retina and iris scans of arrested persons.

This Act replaced the Identification of Prisoners Act,1920 whose scope was limited to capturing finger impressions, footprints and photographs of convicted prisoners and a specific category of arrested and non-convicted persons under the orders of a Magistrate.

The National Crime Records Bureau (NCRB) has been given responsibility to implement this act.

### How is the government implementing DNA and face matching systems at police stations?

The Union Home Ministry has established a Domain Committee with representatives from state police, central law enforcement agencies, and other stakeholders to ensure the successful implementation of the Act.

Some police stations have started recording measurements such as thumbprints, finger impressions, and photographs of accused individuals using existing methods.

The National Automated Fingerprint Identification System (NAFIS) is also being integrated with the Criminal Procedure Identification Act.

**Note:** NAFIS has created a central database of fingerprints of criminals which can be accessed by users from all States, Union Territories and Central Agencies.

### What are the challenges in implementing DNA and face matching systems at police stations?

Lack of Training of Police Officials

Lack of funds and resources in police departments

Tools and systems used by the police should be technologically, legally and forensically sound.

### 13. Telangana's law under scanner: How preventive detention works

**Source:** The post is based on the article “Telangana's law under scanner: How preventive detention works” published in “The Hindu” on 25th October 2023

### What is the News?

The Supreme Court has expressed concerns about the Telangana government's use of Preventive Detention law in three different cases.

### What is Preventive Detention?

Preventive detention means detention of a person by the state without trial and conviction by court, but merely on suspicion. The detention could be up to a year unless extended.

In countries such as Britain, United States and Canada, preventive detention is a wartime measure. In India, the Constitution itself allows for preventive detention.

**Article 22** of Part III of the Constitution, which deals with fundamental rights, grants the state the power to suspend these rights for preventive detention.



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### Under what laws can the state order preventive detention?

The state can order preventive detention under various laws. At the national level, examples of such laws include the National Security Act and the Conservation of Foreign Exchange and Prevention of Smuggling Activities Act, 1974 (COFEPOSA).

Additionally, around 25 states have their own laws that allow for preventive detention.

### What is the procedure for Preventive Detention?

First, the district magistrate would issue an order to detain a person when it is necessary to maintain “public order.”The state can delegate this power to the police as well.

If the detention ordered is for more than three months, such a detention requires the approval of an Advisory Board.

These Advisory Boards are set up by states and normally consist of retired judges and bureaucrats.A detainee is generally not allowed legal representation before the Board. If the Board confirms the detention, the detainee can move Court challenging the detention order.

The detainee is entitled to know the grounds of his detention.However, the state may refuse to divulge the grounds of detention if it is in the public interest to do so.

The detaining authorities must also give the detainee earliest opportunities for making representation against the detention.

### How do courts assess detention orders?

For preventive detention, there are very narrow grounds of judicial review because the Constitution emphasizes the state’s “subjective satisfaction” when ordering a detention.

Judicial review in such cases is often limited to whether the Advisory Board applied its mind, considered all material facts and whether the state showed malicious intention in ordering detention.

However, courts have also invalidated detention orders based on technical issues.These could include delays in the Advisory Board’s decision, timely communication of detention grounds and ensuring that the detainee understands these grounds.

## 14. Minister of Cooperation inaugurated IFFCO’s Nano DAP (Liquid) plant at Kalol in Gandhinagar, Gujarat

**Source:** The post is based on the article “**Minister of Cooperation inaugurated IFFCO’s Nano DAP (Liquid) plant at Kalol in Gandhinagar, Gujarat**” published in “**PIB**” on **24th October 2023**

### What is the News?

The Union Minister of Cooperation has inaugurated IFFCO’s Nano DAP (Liquid) Plant at Kalol in Gandhinagar, Gujarat.

### What is Nano DAP?

Nano-DAP (Di-ammonium Phosphate) is a nanotechnology-based agri-input developed by the Indian Farmers Fertilizer Cooperative Limited (IFFCO).

It will have 8% nitrogen and 16% phosphorus compared to 18% nitrogen and 46% phosphorus contained in the conventional granular bag.

**Comparison with conventional DAP:** A 500 ml bottle of nano-DAP is equal to a 50kg bag of regular DAP. The cost of a bottle of nano-DAP is ₹600 (without subsidy) while conventional DAP is priced at ₹1,350 per bag (with fertilizer subsidy).



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**Patent and Royalty:** IFFCO has obtained a 20-year patent for nano-urea and nano-DAP, entitling them to receive a 20% royalty for global usage of these products.

**What are the benefits of Nano DAP?**

Nutrient use efficiency is more than 90 percent under optimum field conditions.

Enhances Crop Growth and Quality.

It is cheaper than conventional DAP and is economical for the farmers

Reduces pollution of soil, air and water due to excessive use of phosphatic fertilizers.

Reduced production cost and increased output will also boost the annual income of Indian farmers.

It is eco friendly as nano DAP will minimally contaminate the land.

### 15. Losses from extreme events over 31 years were \$3.8 trillion

**Source:** The post is based on the article “Losses from extreme events over 31 years were \$3.8 trillion” published in “The Hindu” on 25th October 2023

**What is the News?**

The Food and Agriculture Organization (FAO) has released a report titled ‘The Impact of Disaster on Agriculture and Food Security’.

**What are the key findings of the report?**

**Warmest Decade:** In 2023, we saw the end of the warmest decade on record with a lot of extreme weather and disasters. These disasters were made worse by conflicts and the COVID-19 pandemic.

**Rising Disaster Frequency:** Over the past 50 years, the number of extreme disaster events has increased significantly.

– In the 1970s, there were about 100 disasters per year, but in the last 20 years, it’s gone up to about 400 annually globally.

**Impact on Agriculture:** Agricultural activities and livelihoods depend on environmental conditions, natural resources, and ecosystems.

– But the agriculture sector is facing threats from hazards such as flooding, water scarcity, drought, and environmental degradation.

– For instance, in Pakistan, exceptional monsoon rainfalls in 2022 led to nearly \$4 billion in damages to the agricultural sector.

**Agriculture losses due to disasters:** Over the last 31 years, extreme events have caused around \$3.8 trillion in losses to agriculture.

– Droughts are the biggest threat to agriculture, causing over 65% of losses.

– Floods, storms, cyclones, and volcanic activities each account for around 20% of losses.

**Region wise differences:** Asia has the highest economic losses from disasters (45%). Oceania experienced the lowest losses from disasters.

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### 16. Pradhan Mantri Anusuchit Jaati Abhuyday Yojana (PM-AJAY)

**Source:** The post is based on the article “Pradhan Mantri Anusuchit Jaati Abhuyday Yojana (PM-AJAY)” published in “PIB” on 24th October 2023

**What is the News?**

This article talks about Pradhan Mantri Anusuchit Jaati Abhuyday Yojana (PM- AJAY).

**What is Pradhan Mantri Anusuchit Jaati Abhuyday Yojana (PM- AJAY)?**

**Nodal Ministry:** Ministry of Social Justice & Empowerment

**Combination of Three Schemes:** The scheme is a merger of 3 Centrally Sponsored Schemes namely: Pradhan Mantri Adarsh Gram Yojana (PMAGY), Special Central Assistance to Scheduled Castes Sub Plan (SCA to SCSP) and Babu Jagjivan Ram Chhatrawas Yojana (BJRCY).

**Aim:** To reduce poverty within Scheduled Caste (SC) communities by creating additional job opportunities through skill development, income-generating initiatives, and more.

– To enhance socio-economic development indicators by providing necessary infrastructure and essential services in SC-dominated villages.

**Components:** The Scheme has three components:

**1. Development of SC dominated villages into an “Adarsh Gram”:** It aims to ensure integrated development of SC majority villages so that they have adequate infrastructure.

**2. Grants-in-aid’ for District/State-level Projects:** It offers financial support for district or state-level projects with the aim to improve the socio-economic conditions of SC communities.

– This may include the construction of infrastructure in SC-dominated villages, including those chosen under the Adarsh Gram component as well as the establishment of hostels and residential schools.

**3. Construction of Hostels in**

– higher educational institutions which are top-ranked as per the National Institutional Ranking Framework (NIRF) of Government of India and are funded by the Centre/State/UT Governments either fully or partially.

– schools which are either fully or partially funded by the Centre/State/UT Governments and recommended by the Ministry of Education

### 17. 2020 Winner: Changemaker Social Transformation – Shanti Raghavan Developing a ‘purple economy’ for disability inclusion

**Source:** The post is based on the article “2020 Winner: Changemaker Social Transformation – Shanti Raghavan Developing a ‘purple economy’ for disability inclusion ” published in “Hindu Businessline” on 26th October 2023

**Why in the News?**

Shanti Raghavan is the recipient of the Business Line Changemakers Award in 2020.

She leads an organization called EnAble India. It is working on creating a **purple economy**.

**What is the Purple Economy?**

Purple Economy obtains its name from the color adopted by many feminist movements.

It represents a new vision of economics that recognizes the importance of care work, empowerment and autonomy of women.

## Factly Compilation for the Month of October (Fourth Week) 2023

**Pillars:** There are four pillars of the purple economy:

**1. Universal Care Services:** To address gender and class disparities, ensure that professional care services are accessible to all households, either through publicly funded or state-subsidized private services.

**2. Work-Life Balance in the Job Market:** Implement measures for a fairer distribution of care responsibilities between genders, like parental leave and reduced work hours.

**3. Alleviate Rural Unpaid Work:** Reduce the extra caregiving burden on women and girls in rural areas by improving infrastructure to save time spent on tasks like fetching water, farming and cooking.

**4. New Economic Policies:** Support these measures with macroeconomic policies that generate jobs, allocate resources for care services, invest in rural infrastructure and ensure effective regulations to make these changes a reality.

**UPSC Syllabus Topic:** Economy

### 18. Dogra architecture gets a revival at J&K's Maharaj Gunj

**Source:** The post is based on the article “Dogra architecture gets a revival at J&K's Maharaj Gunj” published in “The Hindu” on 26th October 2023

#### Why in the News?

Srinagar Smart City Ltd. and the Kashmir chapter of the Indian National Trust for Art and Cultural Heritage (INTACH) have joined hands to conserve vernacular elements of Dogra architecture in Kashmir.

#### What is Dogra Architecture?

Dogra architecture refers to the traditional architectural style and building practices associated with the Dogra community.

They primarily ruled over Jammu and Kashmir from 1846 to 1947.

**Examples of Dogra Architecture:** Mubarak mandi, Jharokha style of balcony, Amar Mahal Palace.

#### Key Features of Dogra Architecture:

**1. Use of Local Materials:** Dogra architecture often utilizes locally available materials such as wood, stone, and clay, which help in maintaining a comfortable indoor temperature and provide insulation from the harsh weather.

**2. Sloping Roofs:** Houses in this style typically have sloping roofs to allow for the shedding of snow and rain which is common in the region.

**3. Carved Wooden Elements:** Intricate wood carvings on doors, windows and balconies showcasing the artistic skills of the local craftsmen.

**4. Courtyard Design:** Houses are often designed around a central courtyard, providing a private and functional space for the family.

**5. Adaptation to Climate:** Dogra architecture is designed to withstand extreme weather conditions, including cold winters and hot summers.

**UPSC Syllabus Topic:** Architecture

## Factly Compilation for the Month of October (Fourth Week) 2023

### 19. In a first, Army gets vertical wind tunnel to train special forces

**Source:** The post is based on the article “In a first, Army gets vertical wind tunnel to train special forces” published in “The Hindu” on 26th October 2023

#### Why in News?

The Indian Army has installed its first vertical wind tunnel (VWT) at the Special Forces Training School (SFTS) at Bakloh in Himachal Pradesh.

#### Why is the Vertical Wind Tunnel(VWT) installed by the army?

**Purpose:** It offers a controlled environment to enable military trainees to enhance their skills by simulating real-life free fall conditions.

#### Benefits:

- 1. Improved Skill Development:** It helps armed forces personnel enhance their abilities by simulating various freefall scenarios.
- 2. Stability and Safety:** It reduces potential instability during freefall and parachute deployment. This makes it an invaluable tool for training beginners and advanced free-fallers.
- 3. Assessment:** The system aids in assessing individual reactions to situations in airborne operations.

**UPSC Syllabus Topic:** Indian Defence

### 20. ISA to release report on global adoption of solar technology in November

**Source:** The post is based on the article “ISA to release report on global adoption of solar technology in November” published in “The Hindu” on 26th October 2023

#### Why in the News?

The International Solar Alliance (ISA) will for the first time compile and release a ‘Global solar stocktake report’.

#### What is the Global solar Stocktake Report?

**To be released by:** International Solar Alliance (ISA)

**Inspired by:** ‘Global Stocktake’ of the United Nations Conference of Parties

**Aim:** To take stock of the progress made by countries in the solar energy sector.

**Focus of the report:** In 2020, there was about \$300 billion invested in solar, and in 2022, it was around \$380 billion. But most of the manufacturing is in China. The stocktake will explore ways to diversify this manufacturing.

#### What is a Global Solar Facility?

**To be Launched by:** International Solar Alliance (ISA)

**Aim:** To help reduce the remaining constraints related to contracts and financing for solar energy projects.

**Focus area:** To expand solar installations in Africa and then expand it to West Asia, Latin America, and the Caribbean.

**Funds:** It will have three funds: **1)** payment guarantee fund **2)** Insurance fund to mitigate project risks and **3)** Investment fund for technical assistance.



## Factly Compilation for the Month of October (Fourth Week) 2023

How much gigawatts of solar photovoltaic panels have been installed globally?

As of 2022, global solar photovoltaic installations have reached 1,133 gigawatts (GW) with 191 GW added in 2022.

China accounts for about a quarter of this total solar photovoltaic installations followed by the United States.

India is also among the top five countries globally with 62 GW of installations.

**UPSC Syllabus Topic:** International Organizations

### 21. Cabinet approves Memorandum of Cooperation between India and Japan on Japan-India Semiconductor Supply Chain Partnership

**Source:** The post is based on the article “Cabinet approves Memorandum of Cooperation between India and Japan on Japan-India Semiconductor Supply Chain Partnership” published in “PIB” on 26th October 2023

**Why in the News?**

The Union Cabinet of India has approved a memorandum of cooperation between India and Japan on a Semiconductor Supply Chain Partnership.

**What is the purpose of the Japan-India Semiconductor Supply Chain Partnership?**

**Aim:** To strengthen cooperation between India and Japan towards enhancement of the semiconductor supply chain.

**Duration of the Partnership:** Five Years

**Type of Cooperation:** The partnership is for both Governments-to-Government (G2G) and Business-to-Business (B2B) collaboration in the semiconductor supply chain sector.

**What is India-Japan Digital Partnership(IJDP)?**

**Signed in:** 2018

**Aim:** To strengthen existing cooperation within the Science and Technology/Information and Communication Technology sector.

**UPSC Syllabus Topic:** International Relations

### 22. India hosting meeting of the United Nations Forum on Forests to deliberate on forest fires and forest certification

**Source:** The post is based on the article “India hosting meeting of the United Nations Forum on Forests to deliberate on forest fires and forest certification” published in “PIB” on 26th October 2023

**What is the News?**

The Ministry of Environment, Forest and Climate Change is organizing a Country-Led Initiative (CLI) event as part of the United Nations Forum on Forests (UNFF) at the Forest Research Institute (FRI), Uttarakhand.

**What is the United Nations Forum on Forests(UNFF)?**

| Specification  | Details                                   |
|----------------|---|
| Established in | 2000                                      |
| Type           | High-level intergovernmental policy forum |



## Factly Compilation for the Month of October (Fourth Week) 2023

|                       |   |
|-----------------------|---|
| <b>Established by</b> | Economic and Social Council of the United Nations (ECOSOC)                                    |
| <b>Aim</b>            | To promote the management, conservation, and sustainable development of all types of forests. |
| <b>Members</b>        | It is composed of all Member States of the United Nations and specialized agencies.           |
| <b>India</b>          | Founding Member   |
| <b>Headquarters</b>   | New York United States  |

**What is the United Nations Strategic Plan for Forests 2017-2030 (UNSPF)?**

**Adopted by:** UN General Assembly in 2017

**Purpose:** It is a global framework to achieve the sustainable management of all types of forests, including trees outside forests, and to combat deforestation and forest degradation.

**Target:** To increase forest area by 3% worldwide by 2030.

**Goals:** The plan contains a set of six Global Forest Goals and 26 associated targets to be reached by 2030.

All these are voluntary in nature and universally applicable.

### **Six Global Forest Goals:**

**Goal 1:** Reverse the loss of forest cover worldwide. This is by adopting sustainable forest management, including protection, restoration, afforestation and reforestation.

**Goal 2:** Enhance forest-based economic, social and environmental benefits. This includes improving the livelihoods of forest-dependent people.

**Goal 3:** Increase significantly the area of protected forests worldwide and other areas of sustainably managed forests.

**Goal 4:** Mobilize new and additional financial resources from all sources. This is for the implementation of sustainable forest management and strengthening scientific and technical cooperation and partnerships.

**Goal 5:** Promote governance frameworks to implement sustainable forest management.

**Goal 6:** Enhance cooperation, coordination, coherence and synergies on forest-related issues at all levels

**UPSC Syllabus Topic:** Environment

### **23. As Gujarat's Dhordo village gets UNWTO recognition, PM Modi says it showcases India's tourism potential**

**Source:** The post is based on the article "As Gujarat's Dhordo village gets UNWTO recognition, PM Modi says it showcases India's tourism potential" published in "The Hindu" on 26th October 2023

#### **Why in the News?**

The United Nations World Tourism Organization (UNWTO) has included Dhordo village (Gujarat) on the list of 'Best Tourism Villages 2023'.

#### **Where is Dhordo Village?**

**Located in:** Great Rann of Kutch, Gujarat.

## Factly Compilation for the Month of October (Fourth Week) 2023

**Known for:** Annual Rann Utsav Festival, which celebrates the region's rich cultural heritage, traditional arts, music and crafts.

**What is the Best Tourism Villages Initiative?**

**Started by:** United Nations World Tourism Organization (UNWTO)

**Aim:** To promote tourism for sustainable development globally.

**The award is given to villages** that are leaders in rural development and preservation of landscapes, cultural diversity, local values and food traditions.

**What is the United Nations World Tourism Organization (UNWTO)?**

| Specification  | Details  |
|----------------|--|
| Established in | 1975   |
| Type           | United Nations Specialized Agency                                      |
| Aim            | To promote responsible, sustainable and universally accessible tourism |
| Headquarters   | Madrid, Spain  |

**UPSC Syllabus Topic:** Art and Culture/International Organizations

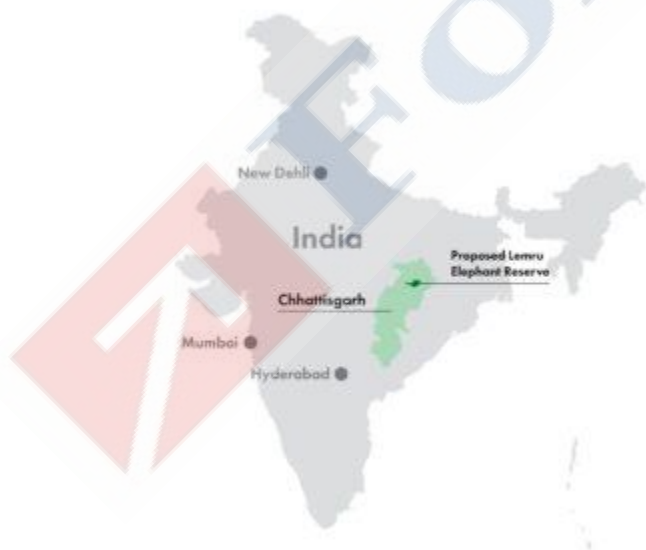
### 24. Lemru Elephant Corridor: Coal Ministry ensures utmost Environ care while Enhancing Coal Production

**Source:** The post is based on the article “Lemru Elephant Corridor: Coal Ministry ensures utmost Environ care while Enhancing Coal Production” published in “PIB” on 26th October 2023

**Why in the News?**

The Ministry of Coal has excluded certain coal mines from development to protect forest areas including the Lemru Elephant Corridor.

**Where is Lemru Elephant Reserve?**



**Located in:** Chhattisgarh

## Factly Compilation for the Month of October (Fourth Week) 2023

**Objective:** To provide elephants with a permanent habitat, reduce property damage, and mitigate human-elephant conflicts.

**Significance:** The area under the reserve is part of the **Hasdeo Aranya forests**.

**Where is Hasdeo Aranya forests?**

**Located in:** Chhattisgarh

**Called as:** “Lungs of Chhattisgarh“

**River:** It is the catchment area of the Hasdeo river, the largest tributary of the Mahanadi.

**Significance:** It is said to be the largest contiguous stretch of dense forestland in central India.

**UPSC Syllabus Topic:** Environment – Elephant Reserve

### 25. Lok Sabha’s Ethics Committee: its history, constitution and members

**Source:** The post is based on the article “**Lok Sabha’s Ethics Committee: its history, constitution and members**” published in “**Indian Express**” on **26th October 2023**

**Why in News?**

Lok Sabha Speaker has referred a “cash-for-query” complaint made by an MP against another MP to the Lok Sabha Ethics Committee.

**What is Lok Sabha Ethics Committee?**

| Specifications      | Detail   |
|---------------------|--|
| <b>Origin</b>       | <b>1996:</b> Presiding Officers’ Conference suggested ethics panels for both houses.<br><b>1997:</b> Ethics Committee constituted in Rajya Sabha<br><b>13th Lok Sabha:</b> Committee of Privileges recommends Lok Sabha Ethics Committee<br><b>2000:</b> Ad hoc Ethics Committee established in Lok Sabha.<br><b>2015:</b> Ethics Committee becomes a permanent part of Lok Sabha. |
| <b>Members</b>      | 15   |
| <b>Appointed by</b> | The Speaker appoints members of the committee for one year.  |
| <b>Functions</b>    | 1. To examine every complaint relating to unethical conduct of a Member of Lok Sabha referred to it by the Speaker and make recommendations<br>2. To formulate a code of conduct for Members<br>3. To suggest amendments or additions to the code of conduct from time to time.  |

### **What is the difference between Ethics committee and privilege committee?**

The work of the Ethics Committee and the Privileges Committee often overlap. An allegation of corruption against an MP can be sent to either body, but usually more serious accusations go to the Privileges Committee.

A non-MP too can be interrogated by the privilege committee for actions that attack the authority and dignity of the House. The Ethics Committee can take up only cases of misconduct that involve MPs.

## Factly Compilation for the Month of October (Fourth Week) 2023

**UPSC Syllabus Topic:** Indian Polity– Important Bodies.

### 26. Vajra Mushti Kalaga: A martial art form in terminal decline

**Source:** The post is based on the article “**Vajra Mushti Kalaga: A martial art form in terminal decline**” published in “**The Hindu**” on **26th October 2023**

**Why in the News?**

Vajra mushti kalaga is a martial art form. It has gone extinct and takes place only during Dasara.

**What is Vajra Mushti Kalaga?**



**Source: The Hindu**

| Specifications          | Details   |
|-------------------------|---|
| Vajra Mushti Kalaga     | It is a Martial Art Form  |
| Meaning                 | Thunderbolt Fist  |
| Objective               | Neutralize opponent and counter their weapon  |
| Technique used          | Hand-to-hand combat like grappling, wrestling, and striking   |
| Weapon used             | Knuckle Duster, a small metal weapon.   |
| Knuckle duster Material | Made of animal horns and worn on the knuckles of the fighter  |
| Characteristics         | It is a form of wrestling different from conventional grappling. In this, two persons take a swipe at each other's head with a knuckle duster. Whoever draws the blood from the opponent's head first is declared the winner. |
| Popular During          | Vijayanagar rulers (14th-17th centuries)  |
| Significance            | Noticed by medieval travelers from Portugal during Navaratri celebrations in Vijayanagar empire   |

**UPSC Syllabus Topic:** Paintings and other art forms

### 27. World Energy Outlook 2023: Substantial cut likely in India's CO2 emissions by 2050

**Source:** The post is based on the article “**World Energy Outlook 2023: Substantial cut likely in India's CO2 emissions by 2050**” published in “**TOI**” on **27th October 2023**



## Factly Compilation for the Month of October (Fourth Week) 2023

### Why in the News?

The [International Energy Agency\(IEA\)](#) has released the World Energy Outlook 2023.

### What is the World Energy Outlook 2023?

**Released by:** International Energy Agency(IEA)

**Aim:** To provide in-depth analysis and strategic insights into every aspect of the global energy system.

### Key Highlights from the report:

#### Globally:

- 1.Fossil fuel share in the global energy supply is projected to reduce from around 80% to 73% by 2030.
- 2.Investment in clean energy has risen by 40% since 2020.
- 3.In 2020, one in 25 cars sold was electric.in 2023, this is now one in 5.

#### India:

India is expected to have the highest growth in energy demand over the next three decades.

But India's industrial sector will emit 30% less CO2 by 2030 and passenger cars will emit 25% less CO2 per kilometer driven.

This is due to the government policies in addressing climate commitments through increased efficiency and new technologies.

**UPSC Syllabus Topic:** Renewable Energy

### 28. Gulf of Guinea: EU and India carry out joint naval exercise

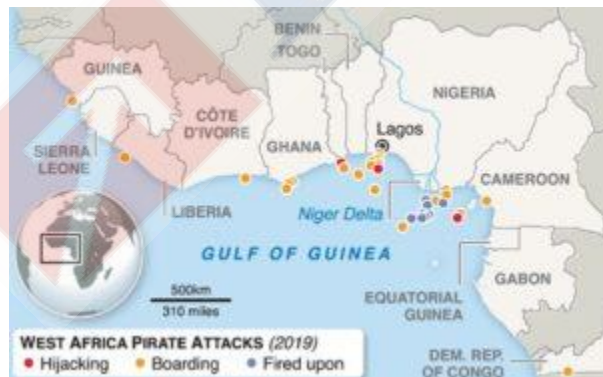
**Source:** The post is based on the article **"Gulf of Guinea: EU and India carry out joint naval exercise"** published in **"PIB"** on **27th October 2023**

### Why in the News?

India and the European Union (EU) have conducted their maiden joint naval exercise in the Gulf of Guinea.

The exercise was conducted with the aim to boost maritime security cooperation in the region.

### Where is the Gulf of Guinea?



| Specification | Details |
|---------------|---------|
|---------------|---------|



## Factly Compilation for the Month of October (Fourth Week) 2023

|                     |  |
|---------------------|--|
| <b>Location</b>     | Western African Coast  |
| <b>Ocean</b>        | Northeastern most part of the Atlantic Ocean   |
| <b>Rivers</b>       | The Volta and Niger rivers are two of its primary tributaries  |
| <b>Known for</b>    | Oil and natural gas.   |
| <b>Significance</b> | Null Island, defined as the intersection of the Equator and Prime Meridian (zero degrees latitude and longitude) is in the gulf. |
| <b>Piracy</b>       | The Gulf of Guinea is also known as the world's hotspot for maritime piracy.   |

**UPSC Syllabus Topic:** Places in News

### 29. India's green hydrogen move may worsen pollution if steps are not in place, says study

**Source:** The post is based on the article “**India's green hydrogen move may worsen pollution if steps are not in place, says study**” published in “**The Hindu**” on **27th October 2023**

#### Why in the News?

A study by Climate Risk Horizons(CRH) has said that India's plans to produce 'green hydrogen' could lead to increased pollution without proper oversight.

#### Can India achieve the target setup under the National Green Hydrogen Mission?

The **National Green Hydrogen Mission** aims to make five million tonnes of green hydrogen by 2030.

To do this, India needs to set up renewable energy sources with a capacity of 125 gigawatts and use 250,000 gigawatt-hour units of power which is around 13% of what India currently uses for electricity.

However, as of August 2023, India's renewable energy capacity was 131 gigawatts.

To meet this 2030 green hydrogen goal, India needs to add a similar amount of renewable energy by 2030.

This is on top of the commitment to add 500 gigawatts of renewable energy by 2030, which is part of the Paris Agreement.

In 2023, India added only 15 gigawatts of new solar and wind energy capacity, falling short of the 45 gigawatts they need to add each year to reach their 2030 target.

#### What are the concerns related to production of Green Hydrogen?

| Specification  | Details  |
|--|--|
| <b>Definition of Green Hydrogen</b>                        | Green hydrogen has been defined as hydrogen with emissions of no more than two kg of carbon dioxide per kg of hydrogen. This definition leaves room for interpretation.              |
| <b>Source of electricity for Green Hydrogen production</b> | Running electrolyzers 24×7 could lead to reliance on coal-based power, especially during nighttime when solar power is unavailable. This would lead to increase in carbon emissions. |

**UPSC Syllabus Topic:** Renewable Energy

## Factly Compilation for the Month of October (Fourth Week) 2023

### 30. SC allows surrogacy, strikes down rule banning use of donor gametes

**Source:** The post is based on the article “SC allows surrogacy, strikes down rule banning use of donor gametes” published in “The Hindu” on 27th October 2023

#### Why in the News?

The Supreme Court has allowed a woman with **Mayer-Rokitansky-Kuster-Hauser (MRKH)** Syndrome to undergo surrogacy using a donor egg.

#### What was the case about?

## Easing the path

On March 14, 2023, government notified amendments to the law to ban the use of donor gametes, saying ‘intending couples’ must use their own gametes for surrogacy

■ Supreme Court says the amendment cannot contradict Rule 14(a), which specifically recognises the absence of a uterus or any allied condition as a medical indication necessitating gestational surrogacy



Source: The Hindu

The woman suffers from Mayer Rokitansky Kuster Hauser syndrome. Medical records confirm her inability to produce eggs or have a uterus.

Due to this, the couple began the gestational surrogacy process.

But the government amended the surrogacy act in 2023 which banned the use of donor gametes. It required “intending couples” to use their own gametes for surrogacy.

Against this, a petition was filed in the Supreme Court arguing that the amendment violated a woman’s right to parenthood.

The petitioner argued that the amendment contradicted Surrogacy Act, 2021 which recognised the situation when a medical condition would require a couple to opt for gestational surrogacy in order to become parents.

## Factly Compilation for the Month of October (Fourth Week) 2023

However, the government argued that surrogacy could only be availed if the child was “genetically related” to the intending couple.

### What did the Supreme Court ruled on this?

The Supreme Court found the amendment contrary to the main provisions of the Surrogacy Act.

The court said that the Surrogacy Act recognizes medical conditions necessitating gestational surrogacy and the amendment cannot contradict this.

### What is Mayer-Rokitansky-Kuster-Hauser(MRKH)?

| Specifications    | Details  |
|-------------------|--|
| <b>Definition</b> | It is a rare congenital disorder that affects the female reproductive system. This condition is characterized by an underdeveloped vagina and uterus.          |
| <b>Caused by</b>  | Incomplete development of the Müllerian duct. This structure in the embryo develops into the uterus, fallopian tubes, cervix and the upper part of the vagina. |
| <b>Prevalence</b> | Rare, occurring in approximately 1 in 4,000 to 5,000 female births.  |
| <b>Fertility</b>  | Usually unable to conceive and carry a pregnancy due to the absence of a uterus, but assisted reproductive technologies like surrogacy may be an option.       |

**UPSC Syllabus Topic:** Diseases

### 31. ‘Super rich’ incomes’ share ebbing amid middle-class mobility: CBDT

**Source:** The post is based on the article “‘Super rich’ incomes’ share ebbing amid middle-class mobility: CBDT” published in “The Hindu” on 27th October 2023

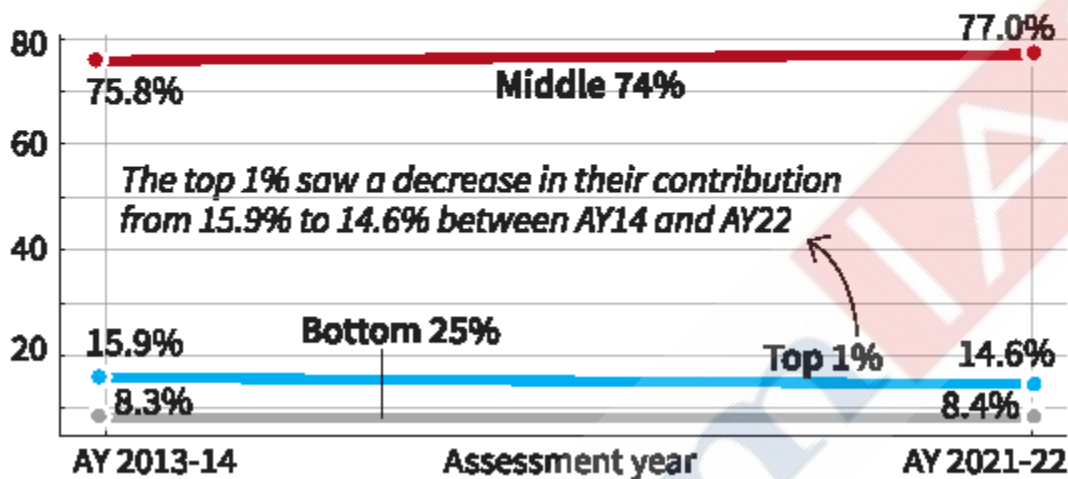
#### Why in the News?

Central Board of Direct Taxes(CBDT) has released data on India’s Tax base.

What are the key highlights from the CBDT's data?

## Marginal shift in contributions

There has been a subtle change in the gross total income contributions among individual taxpayers



Source: The Hindu

**1. Widening Tax Base in India since 2013-14:** India's tax base has significantly expanded since 2013-14.

– The number of income tax returns filed by individuals has increased from 3.36 crore to 6.37 crore between assessment years 2013-14 and 2021-22.

**2. Increased Taxpayer Diversity Across Income Ranges:** The number of returns filed by individual taxpayers in various income ranges has grown.

– In the income range up to ₹5 lakh, there has been a 32% increase in the number of returns filed, including those with incomes below the taxable limit.

– For higher income ranges of ₹5 lakh to ₹10 lakh, the number of returns filed increased by 295%.

**3. Share of Top 1% Individual taxpayers:** The share of the top 1% of individual taxpayers, compared to all individuals, has gone down from 15.9% to 14.6%.

– In contrast, the share of the bottom 25% of taxpayers increased slightly from 8.3% to 8.4% during the same time.

**4. Gross Total Income:** The increase in average gross total income for top 1% individual taxpayers is 42% while that for bottom 25% individual taxpayers is 58%.

**UPSC Syllabus Topic:** Taxation



## Factly Compilation for the Month of October (Fourth Week) 2023

### 32. Eight former Indian Navy officers get death penalty in Qatar

**Source:** The post is based on the article “Eight former Indian Navy officers get death penalty in Qatar” published in “The Hindu” on 27th October 2023

#### Why in the News?

Eight former Indian Navy personnel working for a company in Doha were given the death penalty by a local court in Qatar.

#### Why have former Indian Navy personnel sentenced to death in Qatar?

|  |  |   |
|--|--|---|
| <h3>Case History</h3> <p><b>In August 2022</b>, eight Indian nationals – all retired Indian Navy personnel – were arrested by Qatari intelligence</p> <p>Capt <b>Navtej Singh Gill</b>, Capt <b>Birendra Kumar Verma</b>, Capt <b>Saurabh Vasisht</b>, Cdr <b>Amit Nagpal</b>, Cdr <b>Purnendu Tiwari</b>, Cdr <b>Sugunakar Pakala</b>, Cdr <b>Sanjeev Gupta</b>, Sailor <b>Ragesh</b> were working for Al Dahra company</p> <p><b>Before taking up jobs</b> at Al Dahra, all had retired from Indian Navy several years ago</p> | <p><b>Initially</b>, they were kept in solitary confinement without clear charges</p> <p><b>They were charged with spying in Qatar on behalf of Israel</b></p> <p><b>Al Dahra</b> was shut down after the arrests</p> <p><b>Reports said the personnel were working on a project to develop small, stealth submarines for the Qatar Navy</b></p> | <p><b>India had secured consular access</b> to the accused and provided legal assistance</p> <p><b>Trial started</b> in March this year</p> <p><b>Qatari court of first instance</b> has pronounced them guilty and awarded death sentence</p> <p>India is ‘<b>deeply shocked</b>’ at the verdict and ‘exploring legal options’</p> |
|--|--|---|



Source: Economic Times

The Former Indian Navy Personnel were working for a defence company in Qatar.

This company was involved in training Qatar’s armed forces. It also used to produce high-tech Italian-origin submarines that are known for stealth capabilities.

The former navy personnels have been charged with the offense of spying for Israel on Qatar’s advanced submarines.

#### What will be the impact of this verdict on India-Qatar relations?

This verdict could impact relations between India and Qatar because:

1. There are over seven lakh Indians in Qatar.
2. Qatar is the largest supplier of LNG to India which accounts for over 48% of India’s global LNG imports.
3. India also imports ethylene, propylene, ammonia, urea and polyethylene from Qatar.

**UPSC Syllabus Topic:** International Relations: India-West Asia

### 33. Global Tax Evasion Report 2024

**Source:** The post is based on the article “Global Tax Evasion Report 2024” published in “EU” on 27th October 2023

#### Why in the News?

The European Union Tax Observatory has released ‘Global Tax Evasion Report 2024’.

#### What is the Global Tax Evasion Report 2024?

**Released by:** European Union Tax Observatory

**Aim:** To discuss tax evasion, the **Global Minimum Tax (GMT)** and measures to combat tax evasion.



## Factly Compilation for the Month of October (Fourth Week) 2023

**Note:** Tax evasion is the illegal act of not paying owed taxes to the government by under-reporting income, hiding money offshore or inflating deductions to reduce tax liability.

### Key highlights of the report:

|  |  |
|--|--|
| <b>1. Tax Rates for Global Billionaires</b>                    | Global billionaires often have effective tax rates as low as 0% to 0.5% due to the use of shell companies to avoid income taxation.  |
| <b>2. Profit Shifting by Multinational Corporations (MNCs)</b> | In 2022, MNCs shifted around USD 1 trillion to tax havens, equivalent to 35% of their profits earned outside their home countries.<br>– “Greenwashing the Global Minimum Tax” allows MNCs to use ‘green’ tax credits to lower their tax rates below the 15% minimum. |
| <b>3. Challenges in Curbing Offshore Tax Evasion</b>           | Over the past decade, offshore tax evasion has reduced, with only 25% of previously untaxed wealth remaining.<br>– However, challenges persist such as non-compliance by offshore financial institutions and limitations in sharing bank information automatically.  |

### Key recommendations of the report:

**1. Global Minimum Tax for Billionaires:** Proposes a global minimum tax of 2% on billionaires’ wealth to increase government revenue and reduce wealth inequality.

**2. Reform Corporate Taxation:** Reform international agreements on minimum corporate taxation by implementing a 25% tax rate and eliminating tax competition loopholes.

**3. Unilateral Measures for Tax Collection:** Implement unilateral measures to collect taxes from multinational companies and billionaires if global agreements fail.

**4. Global Asset Registry:** Work towards establishing a Global Asset Registry to enhance the fight against tax evasion.

**5. Strengthen Economic Substance and Anti-Abuse Rules:** Strengthen the application of economic substance and anti-abuse rules to deter tax avoidance and evasion.

**UPSC Syllabus Topic:** Taxation- Indian Economy

### 34. Centre launches ‘Dark Patterns Buster Hackathon 2023’ to design & prototype innovative app or software that can detect dark patterns on e-Commerce platforms

**Source:** The post is based on the article “Centre launches ‘Dark Patterns Buster Hackathon 2023’ to design & prototype innovative app or software that can detect dark patterns on e-Commerce platforms” published in “PIB” on 27th October 2023

#### Why in the News?

The Department of Consumer Affairs in collaboration with IIT (BHU) has launched Dark Patterns Buster Hackathon 2023.

#### What are Dark Patterns?

**Dark Patterns-** A dark pattern refers to a design or user interface technique that is intentionally created to **manipulate or deceive users into making certain choices** or taking specific actions that **may not be in their best interest**.

## Factly Compilation for the Month of October (Fourth Week) 2023

It is a deceptive practice employed to influence user behavior in a way that benefits the company implementing it.

What are the different types of Dark Patterns?

| Specifications           | Details   |
|--------------------------|---|
| <b>Trick Questions</b>   | It means the deliberate use of confusing or vague language to misguide or misdirect a user from taking desired action or leading consumers to take a specific response or action.   |
| <b>Saas Billing</b>      | It is a process of generating and collecting payments from consumers on a recurring basis in a software as a service (SaaS) business model.   |
| <b>Rogue Malwares</b>    | It uses ransomware to mislead/trick users into believing there is a virus on their computer. It then convinces them to pay for a fake malware removal tool that actually installs malware on their computer.  |
| <b>Forced action</b>     | It means forcing a user into taking an action that would require the user to buy any additional good(s) or subscribe or sign up for an unrelated service or <i>share personal information</i> , in order to buy or subscribe to the product/service originally intended by the user.                            |
| <b>Confirm shaming</b>   | It means using a phrase, video, audio or any other means to create a sense of fear or shame or ridicule or guilt in the mind of the user, so as to nudge the user to act in a certain way that results in the user purchasing a product or service from the platform or continuing a subscription of a service, |
| <b>Nagging</b>           | In this, the user is continuously subjected to requests, information, choices or disruptions in order to push them to make a transaction and make some commercial gains   |
| <b>Basket sneaking</b>   | It is used to add additional products or services to the shopping cart without the user's consent   |
| <b>Bait &amp; switch</b> | Advertising a certain product/ service but delivering another, often of lower quality;  |

UPSC Syllabus Topic: Science and Technology

### 35. Anamalai Tiger Reserve panel assesses progress of tiger rewilding project

**Source:** The post is based on the article “ATR panel assesses progress of tiger rewilding project” published in “The Hindu” on 27th October 2023

Why in the News?

A committee visited the Anamalai Tiger Reserve to check the progress of the Forest Department's first Tiger rewilding project.

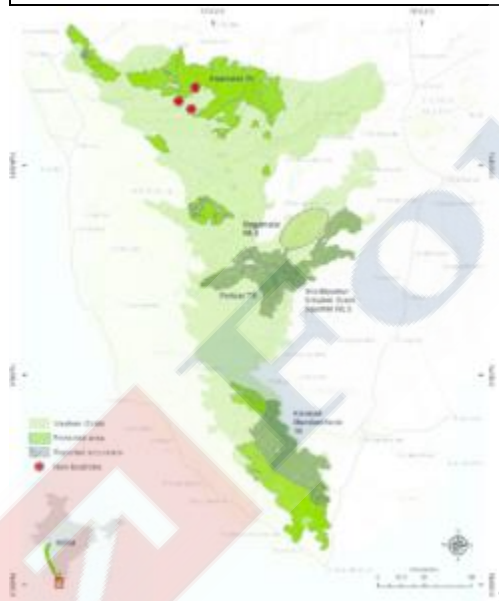
## Factly Compilation for the Month of October (Fourth Week) 2023

### What is Tiger Rewilding?

Rewilding involves the reintroduction of a captive tiger cub into the wild when it becomes clear that the tiger cub is capable of surviving in the jungle independently.

### Where is Anamalai Tiger Reserve?

| Specification                  | Details   |
|--------------------------------|---|
| State                          | Tamil Nadu  |
| Located in                     | South Western Ghats   |
| Surrounded by                  | Parambikulam Tiger Reserve on the East, Chinnar Wildlife Sanctuary and Eravikulam National Park on the South Western side.  |
| Declared as a Tiger Reserve in | 2007  |
| Forest Type                    | It supports diverse forest types: Wet evergreen forests, semi evergreen forests, moist deciduous, dry deciduous, dry thorn and shola forests.                                 |
| Flora                          | Around 2500 species are found   |
| Fauna                          | Tiger, Asiatic elephant, Nilgiri Tahr, Lion Tailed Macaque, Great Indian Hornbill among others.<br>It is also home to 15 of 16 species of birds endemic to the Western Ghats. |
| Tribes                         | The reserve is home to six tribes: Kadars, Malasars, Pulaiyars, Mudugars and Eravallan.   |



Source- Research Gate

**UPSC Syllabus Topic:** National Parks/Wildlife Sanctuaries

### 36. Pradhan Mantri Matru Vandana Yojana

**Source:** The post “Pradhan Mantri Matru Vandana Yojana” is based on the article “Pradhan Mantri Matru Vandana Yojana is a prime example of how Digital Connection and emotional

## Factly Compilation for the Month of October (Fourth Week) 2023

**and administrative responsibility can come together: Union Minister”** published in “**PIB**” on 28th October 2023

### Why in the News?

The Ministry of Women and Child Development has launched a new Pradhan Mantri Matru Vandana Yojana (PMMVY) portal.

### What is Pradhan Mantri Matru Vandana Yojana(PMMVY)?

|                       |   |
|-----------------------|---|
| <b>Launched in</b>    | 2017  |
| <b>Component of</b>   | Mission Shakti since 2022   |
| <b>Nodal Ministry</b> | Ministry of Women and Child Development   |
| <b>Type</b>           | Centrally Sponsored Scheme  |
| <b>Objectives</b>     | 1.To provide partial compensation for the wage loss in terms of cash incentive, so that the woman can take adequate rest before and after delivery of the first child.<br>2.To improve health seeking behavior amongst the Pregnant Women & Lactating Mothers (PW&LM).  |
| <b>Eligibility</b>    | The scheme covers all Pregnant Woman & Lactating Mothers (PW&LM), excluding PW&LM who are in regular employment with the Central Government or State Governments or the Public Sector Undertakings (PSUs) or those who are in receipt of similar benefits under any law.  |
| <b>Limit</b>          | The maternity benefit is to be provided to a woman for the first two children provided the second child is a girl   |
| <b>Benefits</b>       | <b>First Child:</b> ₹5000 (in two installments) under PMMVY. Plus additional cash incentive of Rs 1000 under Janani Suraksha Yojana (JSY) after institutional delivery. On an average ,a women gets ₹6000 total<br><b>Second Child:</b> Benefit of ₹6000 is to be provided subject to the second child being a girl child. This will be provided in one instalment after the birth. |

**UPSC Syllabus:** Government Schemes

### 37. **Brazzaville Declaration**

**Source:** The post is based on the article “**Brazzaville Declaration**” published in “**MEA**” on 28th October 2023

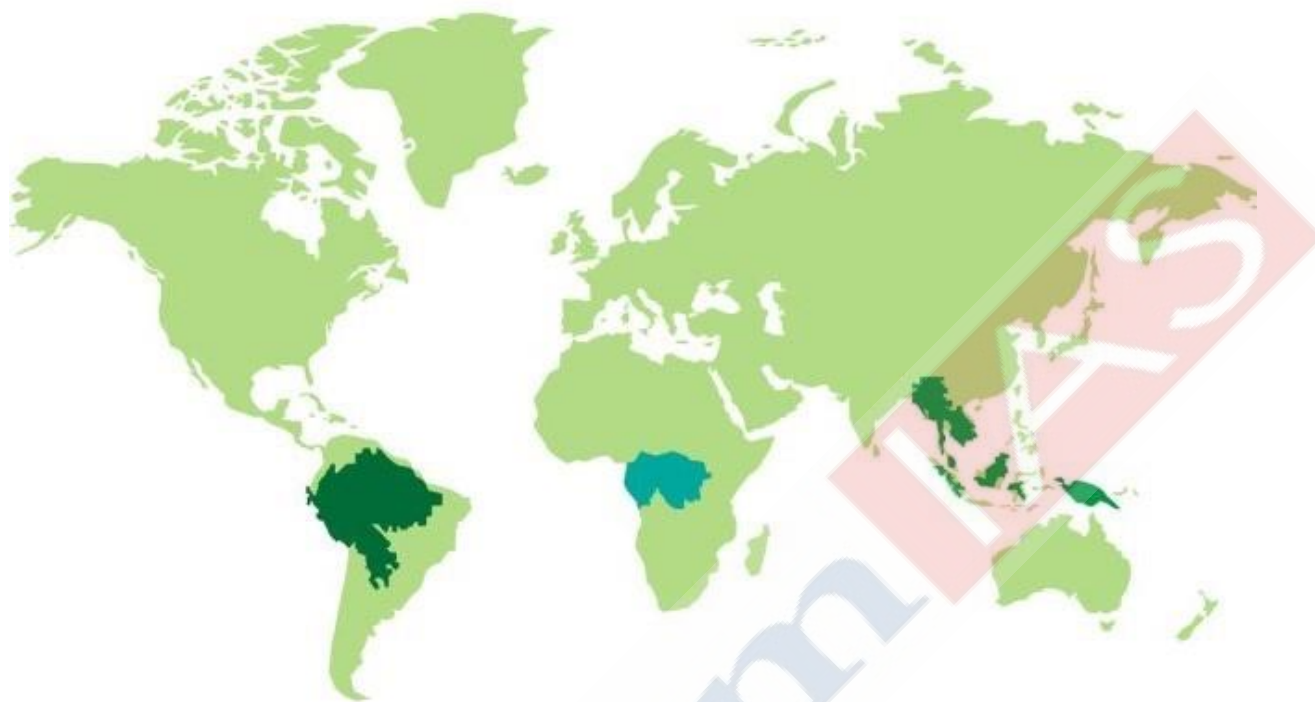
### Why in the News?

A Summit of Three basins is going to be held at Brazzaville, Republic of Congo.



## Factly Compilation for the Month of October (Fourth Week) 2023

What are these three basins?



| Three Basins                              | Details  |
|---|--|
| <b>Congo Basin</b>                        | <p>1) It is the second-largest tropical forest in the world in terms of area.</p> <p>2) It spans across six countries—Cameroon, Central African Republic, Democratic Republic of the Congo, Republic of the Congo, Equatorial Guinea and Gabon.</p>  |
| <b>Amazon basin</b>                       | <p>It is the largest tropical forest on the planet. It extends over 9 countries in South America: Brazil, Peru, Ecuador, Colombia, Venezuela, Bolivia, French Guiana, Suriname and the Republic of Guyana.</p>   |
| <b>Borneo-Mekong-Southeast Asia Basin</b> | <p>It is the world's third largest carbon sink. It is composed of two sub-regions, the island of Borneo and the Mekong River. The Mekong River is one of the largest rivers in the world. It crosses six countries: China, Myanmar, Thailand, Laos, Cambodia and Vietnam.</p> <p>Borneo is the fourth largest island in the world. It is divided between Brunei, Malaysia and Indonesia.</p> |

**What is the Brazzaville Declaration?**

| Specification    | Details  |
|------------------|--|
| <b>Signed in</b> | 2018   |
| <b>Signed by</b> | Democratic Republic of Congo(DRC), the Republic of Congo and Indonesia |

## Factly Compilation for the Month of October (Fourth Week) 2023

|                  |  |
|------------------|--|
| <b>Objective</b> | To protect the Cuvette Centrale region in the Congo Basin, the world's largest tropical peatlands, from unregulated land use and prevent its drainage and degradation. |
|------------------|--|

**UPSC Syllabus:** International Relations

### 38. Mizoram has highest cancer incidence rate in India, finds study

**Source:** The post is based on the article “Mizoram has highest cancer incidence rate in India, finds study” published in “The Hindu” on 28th October 2023

#### Why in the News?

A study has been released titled “Cancer awareness, diagnosis and treatment needs in Mizoram, India: evidence from 18 years trends (2003–2020)”.

#### What are the key findings of the study related to Cancer cases in Mizoram?

| Specifications   | Details  |
|--|--|
| <b>Highest Cancer Incidence in Mizoram</b>               | Mizoram has the highest cancer incidence rate in India despite being the second least populated state in India.  |
| <b>Most Cancer causes</b>                                | Stomach cancer is the primary cause of cancer-related deaths in men, while lung cancer is a significant cause among women.   |
| <b>Increase in Cancer cases among younger population</b> | Cancer cases and deaths are growing among the younger generation in Mizoram. Factors might include the sedentary lifestyle and dietary habits among the local tribal population. |
| <b>Reasons for higher cancer deaths in Mizoram</b>       | Lack of specialized diagnostic facilities, skilled medical personnel, treatment strategies based on genetic research and transportation challenges.                              |

#### What is Cancer?

**According to the World Health Organisation**, cancer is a large group of diseases that can start in almost any organ or tissue of the body when abnormal cells grow uncontrollably and go beyond their usual boundaries to invade adjoining parts of the body or spread to other organs.

Cancer is the **second leading cause of death globally** accounting for one in six deaths in 2018.

**Among men**, lung, prostate, colorectal, stomach and liver cancer are the most common types of cancer.

**Among women**, Breast, colorectal, lung, cervical and thyroid cancer are the most common among women.

#### What is the data related to cancer cases in India?

**1.Cancer Likelihood:** One in nine people in India is at risk of developing cancer during their lifetimes.

**2.Leading Cancer causes:** Lung cancer is prominent among males, while breast cancer is prevalent among females.

– For childhood cancers (0-14 years), lymphoid leukaemia is the most common cause.

## Factly Compilation for the Month of October (Fourth Week) 2023

**3.Expected Increase in Cancer Cases:** Study has indicated a 12.8% increase in cancer cases in India by 2025 compared to 2020.

**UPSC Syllabus:** Social Issues, Health and Disease

### 39. Dark pattern sales deemed 'cybercrime'

**Source:** The post is based on the article “Dark pattern sales deemed ‘cybercrime’” published in “The Hindu” on 28th October 2023

#### Why in the News?

The Consumer Affairs Secretary has said that the dark patterns practices carried out by airlines and travel portals can be called a “cybercrime.”

#### What are Dark Patterns?

[Click Here to read](#)

#### What are Dark Pattern practices used by Airlines?

**Indigo website:** It uses false urgency to make customers feel they must pay an extra fee for a seat as all free seats appear unavailable.

– Even if there are four or five available free seats, they are displayed at the bottom of the page making them harder to find.

– Passengers can click “skip” at the end of the seat selection but they aren’t clearly told that they’ll be automatically assigned a free seat if they don’t pay the extra fee.

**SpiceJet’s booking website:** It encourages passengers to buy travel insurance by using phrases like “I will risk my trip” if they decide not to make the purchase.

– This creates a sense of fear suggesting that not getting the insurance could be risky or harmful for the trip.

#### What are the Parliamentary Committee recommendations on ticket prices of Airlines?

- 1.Airlines must display seat-wise airfares to ensure transparency.
- 2.Direcatorate General of Civil Aviation(DGCA) should ensure proper implementation of the Aircraft Rules, 1934 to ensure that airlines earn only a reasonable profit while pricing their tickets.
- 3.Effective mechanism should be there to address consumer grievances in a time-bound manner.

### 40. What is a ghost particle?

**Source:** The post is based on the article “What is a ghost particle?” published in “The Hindu” on 28th October 2023

#### Why in the News?

China is building the world’s largest telescope called “Trident” below the South China Sea.The job of the telescope is to detect “ghost particles” also known as neutrinos.

#### What are Ghost Particles or Neutrinos?

Neutrinos are tiny subatomic particles.They are often called ‘ghost particles’ because they barely interact with anything else.

#### Characteristics of Neutrinos:

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| Specifications              | Details  |
|-----------------------------|--|
| <b>Electrically neutral</b> | Neutrinos do not carry an electric charge which means they are not affected by electromagnetic forces. This allows them to pass through matter including most atoms, with minimal interaction. |
| <b>Extremely low mass</b>   | Neutrinos have a mass much smaller than other fundamental particles like electrons or quarks.  |
| <b>Weak Charge</b>          | Neutrinos' weak charge have made them difficult to observe. They can only be seen when they interact with other particles.   |

### How Do Scientists detect Ghost Particles or Neutrinos?

Ghost particles rarely interact with other particles but can interact with water molecules.

Underwater telescopes can detect neutrino interactions when they produce “muons,” which create detectable flashes of light.

The University of Madison-Wisconsin’s “IceCube” telescope is the largest neutrino-detecting telescope, located in Antarctica.

China is building a telescope called “Trident” in the South China Sea to detect Neutrinos.

### Why Does the Detection of Neutrinos Matter?

1. **Detecting Cosmic Rays:** Neutrinos will help solve a number of scientific mysteries like the origin of the cosmic rays which are known to contain neutrinos.

2. **Understanding Universe:** Neutrinos are essential for understanding the origins of our universe.

**UPSC Syllabus:** Science and Technology

### 41. Manual Scavenging

**Source:** The post “Manual Scavenging” is based on the article “**Rs 30 lakh compensation to be paid to families of those who die while cleaning sewers: SC**” published in “**Deccan Herald**” on 25th October 2023

#### Why in the News?

The Supreme Court has directed the Union and state governments to ensure the complete eradication of manual scavenging.

#### What is Manual Scavenging?

**Definition:** Manual scavenging refers to the practice of manually cleaning, handling, and disposing of human excreta and other waste materials from dry latrines, open drains and sewers.

**Banned in:** In India, manual scavenging has been officially banned since 1993.

**Deaths:** Over the past five years, 347 people have lost their lives while cleaning sewers and septic tanks in India. Uttar Pradesh, Tamil Nadu and Delhi accounted for 40% of these deaths.

#### What are the directives issued by the Supreme Court on Manual Scavenging?

1. Provide compensation of Rs 30 lakh to the families of individuals who lose their lives while cleaning sewers.



## Factly Compilation for the Month of October (Fourth Week) 2023

2. Those who suffer permanent disabilities during such work should receive a minimum compensation of Rs 20 lakh and

3. Those with other disabilities caused by sewer cleaning should receive Rs 10 lakh as compensation.

UPSC Syllabus- Polity and Nation

### 42. China imposes export curbs on graphite

**Source:** The post is based on the article “China imposes export curbs on graphite” published in “Financial Times” on 28th October 2023

#### Why in the News?

China has imposed export controls on graphite.

#### Why has China decided to impose an export curb on graphite?

**Aim:** To protect China’s national security and controlling supplies of critical minerals.

**Restrictions:** From December 1st, exporters in China will need to apply for permits to ship two types of graphite including high-purity, high-hardness and high-intensity synthetic graphite material and natural flake graphite and its products.

**Impact:** China is the world’s largest graphite producer and exporter. It refines more than 90% of the world’s graphite into the material used in almost all Electric Vehicles (EV) batteries.

– Hence, the ban on graphite exports by China will lead to an increase in the scarcity of graphite, which in turn raises the cost of power batteries, leading to higher production costs for EVs.

#### What is Graphite?

| Specification | Details  |
|---------------|--|
| Type          | Allotrope of carbon  |
| Properties    | 1. Good conductor of electricity<br>2. High thermal stability and resistance to heat   |
| Uses          | Pencil “lead”<br>As a Lubricant<br>Electrodes in batteries and electrical devices<br>As a moderator in the nuclear furnace.  |
| Reserves      | According to the United States Geological Survey, Turkey (27.3%) and Brazil (22.4%) together own half of the world’s natural graphite resources. China comes third at 16%. |

UPSC Syllabus: Science and Technology

### 43. What is ‘Visa Shopping’ and why is it being done to enter countries in Europe

**Source:** The post is based on the article “What is ‘Visa Shopping’ and why is it being done to enter countries in Europe” published in “Indian Express” on 28th October 2023

#### Why in the News?

The practice of ‘Visa Shopping’ has been gaining popularity in several Indian states.

## Factly Compilation for the Month of October (Fourth Week) 2023

### What is Visa Shopping?

| Specifications    | Details   |
|-------------------|---|
| <b>Definition</b> | It is a practice where individuals obtain visas for countries one may or may not intend to visit during the visa's validity period.   |
| <b>Purpose</b>    | Individuals opt for visa shopping as a means to enter their preferred countries, particularly in Europe, even if they already have a visa for another European nation.  |
| <b>Example</b>    | <b>Schengen Visa:</b> It allows travelers to explore many European countries without the need for separate visas. The Schengen system was established by European countries in 1985. Under it, member countries form the Schengen area and people can travel freely between them without going through border controls. |
| <b>Concerns</b>   | Visa Shopping is not illegal if the traveller follows the norms and guidelines of the visa process and gets valid permission to stay in that country. However, legal concerns arise if a traveller seeks visas for one country but actually intends to stay in another or use it merely as an entry point.              |

**UPSC Syllabus:** International Relations