

Crowdfunding for Terrorism Financing: FATF

For Prelims: Crowdfunding for Terrorism Financing, <u>FATF (Financial Action Task Force), Popular Front of India (PFI)</u>, Terrorism.

For Mains: Crowdfunding for Terrorism Financing, Money-laundering and its prevention, Role of external state and non-state actors in creating challenges to internal security.

Source: IE

Why in News?

Recently, <u>FATF (Financial Action Task Force)</u> has released a report titled-"Crowdfunding for Terrorism Financing", highlighting that violent extremist organizations have employed well-structured networks for fundraising purposes.

 The report makes a reference to the <u>Popular Front of India (PFI)</u> as having resorted to solicitation for <u>funds</u> at <u>mosques</u> and <u>public places</u>, which were ultimately used to <u>procure</u> arms and ammunition and for training the cadres.

What is Crowdfunding?

- About:
 - Crowdfunding is a dynamic fundraising method that leverages online platforms to gather small contributions from a large pool of individuals for various purposes such as supporting charitable causes, funding startup ventures, or financing creative projects.
 - While crowdfunding is predominantly used for legitimate purposes, recent events have exposed its potential exploitation for illegal activities, notably by terrorists and terrorist groups.
 - These entities utilize fundraising platforms and social media to solicit financial support globally for their extremist causes.
- Methods of Misuse for Terror Financing:
 - Abuse of humanitarian, charitable and non-profit causes which can act as a front to raise funds for terrorism.
 - Dedicated **crowdfunding platforms or websites** which, given the volume and variety of activity, makes it difficult to detect illicit activity.
 - Social media platforms and messaging apps to allow extremists to amplify their messages and lead users to specific fundraising causes.
 - Interaction of **crowdfunding with virtual assets,** including the use of privacy coins and anonymity enhancing services such as tumblers and mixers.

What are the Key Highlights of the Report?

- Mixed Fundraising Strategies:
 - The PFI collected funds through solicitation at religious places, such as mosques, and public spaces.

- Additionally, the group used modern digital methods, including the circulation of QR codes and **bank account details to encourage donations.**
- Funds collected by the organization involved both domestic and foreign transactions, making the investigation challenging due to the multi-dimensional nature of the financial flows.

Diverse Use of Funds:

 Funds raised through crowdfunding were not limited to a single purpose. A portion of the collected funds was invested in businesses and real estate projects, aiming to generate a regular income for the organization's terrorist activities.

Global Context:

The report places the issue of crowdfunding for terrorism financing in a global context. It
highlights that while most crowdfunding activities are legitimate, terrorist organizations like
ISIL (Islamic State of Iraq and the Levant) and Al-Qaeda have exploited these platforms to
raise money for their activities.

Recommendations:

- The FATF report emphasizes the need for consistent <u>Anti-Money Laundering</u> and <u>Counter-Terrorist Financing</u> (AML/CFT) regulations on a global scale.
- It points out that many countries do not systematically assess the risks associated with crowdfunding activities, leading to a lack of comprehensive data about its misuse.
- FATF highlights the cross-border nature of crowdfunding campaigns and the associated financial transfers.
- Countries are urged to recognize that even if their jurisdiction does not have significant domestic terrorism activity, it can still be used as a pass-through for financial flows.

What is PFI?

- The Popular Front of India formed in 2007 through the merger of three Muslim organizations in southern India in Tamil Nadu, emerged in the aftermath of the ban on the Students Islamic Movement of India (SIMI) and has been involved in various social and Islamic religious activities among Muslims.
- The PFI has presented itself as an organization advocating for the rights of minorities, Dalits, and marginalized communities but has faced allegations of involvement in extremist activities.
- In 2022, the Ministry of Home Affairs had declared the PFI along with its associates or affiliates or fronts as an "unlawful association"...

How to Deal with Such Organisations while Preserving Civil Liberties and Ensuring National Security?

Clear Legal Framework:

- Establish a clear and comprehensive legal framework that outlines the conditions under which an organization can be designated as a threat to national security.
- This framework should be based on constitutional principles, international <u>Human</u>
 <u>Rights</u> standards, and due process.

Judicial Oversight:

• The judiciary can assess whether the government's actions are in accordance with the law and protect individuals' rights.

Transparency and Accountability:

- Maintain transparency in the process of designating organizations as unlawful and disclose the reasons for such actions.
- Establish mechanisms for accountability and oversight to prevent misuse of the legal framework.

Targeted Actions:

Focus on targeting individuals or entities directly involved in criminal or terrorist
 activities rather than broadly targeting an entire organization. This approach minimizes
 the impact on innocent members and supporters.

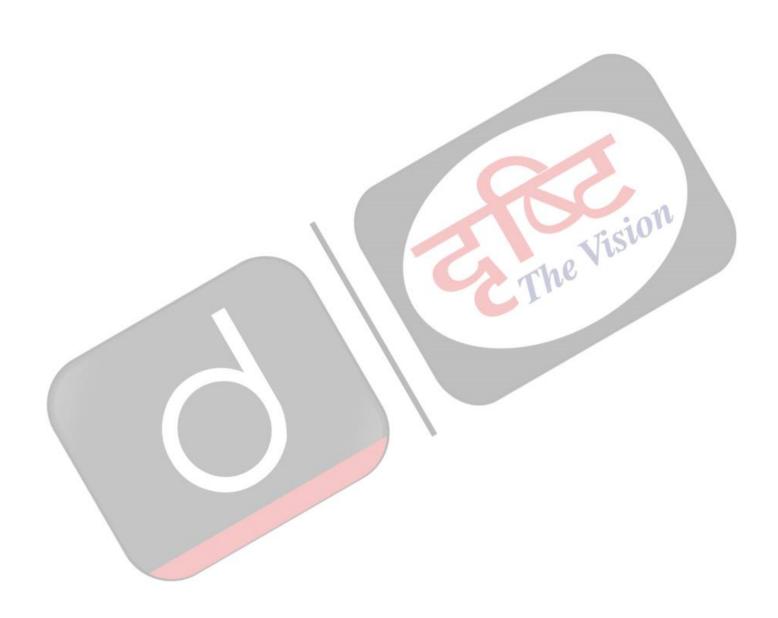
Intelligence and Surveillance:

Enhance intelligence gathering and surveillance capabilities to monitor the activities
of potential threats. Ensure that these actions are in accordance with the law and subject
to oversight.

Public Awareness:

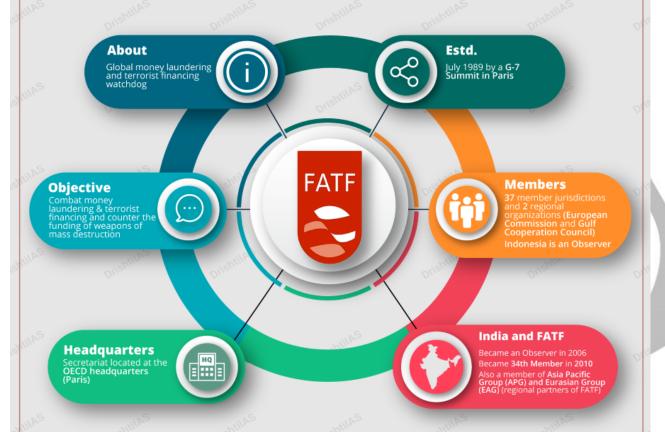
 Promote public awareness about the dangers of extremist ideologies and the importance of reporting suspicious activities. Encourage the public to be proactive in safeguarding national security.

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Financial Action Task Force



FATF Lists

Grey List:

- Aka "Increased Monitoring List"
- Includes countries considered safe haven for supporting terror funding and money laundering
- Serves as a warning that the country may enter the blacklist

Black List:

- Includes Non-Cooperative Countries or Territories (NCCTs) that support terror funding and money laundering activities
- Countries Iran, North Korea and Myanmar

Consequences of being Greylisted:

- Economic sanctions from financial institutions affiliated with FATF (IMF, World Bank,
- Problem in getting loans from such financial institutions and countries
- Reduction in international trade
- International boycott

Mains

- **Q.** Discuss how emerging technologies and globalisation contribute to money laundering. Elaborate measures to tackle the problem of money laundering both at national and international levels. **(2021)**
- **Q.** Analyse the complexity and intensity of terrorism, its causes, linkages and obnoxious nexus. Also suggest measures required to be taken to eradicate the menace of terrorism. **(2021)**

Digital Advertisement Policy, 2023

For Prelims: Digital Advertisement Policy, 2023, Central Bureau of Communication (CBC), Digital Media, Social media, Over-the-Top (OTT) platforms.

For Mains: Digital Advertisement Policy, 2023, Government policies and interventions for development in various sectors and issues arising out of their design and implementation.

Source: IE

Why in News?

Recently, the Ministry of Information and Broadcasting has approved the **Digital Advertisement Policy**, **2023** to enable and empower the Central Bureau of Communication (CBC) to undertake campaigns in the **Digital Media** space.

■ The CBC operates under the Ministry of Information and Broadcasting and is responsible for creating awareness and disseminating information about various government programs, schemes, and policies in India.

Vision

 CBC is committed to adapting to the changing media landscape and embracing new technologies to reach a wider audience.

What are the Key Policies under the Digital Advertisement Policy, 2023?

- Expansion to Digital Platforms:
 - The CBC can advertise on social media, **Over-the-Top (OTT)** platforms, digital audio platforms, mobile applications, and websites.
 - It mandates that the websites, mobile apps, OTT platforms and digital audio platforms need to be at least a year old to be eligible to apply under the scheme.
- Advertisement Rates and Transparency:
 - Advertising rates will be linked to subscriber base and viewership numbers, determined through competitive bidding to ensure transparency and efficiency.
 - Rates discovered through this process will remain valid for three years.
- OTT Platforms Engagement:
 - OTT platforms can be empanelled not only for placing advertisements during regular content but also for the production of embedded/in-film advertisements, promotions, or branding activities as per CBC's Letter of Intent.
- Funding Source:
 - The CBC typically utilizes 2% of the total outlay of government schemes for publicity and outreach activities, and this fund is used for advertisements and campaigns.

What is the Significance of Digital Advertisement Policy, 2023?

- This policy marks a pivotal moment in CBC's mission to disseminate information and create awareness regarding various schemes, programs, and policies of the Government of India in response to the evolving media landscape and the increased digitalization of media consumption.
- The huge subscriber base in the Digital Universe, coupled with technology enabled messaging
 options through Digital advertisements will facilitate effective delivery of citizen centric
 messages in a targeted manner, resulting in cost efficiencies in public oriented campaigns.
- In recent years, the way audiences consume media has witnessed a significant shift towards the digital space.
- The Government of India's Digital India program has led to a huge growth in the number of people in the country who are now connected to the internet, social and digital media platforms.
 - As per <u>TRAI's</u> Indian Telecom Services Performance Indicators January-March 2023, the internet penetration in India as of March 2023, is over 880 million, and the number of telecom subscribers as of March 2023 is over 1172 million.

Gender Disparity in Organ Transplants

For Prelims: <u>Transplantation of Human Organs Act</u>, <u>1994</u>, <u>National Organ Transplantation</u> <u>Guidelines</u>, National Organ and Tissue Transplant Organisation

For Mains: Factors Contributing to the Gender Disparity in Organ Transplants,

Source: IE

Why in News?

In India, a stark gender disparity in <u>organ transplants</u> has been revealed by data from the <u>National</u> <u>Organ and Tissue Transplant Organisation (NOTTO)</u>. Between 1995 and 2021, **four out of every five organ recipients were men**, indicating a significant healthcare imbalance.

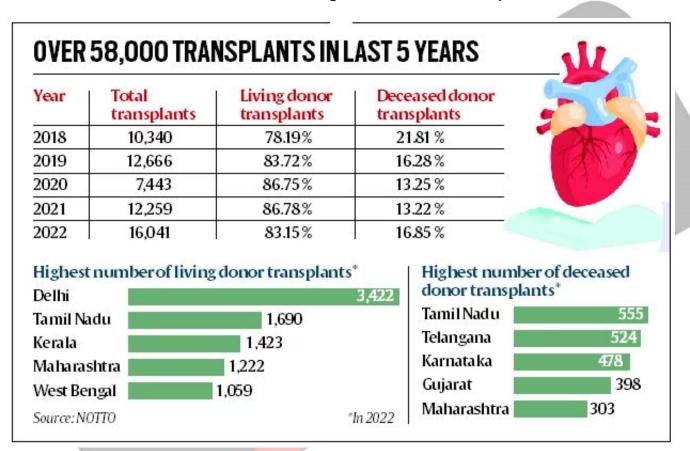
 The low representation of women in organ transplants highlights the need and importance of equitable access to healthcare for all.

Note:

- NOTTO is set up under the Directorate General of Health Services, Ministry of Health and Family Welfare, located in New Delhi.
- The National Network division of NOTTO functions as the apex centre for all Indian activities for procurement, distribution and registry of organs and tissue donation and transplantation in the country.

What are the Trends in Organ Transplants in India?

- According to the data collated by the **NOTTO**, the nodal agency for organ and tissue donation and transplantation in India, there is a significant gender disparity among organ recipients and donors in the country.
 - The data shows that between 1995 and 2021, out of the total 36,640 patients who underwent organ transplants, **29,695 were men and only 6,945 were women.**
 - Although studies show that the number of women donors is higher than men.
 - This indicates that women who need organ transplants are not getting adequate access to healthcare and treatment, due to various socio-cultural and economic factors.
- According to the NOTTO data, there has been an overall increase in the number of organ transplants in India, with a record high of 16,041 such procedures in 2022.
- Among the different types of organ transplants, kidney transplants are the most common, followed by liver, heart, and lung transplants.
- Among the different states, Delhi topped the table in living donor transplants, while Tamil
 Nadu remained the leader in deceased donor transplants, where organs from brain-dead patients are used.
 - Also, India conducts the **third highest number of transplants** in the world.



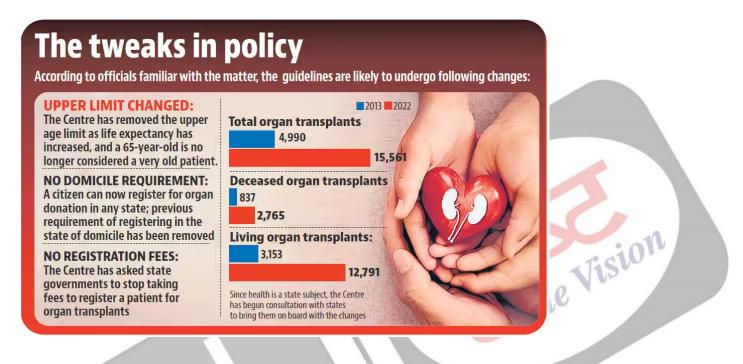
What are the Causes and Consequences of Gender Disparity in Organ Transplants?

- Causes of Gender Disparity in Organ Transplants:
 - The gender disparity in organ transplants reflects the prevailing gender inequality and discrimination in Indian society, where women's health and well-being are often neglected or compromised.
 - Lack of **awareness and education among women** and their families about the need and benefits of organ transplants.
 - **Preference for male members as recipients,** especially in cases of living donor transplants, where organs from family members are used.
 - **Fear and stigma** associated with organ donation and transplantation, especially among women, who may face social exclusion or marital problems.
 - **Financial constraints and affordability issues,** as organ transplants are expensive and require long-term follow-up and medication.

- Consequences of Gender Disparity in Organ Transplants:
 - **Gender bias and discrimination** in the healthcare system, where women may face harassment, negligence, or denial of treatment by the medical staff or authorities.

Laws Related to Organ Donation in India

- Transplantation of Human Organs Act, 1994:
 - It was enacted to provide a system of removal, storage and transplantation of human organs for therapeutic purposes and for the prevention of commercial dealings in human organs.
- National Organ Transplantation Guidelines:



Way Forward

- Organize awareness and information campaigns on organ donation and transplantation, targeting women and their families, through various media and platforms.
 - Providing counseling and support services to women and their families, to address their doubts, fears, and concerns regarding organ donation and transplantation.
- Strengthening and expanding the **network and infrastructure** of organ and tissue donation and transplantation, to ensure timely and equitable access and availability of organs and services.
- Implementing and enforcing the legal and ethical norms and guidelines for organ and tissue donation and transplantation, to prevent and punish any malpractices or violations.
- Encouraging and facilitating the participation and empowerment of women as organ donors and recipients, by recognising and rewarding their contributions and achievements.

Thousands of Earthquakes Rock Iceland

For Prelims: <u>Volcanoes</u>, <u>Earthquake</u>, Iceland, Reykjavík, <u>Mid-Atlantic Ridge</u>, Atlantic Ocean, Eurasian And North American Tectonic Plates.

For Mains: Phenomenon of Earthquake and Volcano, Correlation between an earthquake and a volcano.

Source: IE

Why in News?

Iceland has declared a **state of emergency** following a series of **800 earthquakes** that struck the **southwestern Reykjanes peninsula** in less than 14 hours.

Approximately 1,400 <u>earthquakes</u> were detected in a day, and the peninsula has experienced over **24,000 seismic events** since late October. The strongest of these earthquakes, with a magnitude of 5.2, occurred approximately 40 km from Reykjavík, Iceland's capital.



Iceland volcano Fagradalsfjall



What is Happening in Iceland?

About Iceland:

 Iceland is located on the Mid-Atlantic Ridge, technically the longest mountain range in the world, but on the floor of the Atlantic Ocean. The ridge separates the Eurasian and North American tectonic plates — making it a hotbed of seismic activity.

- The Mid-Atlantic Ridge is a divergent or constructive plate boundary where tectonic plates move away from each other, leading to the creation of new oceanic crust
- This geological setting makes the region prone to frequent earthquakes, with an annual average of approximately 26,000, as reported by Perlan, a natural history museum based in Reykjavik.
- While most of these tremors go unnoticed, the occurrence of earthquake swarms, characterized by numerous small earthquakes without a discernible mainshock, raises concerns about the possibility of an impending volcanic eruption.
 - These earthquake swarms indicate heightened tectonic stress in specific areas.

Notable Icelandic Volcanoes:

- Iceland boasts a total of 33 active volcanoes.
- Eyjafjallajökull, one of Iceland's most famous volcanoes, erupted in 2010, causing a widespread ash cloud.
 - Other notable volcanoes include Hekla, Grímsvötn, Hóluhraun, and Litli-Hrútur, part of the Fagradalsfjall system.

How are Earthquake Swarms a Sign of Volcanic Activity?

Magma Formation and Movement:

- Intense heat beneath the Earth's surface melts rocks, giving rise to magma, a flowing substance lighter than solid rock.
- The buoyancy of magma propels it upwards, with most of it being confined to magma chambers deep underground.

Volcanic Eruptions:

- While the majority of magma cools and solidifies over time, a fraction erupts through vents and fissures on the Earth's surface.
- These eruptions are the visible outcomes of the geological processes occurring beneath the surface.

Earthquake Swarms as Indicators:

- The movement of magma near the Earth's surface exerts force on surrounding rock layers.
- This force often leads to the occurrence of earthquake swarms, clusters of seismic activity in a particular region.

Proximity to Eruption:

- Magma movement underground doesn't always culminate in a volcanic eruption.
- The closer magma gets to the Earth's surface, the higher the likelihood of an eruption, accompanied by more frequent and symptomatic earthquake swarms.

TECTONIC PLATES

OR LITHOSPHERIC PLATES

ABOUT

- Massive, irregularly-shaped slabs of solid rock (Crust + Top Mantle)
- o In 1967, McKenzie, Parker and Morgan came out with the concept of Plate Tectonics

TYPE

- O Continental or Oceanic (whichever occupies the larger portion of plate)
- Pacific plate Oceanic; Eurasian plate Continental

MAJOR AND MINOR PLATES



THE INDIAN PLATE

- O Includes Peninsular India and the Australian continental portions
- East Extension Rakim Yoma Mountains (Myanmar) to Java Trench
- West Makrana coast of Balochistan (Pakistan)
- Rate of Movement 54 mm/year in northeast direction
- O Boundary b/w India and Antarctic plate Marked by an oceanic ridge (divergent boundary)
- O Formation of Himalayas Collision of Indian and Eurasian plates

PLATE MOVEMENT

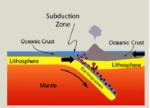
- Plates constantly move horizontally over the Asthenosphere
- O Collision/drifting away of plates result in earthquakes/volcanic eruptions

Asthenosphere – a zone of Earth's mantle lying just beneath Lithosphere: believed to be much hotter and more fluid than Lithosphere

SUBDUCTION

Occurs when tectonic plates shift and one is pushed under another

Downgoing ocean plate » Pushed into hotter Mantle plate » Heats up Mixes volatile elements » Produces magma » Volcanic eruption



BOUNDARIES OF PLATES

- Convergent/Destructive, where plates move into one another (subduction zones)
- O Divergent/Constructive, where plates move apart (rift valleys)
- O Transform/Conservative, where plates move sideways in relation to each other (creates faults)





UPSC Civil Services Examination Previous Year Question (PYQ)

PRELIMS:

- Q. Consider the following: (2013)
 - 1. Electromagnetic radiation
 - 2. Geothermal energy
 - 3. Gravitational force
 - 4. Plate movements
 - 5. Rotation of the earth
 - 6. Revolution of the earth

Which of the above are responsible for bringing dynamic changes on the surface of the earth? (2013)

- (a) 1, 2, 3 and 4 only
- **(b)** 1, 3, 5 and 6 only
- (c) 2, 4, 5 and 6 only
- (d) 1, 2, 3, 4, 5 and 6

Ans: (d)

Mains:

- **Q1.** Mention the global occurrence of volcanic eruptions in 2021 and their impact on regional environment. **(2021)**
- **Q2.** Why are the world's fold mountain systems located along the margins of continents? Bring out the association between the global distribution of fold mountains and earthquakes and volcanoes. **(2014)**

Key Initiatives for Tribal Groups

Source: IE

Why in News?

On the Occasion of <u>Janjatiya Gaurav Diwas (15th November)</u> the Prime Minister (PM) has launched three **key Initiatives** to ensure last-mile welfare scheme delivery and protection for <u>Particularly Vulnerable Tribal Groups (PVTGs)</u>.

■ The PM launched 'Viksit Bharat Sankalp Yatra', Pradhan Mantri Particularly Vulnerable Tribal Groups (PM PVTG) Development Mission and Pradhan Mantri Janjati Adivasi Nyaya Maha Abhiyan.

What is Janjatiya Gaurav Divas?

- The Janjatiya Gaurav Divas is celebrated every year on the **Birth Anniversary of Birsa Munda**, to recognize the efforts of the tribals in the preservation of cultural heritage and promotion of Indian values of national pride, valour, and hospitality.
- Tribals held several tribal movements across different regions of India against the British colonial rule. These tribal communities include Tamars, Santhals, <u>Khasis</u>, <u>Bhils</u>, <u>Mizos</u>, and Kols to name a few.

What are these Key Initiatives?

- PM Janjati Adivasi Nyaya Maha Abhiyan (PM JANMAN):
 - About: PM JANMAN aims to protect and nurture tribal groups, especially those on the verge of extinction, by providing them with necessary support, development, and connectivity to mainstream services and opportunities.
 - **Coverage:** The initiative covers 75 Particularly Vulnerable Tribal Groups (PVTGs) residing in 18 states and union territories, spread across 22,544 villages in 220 districts.
 - Approximately 28 lakh people belong to these identified tribal groups.
 - **Significance:** PM JANMAN underscores the government's commitment to uplifting and safeguarding tribal communities, preserving their cultural heritage, and integrating them into the mainstream development process.
 - It emphasizes the need to bridge the gap between tribal populations and essential services while ensuring their socio-economic empowerment.

Viksit Bharat Sankalp Yatra:

- The focus of the Yatra will be on reaching out to people, creating awareness and providing benefits of welfare schemes like sanitation facilities, essential financial services, electricity connections, access to LPG cylinders, housing for the poor, food security, proper nutrition, reliable healthcare, clean drinking water, etc.
- Enrolment of potential beneficiaries will be done through details ascertained during the Yatra.
- The Yatra will start from districts with significant tribal populations initially and will cover all districts across the country.

PM PVTG Mission:

- The PM-PVTG Development Mission program aims to improve the socio-economic status of Vulnerable Tribal Groups (PVTGs).
 - For this, availability of Rs 24000 Crore for Scheduled Tribes has been envisaged in the Union Budget.
- The mission includes providing basic facilities like safe housing, clean drinking water and sanitation, education, health and nutrition, better access to roads in settlements for backward scheduled tribes.

What are the Other Government Initiatives Related to Tribals?

- TRIFED
- Digital Transformation of Tribal Schools
- Development of Particularly Vulnerable Tribal Groups
- Pradhan Mantri Van Dhan Yojana
- Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA)

UPSC Civil Services Examination, Previous Year Question (PYQ)

Q.1 Consider the following pairs: (2013)

	Tribe	State
1.	Limboo (Limbu)	Sikkim
2.	Karbi	Himachal Pradesh
3.	Dongaria Kondh	Odisha
4.	Bonda	Tamil Nadu

Which of the above pairs are correctly matched?

- (a) 1 and 3 only
- (b) 2 and 4 only
- (c) 1, 3 and 4 only
- (d) 1, 2, 3 and 4

Ans: (a)

Q.2 Consider the following statements about Particularly Vulnerable Tribal Groups (PVTGs) in India: **(2019)**

- 1. PVTGs reside in 18 States and one Union Territory.
- 2. A stagnant or declining population is one of the criteria for determining PVTG status.
- 3. There are 95 PVTGs officially notified in the country so far.
- 4. Irular and Konda Reddi tribes are included in the list of PVTGs.

Which of the statements given above are correct?

- (a) 1, 2 and 3
- **(b)** 2, 3 and 4
- (c) 1, 2 and 4
- (d) 1, 3 and 4

Ans: (c)

CITES Standing Committee Meeting

Source: PIB

Why in News?

The recently concluded **77**th **meeting of the Standing Committee of the <u>Convention on International Trade in Endangered Species of wild fauna and flora (CITES)</u> in Geneva, Switzerland, brought promising developments for India's wildlife conservation efforts.**

What are the Major Outcomes of the Meeting from India's Point of View?

- Removal from Review of Significant Trade (RST) for Red Sanders: India had been under the
 Review of Significant Trade (RST) process for Red Sanders since 2004.
 - This is a process through which the CITES Standing Committee places increased scrutiny on the exports of a species from a country to determine if the Convention is being properly implemented.
 - Owing to compliance and robust reporting, India has been removed from this process, marking a significant achievement for the country's Red Sanders growers.
 - The Red Sanders(Pterocarpus santalinus), a tree species endemic to specific districts in Andhra Pradesh, holds high market value and has faced threats due to illegal harvesting and smuggling.
- India's Category in CITES National Legislation Program: The recent meeting decided to place India in Category 1 as it had fully complied with the requirements of CITES National Legislation programme.

- The CITES provides that every Party align its national legislation to accommodate CITES provisions. Previously, India was listed in Category 2 for CITES National Legislation programme.
- The **Wild Life (Protection) Act, 1972** was, therefore, amended in the year 2022, wherein the provisions of CITES were incorporated in the Act.
- Call for Big Cat Conservation: India advocated for stringent conservation measures for Big Cats, especially Asian Big Cats, urging other range countries and stakeholders to join the <u>International Big Cat Alliance</u> for their conservation, launched by the <u>Indian Prime</u> Minister in April 2023.

What is CITES?

- About:
 - **CITES** is an international agreement aimed to ensure that **international trade in specimens of wild animals and plants** does not threaten the survival of the species.
 - Currently there are **184 Parties** to CITES.
 - It entered into force in **1975** and **India became the 25th party,** a state that voluntarily agrees to be bound by the Convention, in 1976.
- Enforceability:
 - Although CITES is legally binding on States it is generally not self-executing.
 - This means that it cannot be fully implemented until specific domestic measures have been adopted for that purpose.
 - It is therefore essential that CITES Parties have legislation in place allowing them to implement and enforce all aspects of the Convention.
- CITES National Legislation Programme:
 - National laws must fulfill all these minimum requirements under CITES National Legislation programme:
 - Designate a Management Authority and a Scientific Authority.
 - Prohibit trade violating the Convention.
 - Penalize such illicit trade.
 - Confiscate illegally traded or possessed specimens.
- After consulting the concerned Party, the CITES Secretariat assesses the national legislation concerning these criteria and categorizes it into one of three categories:
 - Category 1: Legislation generally meeting CITES implementation requirements.
 - Category 2: Legislation generally not meeting all CITES implementation requirements.
 - Category 3: Legislation generally not meeting CITES implementation requirements.

UPSC Civil Services Examination Previous Year Question (PYQ)

Prelims

- **Q.** With reference to 'Red Sanders', sometimes seen in the news, consider the following statements: **(2016)**
- 1. It is a tree species found in a part of South India.
- 2. It is one of the most important trees in the tropical rain forest areas of South India.

Which of the statements given above is/are correct?

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

Ans: (a)

Exp:

- Red Sanders has a highly restricted distribution in the southeastern portion of Indian peninsula to which it is endemic. **Hence, statement 1 is correct.**
- Red Sanders (Pterocarpus santalinus) occurs in the forest formation which is classified as Southern
 Tropical Dry Deciduous Forests. Hence, statement 2 is not correct.
- Therefore, option (a) is the correct answer.

Q. With reference to the International Union for Conservation of Nature and Natural Resources (IUCN) and the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), which of the following statements is/are correct? **(2015)**

- 1. IUCN is an organ of the United Nations and CITES is an international agreement between governments.
- 2. IUCN runs thousands of field projects around the world to better manage natural environments.
- 3. CITES is legally binding on the States that have joined it, but this Convention does not take the place of national laws.

Select the correct answer using the code given below:

- (a) 1 only
- **(b)** 2 and 3 only
- (c) 1 and 3 only
- (d) 1, 2 and 3

Ans: (b)

Exp:

- The International Union for Conservation of Nature (IUCN) is a membership Union uniquely composed of both government and civil society organizations. Created in 1948, it acts as the global authority on the status of the natural world and the measures needed to safeguard it.
 ☐ IUCN is not an organ of the UN but maintains a formally accredited permanent observer mission to the UN in New York. Hence, statement 1 is not correct.
- IUCN aims to influence, encourage and assist societies throughout the world to conserve the integrity and diversity of nature and to ensure that any use of natural resource is equitable and economically sustainable.
- For this purpose, it runs thousands of field projects around the world to better manage natural environments. **Hence, statement 2 is correct.**
- CITES (Convention on International Trade in Endangered Species of Wild Fauna and Flora) is an
 international agreement between governments. Its aim is to ensure that international trade in
 specimens of wild animals and plants does not threaten their survival.
- Although CITES is legally binding on its parties but it does not take the place of national laws. Rather, it provides a framework to be respected by each Party, which has to adopt its own domestic legislation to ensure that CITES, is implemented at the national level. Hence, statement 3 is correct. Therefore, option (b) is the correct answer.

Euclid Mission for Dark Matter and Dark Energy

Source: IE

Why in News?

The Euclid mission by the <u>European Space Agency (ESA)</u> launched in July 2023, to study <u>dark matter</u> and <u>dark energy</u> has shared its initial five science images which include pictures of expansive <u>galaxy</u> <u>clusters</u>, detailed shots of two nearby galaxies, a <u>nebula</u>, and a gravitationally connected group of stars known as a **globular cluster**.

Euclid Mission:

- ESA's Euclid mission is a space telescope designed to explore the composition and evolution of the dark Universe.
 - Euclid will explore how the Universe has expanded and how structure has formed over cosmic history, revealing more about the role of gravity and the nature of dark energy and dark matter.
- Launch Vehicle: SpaceX Falcon 9
- Destination: Sun-Earth Lagrange point 2

What are the Different Findings by Euclid's Mission?

- The Perseus Cluster: A Glimpse into Cosmic Depths:
 - Euclid's lens focused on the Perseus Cluster, capturing 1,000 galaxies and over 100,000 more in the background, some situated 10 billion light-years away.
 - The mapping of special attributes and characteristics of these galaxies will help unravel
 the role of dark matter in shaping the universe.
- Spiral Galaxy IC 342: Euclid's Infrared Revelation:
 - Euclid's infrared capabilities provided valuable insights into the stars of IC 342, a spiral galaxy akin to the Milky Way useful for understanding galaxies with structures similar to our own.
- Irregular Dwarf Galaxy NGC 6822: Galactic Building Blocks:
 - Irregularly-shaped and small galaxies like NGC 6822 play a crucial role as the building blocks for larger galaxies.
 - Studying them sheds light on the formation of galactic structures.
- Globular Cluster NGC 6397 and the Horsehead Nebula:
 - NGC 6397 is a nearly globe-shaped globular cluster about 7,800 LYs away.
 - The mission showcased the **Horsehead Nebula**, aiming to uncover unseen Jupiter-mass planets in their early stages of development.



What is Dark Matter?

- About:
 - Dark matter, though never detected, is believed to be present in the entire universe, its existence presumed because a number of observable celestial phenomena could not be possible if the universe did not have much more matter in it than is seen.
 - It is believed to make up more than 95% of all the universe.
- Characteristics:
 - The material is considered to be a 'matter' since it has gravitational attraction and it
 is 'dark' because it does not seem to interact with light (or any part of the
 electromagnetic spectrum).
 - Its gravitational force prevents stars in our Milky Way from flying apart.
 - However, attempts to detect such dark matter particles using underground experiments, or accelerator experiments including the world's largest accelerator, the <u>Large Hadron</u> <u>Collider (LHC)</u>, have failed so far.

Dark Energy:

- Dark energy is a hypothetical form of energy that is thought to permeate all of space and drive the accelerated expansion of the universe.
- It's a term used in cosmology to explain the observed phenomenon that galaxies are moving away from each other at an accelerating rate.

UPSC Civil Services Examination, Previous Year Question (PYQ)

- **Q.** The efforts to detect the existence of the Higgs boson particle have become frequent news in the recent past. What is/are the importance of discovering this particle?
 - 1. It will enable us to understand why elementary particles have mass.
 - 2. It will enable us in the near future to develop the technology of transferring matter from one point to another without traversing the physical space between them.
 - 3. It will enable us to create better fuels for nuclear fission.

Select the correct answer using the codes given below:

- (a) 1 only
- **(b)** 2 and 3 only
- (c) 1 and 3 only
- (d) 1. 2 and 3

Ans: (a)

- **Q.** In the context of modern scientific research, consider the following statements about 'IceCube', a particle detector located at South Pole, which was recently in the news: **(2015)**
 - 1. It is the world's largest neutrino detector, encompassing a cubic kilometre of ice.
 - 2. It is a powerful telescope to search for dark matter.
 - 3. It is buried deep in the ice.

Which of the statements given above is/are correct?

- (a) 1 only
- **(b)** 2 and 3 only
- (c) 1 and 3 only
- (d) 1, 2 and 3

Ans: (d)

Rapid Fire Current Affairs

National Epilepsy Day

National Epilepsy Day is celebrated every year in India on 17th November to raise awareness about the brain disorder and bust myths surrounding the disease.

- Epilepsy is a brain disorder that can cause seizures due to abnormal brain activity or temporary changes in the brain's electrical functioning.
 - The brain produces **orderly electrical impulses** along nerve cell networks, but in epilepsy, this balance is disrupted thus it impacts consciousness, movements, or sensations.
- According to the <u>World Health Organization (WHO)</u>, around 50 million people worldwide are affected by epilepsy and **India accounts for nearly 10-20%** of the global burden of epilepsy.
- Epileptic seizures are broadly categorized into **focal and generalized seizures** based on the location of abnormal brain activity.
 - Focal seizures may cause brief emotional changes, involuntary movements, and symptoms like dizziness.
 - Generalized seizures present varied symptoms including staring, muscle jerking, loss of control, twitches, and sudden loss of consciousness.
- Every year the second Monday of February is observed as <u>International Epilepsy Day.</u>

Read more: International Epilepsy Day

National Press Day

National Press Day, marked on 16th November, holds immense significance in India as it marks the establishment of the Press Council of India, functioning as a guardian of journalistic ethics and freedom.

- Unlike other global Press or Media Councils, the unique authority of the Press Council of India extends even over state instruments, ensuring the independence of the press.
- The Council, initiated in 1966, was recommended by the first Press Commission in 1956 to uphold professional standards and ethics in journalism through a statutory body comprising industry stakeholders.

Read more: National Press Day

CITES Standing Committee Meeting

Recently, the Union Minister of Environment, Forest and Climate Change, announced the outcomes of the 77th meeting of the Standing Committee of the Convention on International Trade in Endangered Species (CITES).

Major Takeaways Consequent to amendment of Wild Life Act, placement of the CITES legislation of India in Category 1 of the National Legislation Project of CITES has been confirmed. India was under Review of Significant Trade process for Red Sanders since 2004. Based on our compliance and reporting, India has been removed from the Review of Significant Trade for Red Sanders.

- **CITES** is an international agreement aimed to ensure that international trade in specimens of wild animals and plants does not threaten the survival of the species.
 - It entered into force in 1975 and India became the 25th party, a state that voluntarily agrees to be bound by the Convention, in 1976.

Read more: Convention on International Trade in Endangered Species