

ECONOMY

❖ **The EU's new crypto-legislation**

➤ **CONTEXT: The European Parliament, the legislative body of the 27-country block European Union, has approved the world's first set of comprehensive rules to bring largely unregulated cryptocurrency markets under the ambit of regulation by government authorities.**

- The regulation, called the Markets in Crypto Assets (MiCA), will come into force after formal approval by member states.

➤ **Why regulation?**

- Having a comprehensive framework like MiCA for 27 countries in Europe not only harmonises the crypto industry but also gives the EU a competitive edge in its growth compared to the U.S. or the U.K. which lack regulatory clarity.
- More importantly, 2022 saw some of the biggest failures and wipeouts in the crypto industry involving bankruptcies and fraud scandals, be it the collapse of the crypto exchange FTX and its spat with Binance or the failure of Terra LUNA cryptocurrency and its associated stablecoin.
- The liquidity shortage caused by these shocks led other crypto lending platforms to halt customer transfers and withdrawals before filing for bankruptcy.

➤ **What kind of assets will MiCA cover?**

- The MiCA legislation will apply to 'cryptoassets', which are broadly defined in the text as "a digital representation of a value or a right that uses cryptography for security and is in the form of a coin or a token or any other digital medium which may be transferred and stored electronically, using distributed ledger technology or similar technology".

✓ This definition implies that it will apply not only to traditional cryptocurrencies like Bitcoin and Ethereum but also to newer ones like stablecoins.

- As for the assets that will be out of MiCA's scope, it will not regulate digital assets that would qualify as transferable securities and function like shares or their equivalent and other cryptoassets that already qualify as financial instruments under existing regulation. It will also for the most part, exclude nonfungible tokens (NFTs).
- MiCA will also not regulate central bank digital currencies issued by the European Central Bank and digital assets issued by national central banks of EU member countries when acting in their capacity as monetary authorities, along with cryptoassets-related services offered by them.

➤ **What are the new rules?**

- MiCA will impose compliance on the issuers of cryptoassets, who are defined as the "legal person who offers to the public any type of cryptoassets".
- It will apply to cryptoasset service providers (CASPs) providing one or more of these services, the operation of a trading platform like Coinbase, custody and administration of crypto-assets on behalf of third parties (customers), the exchange of crypto-assets for funds/other crypto-assets, the execution of orders for crypto-assets, the placing of crypto-assets, providing transfer services for crypto -assets to third parties, providing advice on cryptoassets and crypto-portfolio management.
- The regulation prescribes different sets of requirements for CASPs depending on the type of cryptoassets. The base regime will require every CASP to get incorporated as a legal entity in the EU.

- They can get authorised in any one member country and will be allowed to conduct their services across the 27 countries.

- They will then be supervised by regulators like the European Banking Authority and the European Securities and Markets Authority, who will ensure that the companies have the required risk management and corporate governance practices in place.

- Besides authorisation, service providers of stablecoins also have to furnish key information in the form of a white paper mentioning the details of the crypto product and the main participants in the company, the terms of the offer to the public, the type of blockchain verification mechanism they use, the rights attached to the cryptoassets in question, the key risks involved for the investors and a summary to help potential purchasers make an informed decision regarding their investment.

- Another legislation passed with MiCA requires crypto companies to send information of senders and recipients of cryptoassets to their local anti-money laundering authority, to prevent laundering and terror financing activities.

➤ **What has been the reaction?**

- Leaders at some of the biggest cryptocurrency firms have taken exception to some aspects of MiCA but the broad view is that it is better to have a regulatory framework than having no rules at all and attracting regulatory action on a case-by-case basis without clarity.

- Meanwhile, since it's been three years since MiCA has been in development, some experts feel that the regulation is already laggard in covering newer vulnerabilities in the crypto industry.

- For instance, it does not cover practices like crypto staking and lending, which led to some of the industry's biggest failures last year.

➤ **How is crypto regulated in India?**

- India is yet to have a comprehensive regulatory framework for cryptoassets. A draft legislation on the same is reportedly in the works.
- A full-fledged regulation aside, the Indian government has taken certain steps to bring cryptocurrencies under the ambit of specific authorities and taxation.
- In the Union Budget for 2022, the Finance Ministry said that cryptocurrency trading in India has seen a “phenomenal increase” and imposed a 30% tax on income from the “transfer of any virtual digital asset.”
- In March 2023, the government placed all transactions involving virtual digital assets under the purview of the Prevention of Money Laundering Act (PMLA).

POLITY AND GOVERNANCE

❖ **How can a juvenile be tried as an adult in Court?**

➤ **CONTEXT: The National Commission for Protection of Children (NCPCR) has recently issued guidelines for conducting a preliminary assessment by the Juvenile Justice Board (JJB) under Section 15 of the Juvenile Justice Act, 2015 (JJ Act, 2015).**

- This preliminary assessment is to ascertain whether a juvenile can be tried as an adult. Replacing the Juvenile Justice Act, 2000, the 2015 Act, for the first time, provided for trying juveniles in the age group of 16-18 as adults in cases of heinous offences.

➤ **How does a child get tried as adult?**

- The Act has categorised the offences committed by children into three categories — petty offences, serious offences, and heinous offences.
- Section 15 of the JJ Act provides that in case of a heinous offence alleged to have been committed by a child, who has completed or is above the age of sixteen years, the Board shall conduct a preliminary assessment regarding his mental and physical capacity to commit such offence, ability to understand the consequences of the offence and the circumstances in which he allegedly committed the offence.
- Section 18 (3) of the Act further suggests that, if the Board, after preliminary assessment under section 15 passes an order that there is a need for trial of the said child as an adult, then the Board may order the transfer of the case to the Children’s Court having jurisdiction to try such offences.
- The sole objective of having such a preliminary assessment is to determine whether a child within the age group of 16-18 years should be tried as an adult in case of heinous offences.

➤ **What are the responsibilities of the Board?**

- The guidelines further make it clear that the JJB shall be responsible for the preliminary assessment and provide the child, the child’s family, and their counsel a copy of the order.
- It further states that in case the JJB does not have at least one member who is a practising professional with a degree in child psychology or child psychiatry, the Board shall take the assistance of psychologists or experts who have the experience of working with children in difficult times.
- The child should also be provided with a legal aid counsel through the District Legal Services Authority who shall be present during the preliminary assessment.
- One of the important aspects of the guidelines is that it mandates experts, who have the required qualification to assist the JJB, to undergo training concerning Section 15 of the JJ Act, 2015
- During the preliminary assessment, the Board and experts shall also analyse and take into consideration the Social Investigation Report (SIR), to be prepared by the Probation officer or Child Welfare Officer or any social worker, or a Social Background Report (SBR) to be prepared after interaction with the child or child’s family.

➤ **What next?**

- The NCPCR is under a statutory obligation under Section 109 of the JJ Act, 2015 to monitor the proper implementation of the provisions of the Act.
- The guidelines have been made to remove any ambiguity and to clarify the steps that need to be followed while conducting the preliminary assessment.
- However, the major issue remains the implementation and absorption of these principles in the system, particularly to be followed by the JJB and the Children’s Court.
- A lot of principles which have been made a part of the Act have not been given due prominence by the Board as well as by the Children’s Court.

CYBER SECURITY

❖ **LockBit ransomware**

➤ **CONTEXT: Recently, in a first, reports emerged that LockBit ransomware was found to be targeting Mac devices.**

- ✓ Cybercriminals have developed new ransomware encryptors designed to target macOS devices, making this the first major ransomware operation to specifically target Apple computers.
- ✓ The new encryptors target both older Macs and newer ones running on Apple Silicon. The same gang was also reportedly behind a cyber-attack on U.K. postal services earlier this year, causing international shipping to grind to a halt.

➤ **What is LockBit ransomware?**

- First reported in September 2019 and dubbed the “abcd” virus, due to the file extension used when encrypting victim’s files, the LockBit ransomware is designed to infiltrate victims’ systems and encrypt important files.
- The virus is categorised as a “crypto virus” due to its requests for payment in cryptocurrency to decrypt files on the victim’s device.
- The ransomware is therefore typically deployed against victims who feel hindered enough by the disruption to pay heavy sums in exchange for access to the files and can afford to do so.
- The gang behind the LockBit ransomware reportedly maintains a dark web portal to recruit members and release data of victims who refuse to meet their demands, as part of their business model.
- In the past, LockBit ransomware has been used to target enterprises and organisations in the U.S., China, India, Ukraine, and Indonesia. Attacks have also been recorded throughout Europe, including France, Germany, and the U.K.

➤ **Why is LockBit targeting macOS?**

- Historically, ransomware has targeted Windows, Linux, and VMware ESXi servers.
- However, LockBit is now working to create encryptors targeting Macs for the first time.
- Analysis of the encryptors revealed they were put together as a test, rather than an actual ready-to-use ransomware.
- Experts believe that, after launching multiple attacks across Europe and Asia, the gang is developing tools to target macOS and further increase the scope of attacks to bring in more financial gains for the operation.

➤ **How does LockBit ransomware work?**

- It works as a self-spreading malware, not requiring additional instructions once it has successfully infiltrated a single device with access to an organisational intranet. It is also known to hide executable encryption files by disguising them in the .png format, thereby avoiding detection by system defences.
- Attackers use phishing tactics and other social engineering methods to impersonate trusted personnel or authorities to lure victims into sharing credentials. Sometimes, the ransomware has also used brute force to gain access to the intranet server and network of an organisation.
- Once it has gained access, the ransomware prepares the system to release its encryption payload across as many devices as possible. It then disables security programs and other infrastructures that could permit system data recovery. The goal is to ensure that data recovery without assistance from the LockBit gang is impossible.
- After this is ensured, the ransomware places an encryption lock on all system files, which can only be unlocked via a custom key created by the LockBit gang.
- The process leaves behind a ransom note, with instructions to restore the system, and has reportedly also included threatening blackmail messages. Victims are then left with no choice but to contact the LockBit gang and pay up for the data, which the gang may sell on the dark web — whether the ransom is paid or not.

➤ **Who is behind the ransomware?**

- The group behind this is known as the LockBit gang. It is considered the most prolific ransomware group ever.
- It operates on the ransomware-as-a-service (Raas) model and comes from a line of extortion cyberattacks.
- In this model, willing parties put down a deposit for use in a custom attack and make profits through the ransom payment.
- The ransom is divided between the LockBit developer team and attacking affiliates, who receive up to three-fourths of the ransom, cybersecurity company Kaspersky revealed in a blog post.
- Though the exact location of the gang is yet to be ascertained, their attack patterns and propensity to avoid attacking Russian systems or countries within the Commonwealth of Independent States (CIS) suggest the group operates within its territories, and that it avoids these countries to escape prosecution.

➤ **What actions have authorities taken?**

- In November 2022, a dual Russian and Canadian national with suspected links to the gang was arrested, in Ontario, Canada for his alleged involvement in attacks targeting critical infrastructure and large organisations. The arrest came after similar action was taken in Ukraine, in October 2021.
- According to U.S Department of Justice notes that LockBit has claimed at least 1,000 victims in the U.S., extracting millions of dollars in the process.

➤ **How do we protect systems against the LockBit ransomware?**

- While there are no fool-proof ways of protecting against ransomware attacks, organisations and individuals can take certain steps to increase resilience against such cyber threats.
- The use of strong passwords, with strong variations of special characters which are not easy to guess along with multi-factor authentication should be implemented. This ensures the use of brute force will not be enough to compromise systems.

- Organisations can also undertake training exercises to educate employees on the use of phishing attacks and their identification.
- Old and unused user accounts should be deactivated and closed as they can become weak links in the security apparatus.
- Additionally, organisations and individuals should have an understanding of cybersecurity threats and vulnerable points that may be exploited by cybercriminals.

PRELIMS

1. Ponzi Scheme

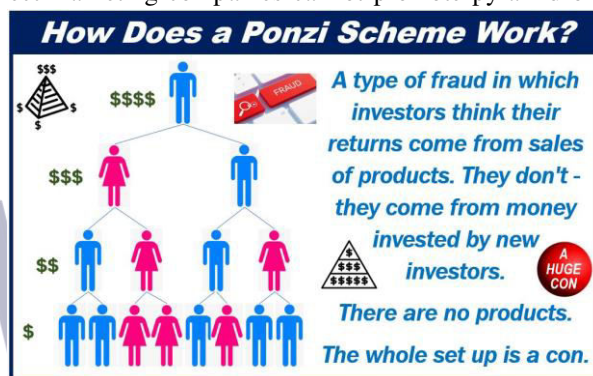
➤ **CONTEXT: Govt working to clamp down on dubious ponzi schemes, says Nirmala Sitharaman**

➤ **What Are Ponzi Schemes?**

- It is a fraudulent investing scam promising high rates of return with little risk to investors.
- The term "Ponzi Scheme" was coined in 1919 after the name of an Italian con-man named Charles Ponzi. He arrived in the US in 1882 and made money through fraudulent schemes.
- It works like a pyramid scheme and generates returns for older investors by acquiring new investors, who are promised a large profit at little to no risk.
- It relies on a constant flow of new investments to continue to provide returns to older investors and when the flow of fresh investments runs out, the scheme falls apart.
- These are generally multi-level marketing schemes, however, Multi-level marketing itself is not illegal in India because there is a product being sold. But direct marketing companies cannot promote pyramid or money circulation schemes.

➤ **Safeguards against Ponzi Schemes in India:**

- Ponzi schemes are banned under the Prize Chit and Money Circulation (Banning) Act, 1978.
- ✓ It is a Central Act but the respective State governments are the enforcement agency of this law
- These are also dealt with by the Enforcement Directorate under the Prevention of Money Laundering Act, 2002.
- The Banning of unregulated Deposit Schemes Act 2019 has been enacted to prevent fraudulent schemes.
- ✓ It provides for severe punishment ranging from 1 year to 10 years and fines ranging from 2 lakh to 50 crore rupees to act as a deterrent.
- ✓ It has adequate provisions for disgorgement or repayment of deposits in cases where deposits have been raised illegally.
- ✓ It mentions that the first claim on the recovered money will be that of depositors.



2. Pradhan Mantri Urja Ganga Project

➤ **CONTEXT: Recently, Prime Minister praised the completion of Bihar portion of Barauni- Guwahati pipeline under Pradhan Mantri Urja Ganga Project.**

- This pipeline will connect Bihar's six districts to the National Gas Grid.
- The project will promote a sustainable lifestyle by providing access to clean natural gas for companies, CNG for vehicles, and PNG for residences.

➤ **About the initiative**

- India is a fast-growing economy with huge energy demand. However, the country faces many challenges in meeting its energy needs, such as dependence on imported fossil fuels, high cost of electricity, environmental pollution and lack of access to clean energy for millions of people. To address these challenges, the Government of India launched the Pradhan Mantri Urja Ganga Project (PMUGP) in 2016.
- It is a 3,400 km long pipeline network that will connect five states; Uttar Pradesh, Bihar, Jharkhand, West Bengal and Odisha - to the existing gas grid.
- The project is implemented under the Union Minister of Petroleum and Natural Gas.

➤ **Objectives**

- Creating a gas-based economy and providing piped natural gas (PNG) and compressed natural gas (CNG) to households, industries and vehicles across the country.
- Reduce India's dependence on imported oil and gas by increasing the share of domestic gas in the energy mix.
- Lowering the cost of energy for consumers and industries by providing cheaper and cleaner fuel alternatives.
- Improve air quality and reduce greenhouse gas emissions by replacing polluting fuels like coal, diesel and firewood with natural gas.
- Create employment opportunities and boost industrial development along the pipeline corridor.

- Enhance the quality of life and health of millions of people by providing them access to clean cooking fuel and transportation.
- **Significance**
- Piped Natural Gas (PNG): PNG is cheaper than liquefied petroleum gas (LPG) and does not require cylinders or subsidies. It is also safer and more convenient than LPG as it is supplied through pipes and does not need storage or transportation.
- Compressed Natural Gas (CNG): CNG is cheaper than petrol and diesel and reduces vehicular emissions and pollution. It also improves the fuel efficiency and performance of vehicles.
- Natural Gas
- ✓ Natural gas is a cleaner and greener fuel than coal and oil.
- ✓ It reduces greenhouse gas emissions and helps in mitigating climate change.
- ✓ It enhances the energy security and diversity of the country by reducing dependence on imported fuels.
- ✓ It can be used for various purposes such as cooking, heating, cooling, lighting, power generation, fertiliser production, steel making, petrochemicals, etc.
- ✓ It can be used as a feedstock for producing hydrogen, which is a potential future fuel.
- ✓ It also boosts the development of infrastructure, transportation, communication, health, education and other sectors.

ANSWER WRITING

Q. Recently, the government has released the Tiger Census 2022 which showed a significant increase in tiger population in India. Discuss the significance Project Tiger and also, discuss the reasons of decline in tiger population in western ghats, outlined by the tiger census 2022.

Introduction

- Tiger census is a quadrennial survey of estimating tiger population in India released by National Tiger Conservation Authority (NTCA) under Ministry of Environment and Forests. Recently, Tiger Census 2022 was released by the Prime Minister on 50th anniversary of Project Tiger.
- The report showed a significant growth in Tiger population at least by 200 to 3,167 in 2022 from the last count in 2018. While the Central Indian Highlands & Eastern Ghats Landscape witnessed a growth in the population, the Western ghats landscape suffered a decline.

Tiger and its significance for the ecosystem:

- Tigers are the apex predators and an umbrella species for the ecosystem which helps maintaining ecological balance by controlling the prey population and protecting the ecosystem from overgrazing of primary producers. They ensure the ecological viability of the entire area and habitat, which also ensures the water and climate security of the region.

➤ **Significance of Project Tiger:**

Project Tiger is a centrally sponsored scheme launched to conserve the tiger in 1973. Since its inception, it has proved to be very crucial in tiger conservation:

- Because of this, the country has not only saved the tiger population from declining but also provided an ecosystem where tigers can flourish.
- ✓ In 1970s the population was somewhere around 1200, which has grown to 3167 (almost tripled in 50 years).
- ✓ India is a home to largest (70%) tiger population in the world.
- It has helped India to achieve Tx2 target set by WWF (doubling tiger population by 2022), very prior to its deadline.
- It has given India to showcase its efforts in Nature's conservation. While the whole world is seeking methods of increasing the number of tigers, India has already started achieving milestones through Project Tiger.
- Establishment of Tiger reserves has created many tourist sites and created many employment opportunities.
- ✓ India currently has 53 tiger reserves.
- Conserving forest for tiger conservation has helped India to maintain its green cover.
- ✓ It has also provided shelter to many tribal populations.

➤ **What are the reasons behind the decrease in population in western ghats region?**

As per the latest report, the tiger population witnessed in the tiger population in some areas of western ghats such as Waynad landscape, Biligirirangan (BRT) Hills. The population here has declined from 981 (2018 estimates) to 824 (2022 estimates). The main reasons behind this decline are:

- Human-wildlife conflict in the region (There has been an increase of over a thousand incidents of man-animal conflict in Kerala's Western Ghats region in 2016-2022)
- High mortality rates among cubs, Threats from invasive species, Insufficient prey population in many reserves, Infrastructure development that impedes movement of the animal, Disease, Poaching

Conclusion

Tiger being an ecologically significant species, is a culturally important species as well. The importance of the can be observed by the very fact of being adopted as National animal of India in 1973. Since then, India has launched several initiatives for the conservation of big cats, and they have undoubtedly been successful in

increasing the tiger population. But there is still a need to do more in this aspect as to prevent human-wildlife conflict, poaching, disease prevention and sustainable infrastructural development.

MCQs

- With reference to National Commission for Protection of Child Rights consider the following statements
 - The commission was established under Commission for Protection of Child Rights Act 2005.
 - Every State's Commission for Protection of Child Rights are subordinate to it.
 - For the Commission, protection of all children in the 0 to 18 years age group is of equal importance.
 - It is the sole authority to implement Protection of Children from Sexual Offences Act 2012 and Right to Education Act 2009

Which of the above statement/s is/are correct?

- 1 and 2 only
- 2 and 3 only
- 3 and 4 only
- 1 and 3 only**

- Consider the following statements with regards to National Security Act (NSA), 1980 and choose the correct statement

- The NSA empowers only Centre to detain a person to prevent him from acting in any manner prejudicial to national security.
- Under the NSA, the arrested person is not entitled to the aid of any legal practitioner in any matter connected with the proceedings before an advisory board, which is constituted by the government for dealing with NSA cases.
- NSA has the provision to move the detainee from "one place of detention to another place, within the same State or another State".

Choose the correct answer using the codes given below

- 1 and 3 only
- 2 and 3 only**
- 1 and 2 only
- 1,2 and 3

- Consider the following statements

- 36% of India's districts are classified as "overexploited" or "critical" by the Central Ground Water Authority (CGWA).
- CGWA was formed under the Environment (Protection) Act.
- Ground Water Management and Regulation Scheme is central sector scheme.
- India has the largest area under groundwater irrigation in the world.

Which of the statements given above is/are correct?

- 1 and 4 only
- 2, 3 and 4 only**
- 2 and 4 only
- 1 and 3 only

- With reference to Gig workers, consider the following statements:

- Code on Social Security, 2020 aims to provide labor rights to gig workers.
- There is no clear employee-employer relationship is available to gig workers in India.

Which of the statements given above is/are correct?

- 1 only
- 2 only**
- Both 1 and 2
- Neither 1 nor 2

- With reference to Ponzi Scheme often seen in news, consider the following statements:

- A Ponzi scheme is a form of fraud that lures investors and pays profits to earlier investors with funds from more recent investors.
- It is banned under the Prize Chit and Money Circulation (Banning) Act 1978.
- These schemes come under the regulatory purview of SEBI.

Which of the statements given above is/are correct?

- 1 and 2 only**
- 2 and 3 only
- 1 and 3 only
- 1,2 and 3

- Consider the following statements true about the Juvenile Justice (Care and Protection) Act, 2015

- A Child welfare police officer shall be appointed in each state.
- The state government shall create for every district one or more juvenile justice board.
- A child while committing an offence was under 18 years but in between the trial turns 18, then he/she should be tried as normal offender.
- There shall be a special juvenile police unit in each state.

Which of the above statement/s is/are not correct?

- 1 and 3 only
- 1,2 and 4 only
- 3 and 4 only
- 1,3 and 4 only**

- Urja Ganga Project, sometimes seen in news is related to which of the following?

- The purpose of this project is to provide LPG as a clean fuel to residents with piped gas.**
- Promote small hydroelectric projects on the Ganges and its tributaries.
- It is a type of "waste to energy" process that will be implemented as a part of the Clean Ganga Mission
- To encourage farmers who use solar pumps for crop irrigation.

- Recently which of the following legislative body approved legislation called 'MiCA' on Crypto Assets?

- USA congress
- UN General Assembly
- European Union Parliament**
- Institute of International Bankers

- With reference to INS Sumedha often mentioned in news consider the following

- It is an indigenously built Naval Offshore Patrol Vessel
- The ship has been designed and built by Goa Shipyard Limited.
- It undertake EEZ surveillance, anti-piracy patrols

Which of the above statement/s is/are correct?

- 1 and 2 only
- 2 and 3 only
- 1 and 3 only
- 1,2 and 3**

- 'Coalition of Coastal Cities to Combat Marine Litter' was in news recently, it is an initiative of

- Centre for Science and Environment (CSE)**
- Ministry of Environment
- United Nations Environment Program
- International Maritime Organization