Daily current affairs

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Dam safety Bill 2018

- The Dam Safety Bill of 2018 addresses the concerns raised about the safety of over 5,200 large dams in India and about 450 which are under construction.
- A lack of legal and institutional architecture for dam safety raises fears about unsafe dams, and the possibility of consequent disasters and loss of life and property.
- The Bill, approved by the Union Cabinet last month, proposes uniform dam safety procedures.
- It provides for surveillance, inspection, operation and maintenance of specified dams and the constitution of a National Committee on Dam Safety to evolve safety policies and recommend necessary regulations
- Also envisaged is the establishment of a National Dam Safety Authority as a regulatory body to implement the policy, guidelines and standards for dam safety. The Bill proposes the constitution of State-level committees on dam safety.
- The legislation addresses procedures concerning dam safety, including regular inspection of dams, emergency action plan, comprehensive dam safety review, adequate repair and maintenance funds for dam safety, instrumentation and safety manuals. It lays the onus of dam safety on the dam owner and provides for penal provisions.

National Dam Safety Authority (functions)

- Standardisation of safety-related data and practices.
- This authority shall provide technical and managerial assistance to the States and State Dam Safety Organisations.
- Maintain a national level database of dams and the records of major dam failures.
- It shall examine the cause of any major dam failure and publish and update the standard guidelines and check-lists for the routine inspection and detailed investigations of dams and appurtenances.
- The National Authority is empowered to examine unresolved points of issue between the State Dam Safety Organisations of two States, or between the State Dam Safety Organisation of a State and the owner of a dam in that State.

Pad Abort Test

“The Pad Abort Test [PAT] demonstrated the safe recovery of the crew module in case of any exigency at the launch pad,” ISRO said.

- It described PAT as a major technology demonstrator and the first in a series of tests to qualify a larger Crew Escape System of the future.
- The U.S., Russia and China which have sent human missions have developed their own systems.
- The Indian Space Research Organisation (ISRO) inched a small step closer to its ambition of sending Indians to space by conducting the first 'pad abort' test.
- The test proves that the agency can bail out future astronauts with their capsule in case of an early danger to them at the launch pad.

Cryptocurrency

- A cryptocurrency is a digital or virtual currency that uses cryptography for security.
- A cryptocurrency is difficult to counterfeit because of this security feature.
- A defining feature of a cryptocurrency, and arguably its most endearing allure, is its organic nature; it is not issued by any central authority, rendering it theoretically immune to government interference or manipulation

Cryptocurrency Benefits

- Cryptocurrencies make it easier to transfer funds between two parties in a transaction; these transfers are facilitated through the use of public and private keys for security purposes.
- These fund transfers are done with minimal processing fees, allowing users to avoid the steep fees charged by most banks and financial institutions for wire transfers.
- Central to the appeal and function of Bitcoin is the blockchain technology, making it almost impossible to forge transaction histories.
- Many experts see this blockchain as having important uses in technologies, such as online voting and crowdfunding
- Cryptocurrency has the potential to lower transaction costs by making payment processing more efficient.

Cryptocurrency Drawbacks

- cryptocurrencies are virtual and do not have a central repository, a digital cryptocurrency balance can be wiped out by a computer crash if a backup copy of the holdings does not exist.
- Since prices are based on supply and demand, the rate at which a cryptocurrency can be exchanged for another currency can fluctuate widely.
- The anonymous nature of cryptocurrency transactions makes them well-suited for a host of nefarious activities, such as money laundering and tax evasion.
- Cryptocurrencies are also considered by some economists to be a short-lived fad or speculative bubble - concerned especially that the currency units, such as Bitcoins, are not rooted in any material goods
- Cryptocurrencies are not immune to the threat of hacking.

Most common cryptocurrencies

Bitcoin — The first ever cryptocurrency that started it all.

Ethereum — A Turing-complete programmable currency that lets developers build different distributed apps and technologies that wouldn't work with Bitcoin.

Ripple — Unlike most cryptocurrencies, it doesn't use a Blockchain in order to reach a network-wide consensus for transactions. Instead, an iterative consensus process is implemented, which makes it faster than Bitcoin but also makes it vulnerable to hacker attacks.

Bitcoin Cash — A fork of Bitcoin that is supported by the biggest Bitcoin mining company. It has only existed for a couple of months but has already soared to the top five cryptocurrencies in terms of market cap.

NEM — Unlike most other cryptocurrencies that utilize a Proof of Work algorithm, it uses Proof of Importance, which requires users to already possess certain amounts of coins in order to be able to get new ones. It encourages users to spend their funds and tracks the transactions to determine how important a particular user is to the overall NEM network.

Litecoin — A cryptocurrency that was created with an intention to be the 'digital silver' compared to Bitcoin's 'digital gold.' It is also a fork of Bitcoin, but unlike its predecessor, it can generate blocks four times faster and have four times the maximum number of coins at 84 mln.