



# Cryptocurrencies

---



---

# What are Cryptocurrencies?

---

- Digital currencies that use encryption techniques
- Decentralized and not controlled by governments or financial institutions
- No bank involved
- Exist only in digital form
  - Stored in wallets and sent to another wallet

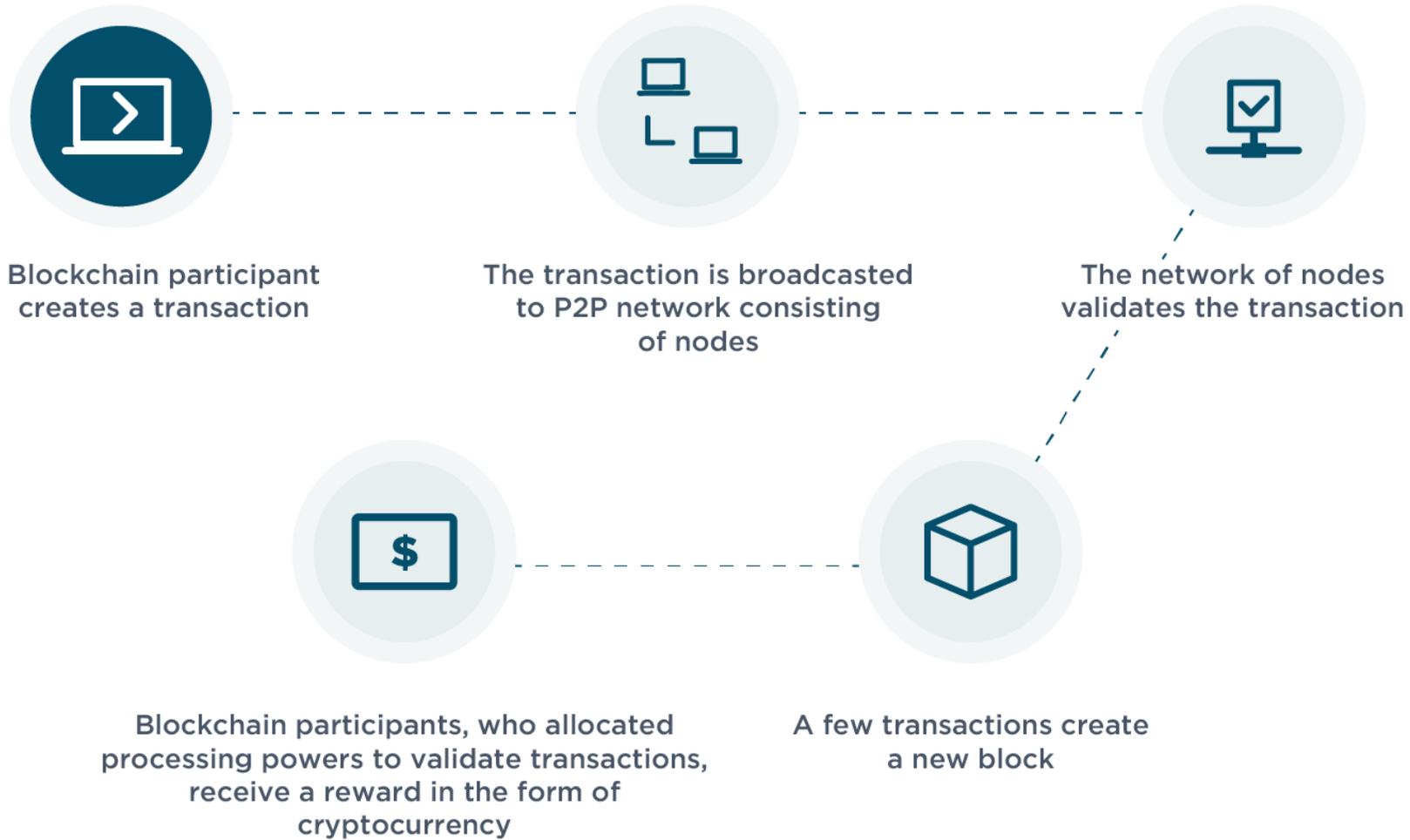


# How do Cryptocurrencies Work?

- Peer to peer transfers
- Transactions are verified within the peer network using Blockchain and recorded on a decentralized digital ledger
- Every transaction is encrypted and linked to the previous one
- Miners use powerful computers to solve complex mathematical problems and verify transactions



# How cryptocurrency works



1 Bitcoin =

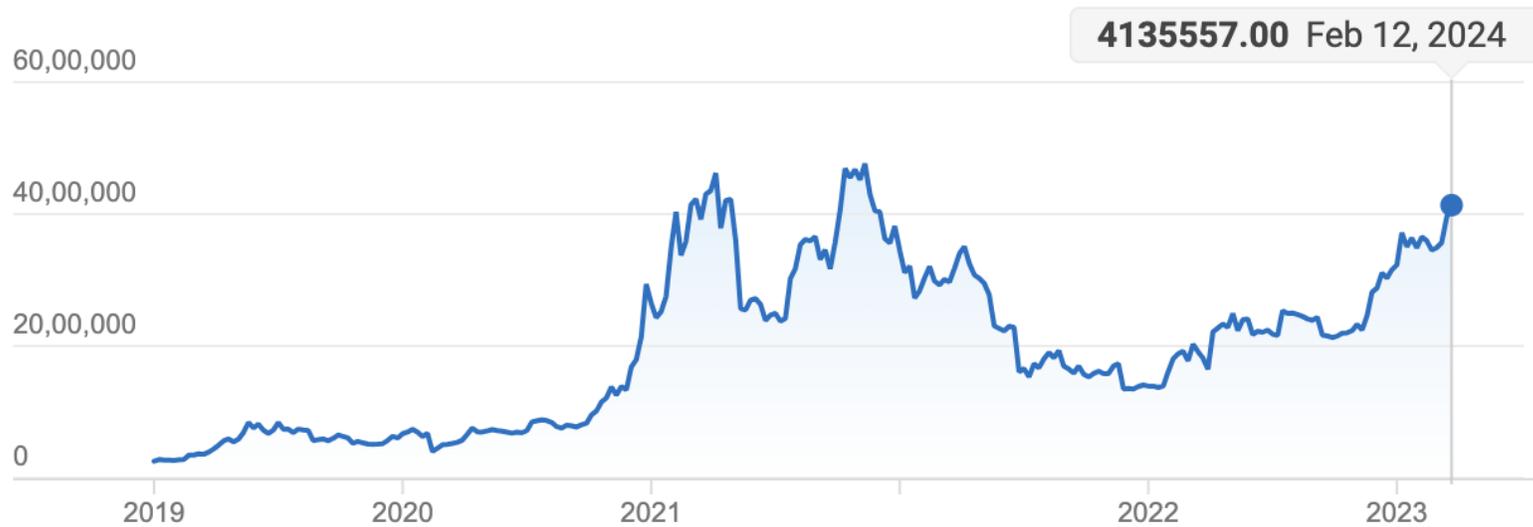
# 41,58,768 Indian Rupee

Last updated · 13 February at 8:30 am UTC

BTC - Bitcoin

INR ₹ - Indian Rupee

- Day
- Week
- Month
- Year
- 5 Year**
- Max



# Types of Cryptocurrencies

Several types of cryptocurrencies are presently there in the world.



# Major cryptocurrencies of the world

- **Bitcoin (BTC):** Pioneer cryptocurrency, decentralized, peer-to-peer transactions.
- **Ethereum (ETH):** Offers smart contracts and decentralized applications (DApps).
- **Tether (USDT):** Stablecoin pegged to the U.S. dollar, price stability, high trading volume.
- **USD Coin (USDC):** Stablecoin pegged to the U.S. dollar.
- **Ripple (XRP):** Known for its digital payment protocol.
- **Solana (SOL):** High-performance cryptocurrency, supports smart contracts and decentralized applications.
- **Dogecoin (DOGE)**

# Benefits of Cryptocurrencies-1

- **Inflation Protection:** Cryptocurrencies act as a hedge against inflation.
- **Transactional Speed:** Transactions processed quickly, often within minutes.
- **Cost Efficiency:** Low-cost transactions, especially for international transfers.
- **Decentralization:** Cryptocurrencies operate on decentralized networks based on blockchain technology.

## Benefits of Cryptocurrencies-2

- **Security:** Cryptocurrencies use cryptographic technologies for security.
- **Potential for High Returns:** Cryptocurrencies have high return potential, albeit with high risk.
- **Ease of Transactions:** Cryptocurrency transactions are easy, low-cost, and relatively private.
- **Access to the Traditional Financial System:** Cryptocurrencies provide financial services to those lacking access to the traditional financial system.

# Risks and Challenges of Cryptocurrencies

- **High Volatility:** Significant price fluctuations in short periods.
- **Evolving Regulatory Landscape:** Inconsistent frameworks across countries.
- **Security Risks:** Vulnerability to hacking despite cryptographic security.
- **Scalability Issues:** Congestion leads to slower transaction speeds, higher fees.
- **Energy Consumption:** Extensive use in Proof-of-Work algorithms.
- **Financial Crime Risks:** Associations with illicit activities, money laundering, tax evasion.
- **Crypto frauds:** e.g. OneCoin floated by Ruja Ignatova in 2016
- **Rapidly Evolving Field:** Large uncertainties

# India's Stand-1

- **MAJOR CONCERNS**

- 1. Regulatory Concerns:** Cryptocurrencies are borderless and require international collaboration to prevent misuse and black money circulation.
- 2. Security Risks:** Cryptocurrencies can be used for illicit activities, money laundering, and tax evasion.
- 3. Lack of Control:** Cryptocurrencies operate outside the control of central government or authorities, posing challenges for financial regulation.
- 4. Volatility:** Cryptocurrencies have high price volatility and pose financial risks.

# India's Stand-2

- **CURRENT STATUS:** The Govt has not banned cryptocurrencies, but has taken steps towards regulating them, such as
  1. not approving it as a medium of exchange,
  2. preventing banks & FIs from making crypto investments,
  3. mandatory disclosure,
  4. taxation, and
  5. exploring digital currency issued by the RBI.

# Crypto Taxation in India

With a view to regulate cryptocurrencies in India:

- **Tax on Profits:** 30% flat tax on profits from selling, swapping, or spending Virtual Digital Assets (VDAs), including cryptocurrencies.
- **Cess:** 4% cess on tax on profits.
- **TDS:** 1% TDS on transfer of crypto assets from July 01, 2022, if transactions exceed ₹50,000 (or ₹10,000 in some cases) in the same financial year.
- **No Deductions:** No deductions allowed, except for cost of acquisition.
- **Reporting:** Crypto gains reported under Schedule VDA in the Income Tax Return.

# RBI initiative

- **Retail Digital Rupee (e₹-R):** A digital token that represents legal tender, issued and distributed by RBI through banks.
- **Digital Wallet:** A mobile app that allows users to store and transact with e₹-R, both P2P and P2M.
- **Pilot Project:** Launched on December 01, 2022, covering select locations and customers in a CUG. Eight banks and 13 cities involved in phase-wise implementation.
- **Objective:** To test the robustness and feasibility of e₹-R creation, distribution, and usage in real time. To explore different features and applications of e₹-R in future pilots.

**Thank You**