SC Upholds EVM and VVPAT System

Source: TH

Why in News?

Recently, the Supreme Court in *the Association of Democratic Reforms v. Election Commission of India Case, 2024*, upheld the **electronic voting machine (EVM) system**, rejecting a return to paper ballots. Also, the Court rejected the request for **100%** cross-verification of EVM votes with **Voter verifiable paper audit trail (VVPAT)** slips, maintaining the current random **5% verification** in Assembly constituencies.

- However, the Court issued a series of directions to the **Election Commission of India** (ECI) to strengthen the existing system.

What is the Supreme Court's Current Observation on EVM and VVPATs?

- **Insufficient Evidence to Question Polling System:** The Court, drawing from a range of legal precedents, emphasised that there is **insufficient evidence** to question the current polling system, particularly after the implementation of VVPATs.
    - In the 2013 case of *Subramanian Swamy v. Election Commission of India*, the Court declared that a paper trail is essential for ensuring fair elections.
    - Subsequently, in 2019, when addressing a petition advocating for a 50% cross-verification of EVM votes with VVPAT slips in each Assembly constituency, the **Court favoured increasing the number of polling stations conducting VVPAT verification** from 1 per Assembly constituency to 5.
- **Neutrality of EVM Microcontrollers:** SC observed that the microcontrollers programmed separately by **EVM manufacturers** are neutral, as they do not favour any political party or candidate but only record the buttons pressed by voters.
    - SC also pointed out that any unauthorised attempt to access the EVM's microcontroller or memory triggers the **Unauthorized Access Detection Mechanism (UADM)**, rendering the EVM permanently disabled.
- **Security Measures in EVMs:** Highlighting the security measures, the court noted that the program installed in the EVMs is securely hashed and burned into a **One Time Programmable microcontroller chip during manufacturing,** eliminating any possibility of tampering.
    - Additionally, all three units of the EVM – **the ballot unit, control unit, and VVPAT –** have microcontrollers with firmware that cannot be altered after delivery to the ECI by the manufacturer.

How EVMs and VVPAT were Introduced in India?

- **1977-1979:** The idea of EVM was conceived in **1977** and a prototype was developed by Electronics Corporation of India Ltd (ECIL), Hyderabad, in 1979.
- **1980**: The Election Commission demonstrated an EVM on 6th August 1980. After consensus on its use, the ECI issued directives under **Article 324 for the use of EVMs**.
- **1982:** EVMs were used in 50 polling stations during elections in the Parur seat of Kerala. The Supreme Court ruled against the legality of EVMs' use.
- **1988:** A section of the **Representation of the People Act, 1951** was amended in december 1988 and a new section, 61A, was included in the law, empowering the EC to use EVMs. The amendment came into force on 15th March 1989.
- **1990**: An Electoral Reforms Committee under Dinesh Goswami was constituted, which recommends a technical examination of EVMs. The Technical Expert Committee recommended EVMs **"without any further loss of time marking it technically sound, secure and transparent".**
- **1998**: EVMs were used in 16 Assembly elections across Madhya Pradesh, Rajasthan and New Delhi.
- **2001:** State assembly elections in Tamil Nadu, Kerala, Puducherry, and West Bengal were completely conducted using EVMs. All state assembly elections thereafter witnessed the use of this machine
- **2004:** EVMs were used in all 543 constituencies of Lok Sabha elections.
- **2013:** Amendment to **the Conduct of Election Rules, 1961** introduced the use of Voter Verifiable Paper Audit Trail (VVPAT) machines. Used in the by-election for the Noksen assembly seat in Nagaland.
- **2019:** First Lok Sabha election in which EVM was fully backed by a VVPAT EVM.

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How do VVPAT machines work?

When a voter presses a button in the EVM, a paper slip is printed through the VVPAT

Candidate Name 4

The slip contains the poll symbol, name and serial number of the candidate
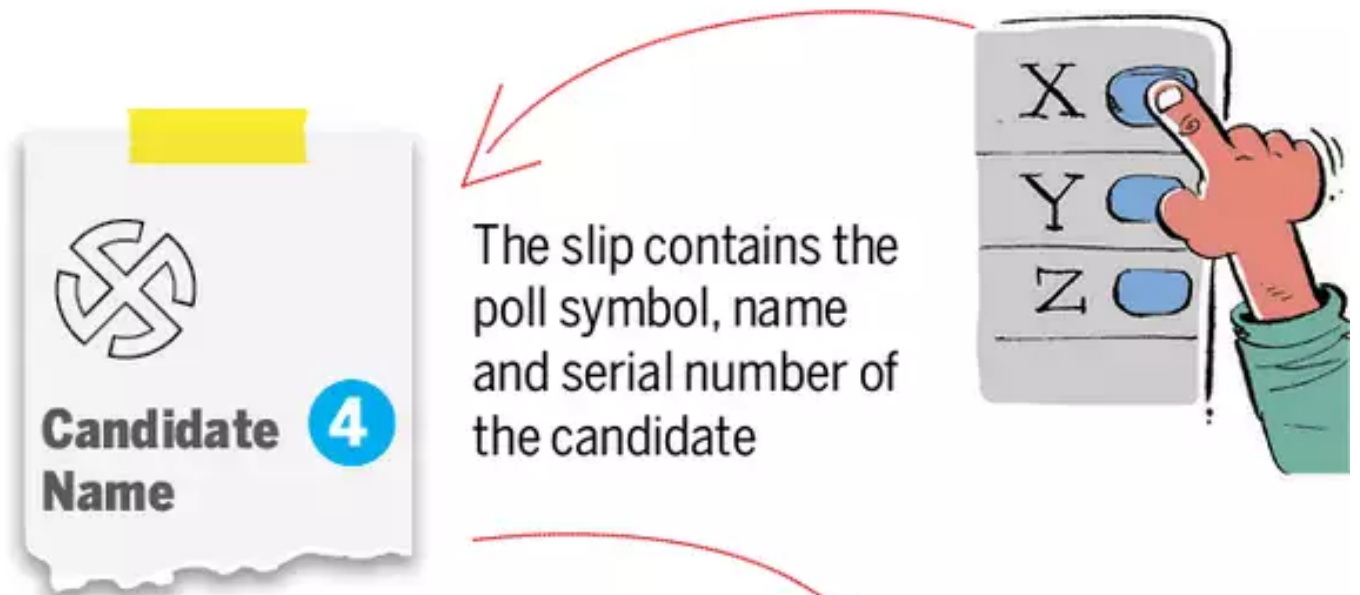
It allows the voter to verify his/her choice. After being visible to the voter from a glass screen for 7 secs, the ballot slip will be cut and dropped into the box and a beep will be heard. VVPAT machines can be accessed by polling officers only

Note:

- The **paper ballot system** is a traditional voting method where **voters mark their choices on physical paper ballots**, which are then manually counted by election officials to determine the results.
- This system is transparent but **can be time-consuming and prone to errors** during counting.

How is EVM better than the Paper Ballot System?

- **Accuracy and Reduced Errors:** EVMs eliminate the possibility of human errors such as miscounting, double voting, or invalid votes due to unclear markings.
  - The digital nature of EVMs ensures **precise tabulation of votes,** leading to more accurate election results compared to manual counting.
- **Faster Counting and Results**: EVMs significantly reduce the time required for vote counting as compared to traditional paper ballots, allowing for quicker declaration of election outcomes.
  - This swift counting process helps in **minimising uncertainties** and delays associated with manual counting methods.
- **Environmentally Friendly:** EVMs contribute to environmental sustainability by **reducing paper usage**, thus lowering the environmental impact associated with printing and managing large quantities of paper ballots.
  - The shift towards electronic voting aligns with global efforts to promote eco-friendly practices in electoral processes.
- **Enhanced Security Measures:** EVMs incorporate advanced security features such as **encryption, secure booting, and tamper detection mechanisms,** making them less susceptible to tampering or fraud which is very likely in paper ballot systems through booth capturing, **pouring ink into ballots and ballot box stuffing.**
  - The digital encryption of votes ensures the integrity and confidentiality of the electoral process, enhancing overall security and trust in election outcomes.
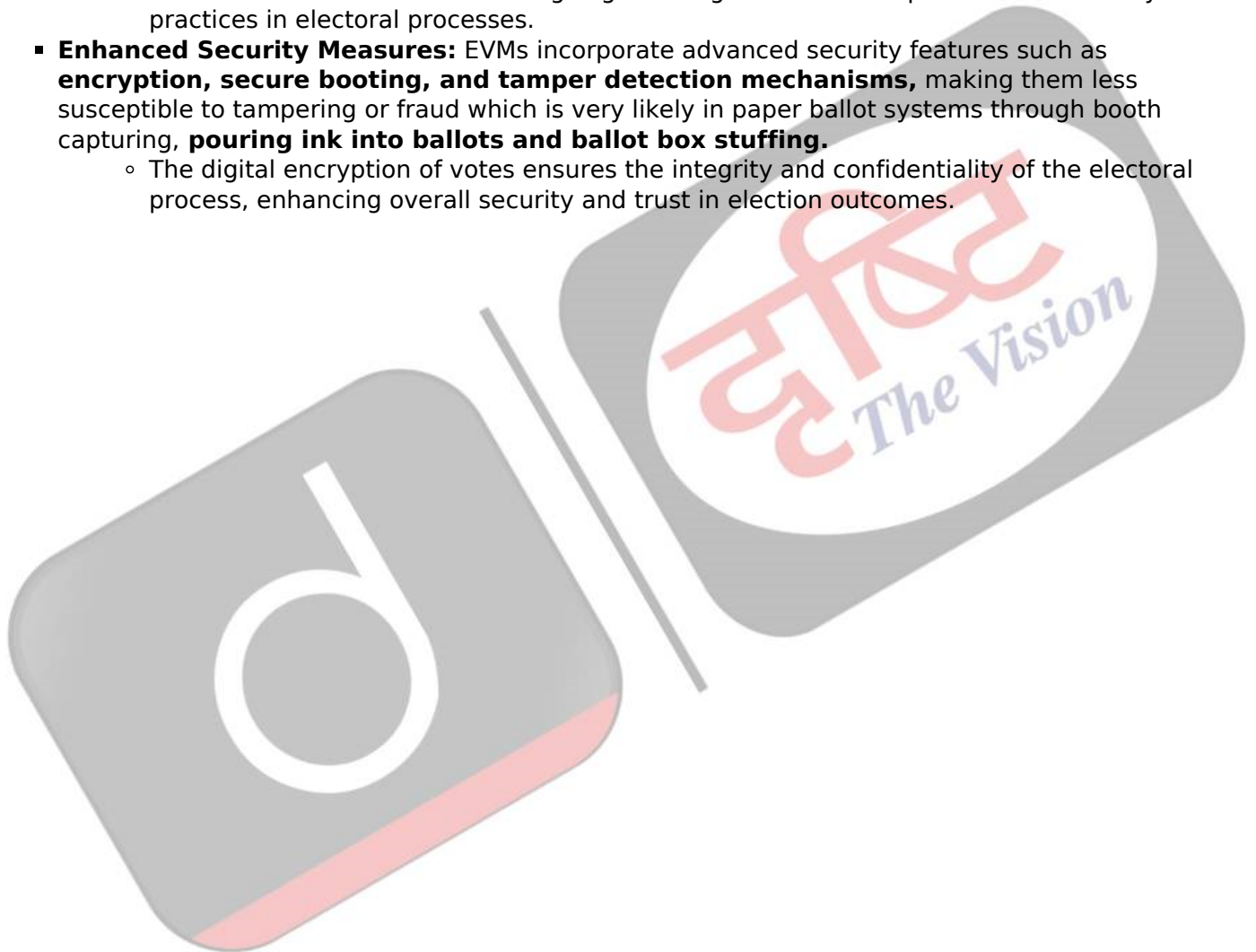
ELECTORAL REFORMS IN INDIA

ELECTORAL REFORMS ARE CHANGES MADE TO IMPROVE THE ELECTION PROCESS AND ENSURE FAIRNESS.

Electoral Reforms Before 1996

- **Model Code of Conduct (1969):** Guidelines to regulate political parties and candidates prior to elections
- **61st Constitutional Amendment Act (1988):** Lowering of the voting age from 21 to 18 years
- **Electronic Voting Machines (EVMs) (1989):** Switched from individual colored ballot boxes to ballot papers, and later to EVMs
- **Booth Capturing (1989):** Provision for adjournment of poll or countermanding of elections in such cases
- **Elector's Photo Identity card (EPIC) (1993):** Electoral roll is the basis to issue EPIC to registered electors
- **ECI- A Multi-member Body (1993):** Election commissioners were appointed in addition to CEC

Electoral Reforms of 1996

- **Time-limit for By-elections:** Elections must occur within 6 months of any vacancy in a legislative house
- **Listing of Names of Candidates:** Contesting candidates categorized into 3 groups for listing
  - Recognised & registered-unrecognised political parties
  - Other (independent)
- **Disqualification for Insulting the National Honour Act, 1971:** Leads to election disqualification for 6 years upon:
  - Insulting the National Flag, Constitution of India or preventing the singing of National Anthem

Electoral Reforms After 1996

- **Vote Through Proxy (2003):** Service voters in Armed Forces & forces under Army Act can vote by proxy
- **Allocation of Time on Electronic Media (2003):** Equitable sharing of time on electronic media during elections to address the public
- **Introduction of Braille Signage Features in EVMs (2004):** To facilitate the visually impaired voters to cast their votes without an attendant

Electoral Reforms Since 2010

- **Voting Rights to Indian Citizens Living Abroad (2010)**
- **Online Enrollment in Electoral Roll (2013)**
- **Introduction of NOTA option (2014)**
- **VVPAT Voter Verified Paper Audit Trail (2013):** Introduction of VVPAT with EVMs to conduct free and fair elections
- **Photos of Candidates on EVMs and Ballot Papers (2015):** To prevent confusion in constituencies with namesake candidates
- **Introduction of Electoral bonds (2017 Budget):** An alternative to cash donations for political parties
  - Declared as unconstitutional by SC (2024)
- **Launch of Electronic EPIC (2021)**
- **Home Voting for People with Disabilities & Those Above 85 years of Age (2024)**

IMPORTANT COMMITTEES/ COMMISSION

Committees/ Commission	Year	Purpose
Tarkunde Committee	1974	By Jaya Prakash Narayan (JP) during the "Total Revolution" movement.
Dinesh Goswami Committee	1990	Electoral Reforms
Vohra Committee	1993	On the Nexus between Crime and Politics
Indrajit Gupta Committee	1998	State Funding of Elections
Second Administrative Reforms Commission of India	2007	Report on Ethics in Governance (Headed by Veerappa Moily)
Tankha Committee (Core Committee)	2010	To look into the whole gamut of the election laws & electoral reforms.

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The Vision

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Read more: Electoral Reforms in India

UPSC Civil Services Examination Previous Year Questions (PYQ)

Prelims:

Q.1 Consider the following statements: (2017)

1. The Election Commission of India is a five-member body.
2. The Union Ministry of Home Affairs decides the election schedule for the conduct of both general elections and bye-elections.
3. Election Commission resolves the disputes relating to splits/mergers of recognised political parties.

Which of the statements given above is/are correct?

(a) 1 and 2 only

(b) 2 only

(c) 2 and 3 only

(d) 3 only

Ans: (d)

Mains:

Q.1 To enhance the quality of democracy in India the Election Commission of India has proposed electoral reforms in 2016. What are the suggested reforms and how far are they significant to make democracy successful? **(2017)**

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