

# ELECTRONIC VOTING MACHINES:

## The Shockingly Secure Solution to Election Fraud

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In recent years, electronic voting machines (EVMs) have been increasingly used in elections around the world, providing a quick and efficient way for citizens to cast their ballots. However, the use of EVMs has faced criticism in Pakistan, with some claiming that the machines are tamper-prone and susceptible to fraud, lack transparency and verifiability in the voting process, and have the potential for data breaches. For example, in September 2021 the Election Commission of Pakistan (ECP) raised 37 objections to the proposed use of EVMs by the government, including concerns about the security and reliability of the machines, the lack of consensus among stakeholders, and the feasibility of implementing the technology on a large scale in a short time frame. Despite these concerns, the evidence suggests that EVMs are a secure, reliable, and efficient way of conducting elections.

India is our neighbouring country with a shared history and many similarities with our political, socio-economic, as well as cultural conditions. Both are large, diverse democracies with multi-party systems and have faced challenges in ensuring fair and transparent elections. It is natural to compare the experiences of the two countries when it comes to the use of EVMs. EVMs were introduced in India on an experimental basis as early as 1998 in select constituencies in state assembly elections. The use of EVMs was intended to strengthen the electoral process and reduce the cost of conducting elections. After initial success, the technology was gradually introduced in subsequent assembly elections and replaced paper ballots throughout the country from 2001 onwards.

A 2017 study examined the impact of EVMs on electoral fraud, democracy, and development in India. The research found that the introduction of EVMs led to a significant reduction in electoral fraud, particularly in politically sensitive states that had been prone to repeat polls due to electoral rigging. The use of EVMs also empowered weaker and vulnerable groups, such as women and marginalized communities, who were more likely to cast their votes due to EVMs. In addition, the study found evidence that EVMs contributed to an increase in the provision of electricity and a decline in crimes such as murder and rape. Prior to the introduction

of EVMs, women in India often faced obstacles to voting, such as lack of access to polling stations and harassment by male voters. EVMs made it easier for women to cast their votes, and as a result, their participation in elections increased. This, in turn, led to a greater focus on issues affecting women and a stronger stance against sexual violence.

EVMs also allowed for faster and more efficient voting, which is particularly important in a country with a large and complex multi-party system like India. The use of EVMs has given Indian voters confidence in the integrity of the electoral process and has helped improve the overall strength of democratic institutions in the country. Electoral fraud and frequent allegations of rigging has had a destabilizing effect on Pakistan. When elections are rigged, it can lead to a lack of trust in the government and a breakdown of the rule of law. This can create a climate of impunity, where crimes are more likely to go unpunished. By making elections freer and fairer, EVMs can help restore trust in the government and improve the rule of law, which leads to a better functioning society.

The objections raised by many in Pakistan, including the ECP, are based on a misunderstanding of how EVMs work and the assumption that they are easier to tamper compared to traditional paper-based balloting. EVMs are not necessarily susceptible to tampering or fraud, as they can be designed with multiple security measures to prevent unauthorized access. For example, EVMs can use encrypted software that cannot be altered, and each machine can have a unique identification number that is recorded in the system. In addition, EVMs are not connected to the internet, so they cannot be hacked remotely. Opponents of EVMs have also argued that the machines do not provide a paper trail, making it difficult to verify the accuracy of the vote count. This concern is also unfounded, as many EVMs can produce a paper trail that can be used for auditing purposes. In fact, several countries, including India, Brazil, and the United States, have implemented EVMs with a paper trail to provide an additional layer of security.

The term 'hacking' is also often misunderstood and used to

refer to any kind of unauthorized access or tampering with a computer system. However, the reality is that any kind of voting system, whether it is electronic or paper-based, is vulnerable to tampering or 'hacking' in order to alter the results unfairly. In fact, paper-based voting systems are often more susceptible to tampering than EVMs, as they do not have the same security measures in place to prevent unauthorized access. Therefore, while 'hacking' is always a concern in any voting system, EVMs are less prone to tampering than the traditional system that we have seen 'hacked' again and again during the 75-year-old roller-coaster ride of democracy in Pakistan.

The use of EVMs is not only secure, but it also has the potential to improve the overall quality of elections in Pakistan. EVMs can reduce the risk of human error and fraud, which are common problems with traditional paper-based voting systems. They can also speed up the vote count, which is particularly important in a country like Pakistan where elections are held over the course of a single day. Additionally, EVMs can make the voting process more accessible for disabled and elderly voters, who may have difficulty using a paper ballot.

Research from India suggests that EVMs may also have significant political effects. A study published in the European Political Science Association in 2016 looked at the introduction of EVMs in India and found that their use was associated with dramatic declines in the incidence of invalid votes. Invalid votes are ballots that are not counted because they do not meet certain criteria, such as having a clear mark for a candidate or being marked for more than one candidate. In many cases, invalid votes are seen as unintentional errors, and reducing their incidence is often seen as a positive development. However, some scholars argue that invalid votes can also be a form of conscious protest, with voters using them to signal their dissatisfaction with the electoral system or the choices on offer. The study used a difference-in-differences methodology, comparing the effects of EVMs on elections before and after their introduction. They found that the use of EVMs was associated with a significant decrease in invalid votes, and a corresponding increase in votes for minor candidates. This suggests that voters who would have previously used invalid ballots as a form of protest were now casting their votes for minor parties instead.

The study also found that there was ambiguous evidence for EVMs decreasing turnout, but no evidence for increases in voter error or fraud. Additionally, there was no difference in the effects of EVMs with and without an auditable paper trail. This is an important finding, as auditable paper trails are often seen as a way to address concerns about the security and transparency of electronic voting systems. Overall, the study gives strong evidence that the introduction of EVMs in a democracy can have significant political effects, with voters using them to express their dissatisfaction with the electoral system in different ways.

Pakistan has had many elections marred with allegations of rigging. Most recently, both 2013 and 2018 elections became highly politicized due to this – so much so that the ensuing instability for both the PMLN and PTI governments was primarily caused by the allegations of rigging and consequent questioning of the legitimacy of both

both governments. One can argue that the dire situation Pakistan finds itself in today, economically, socially, and politically, is due to a lack of faith in the electoral process and governments because of these allegations. This can be significantly reduced by the use of EVMs.

There is ample evidence that shows that EVMs are a secure and reliable way to conduct elections, increase public trust in the electoral process, and improve the perceived legitimacy of the government. They have been successfully used in countries around the world and have been shown to reduce the risk of fraud and human error. Despite the objections raised by the ECP and many in Pakistan, EVMs have the potential to improve the quality of elections in Pakistan and should be adopted as a means of strengthening the country's democratic institutions.

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