

LEGAL ANALYSIS OF THE IMPACT OF BVAS ON THE 2023 ELECTIONS IN NIGERIA: A CASE STUDY OF ADO-ODO OTA LOCAL GOVERNMENT AREA OF OGUN STATE

PROMISE AARON*¹

MILLER NZEWENTA **²

AIYEDOGBON, OLORUNFEMI ALABA *³**

Abstract

This study evaluates the impact of the Bimodal Voter Accreditation System (BVAS) on Nigeria's 2023 general elections, focusing on its role in enhancing electoral credibility, transparency, and fairness. The primary objective is to assess the effectiveness of BVAS in addressing long-standing issues such as voter fraud, verification inefficiencies, and public distrust in the electoral process. The study employs a mixed-methods approach, combining quantitative data from surveys conducted among voters in Ado-Odo Ota Local Government Area, Ogun State, with qualitative insights gathered from expert opinions and secondary sources. The findings reveal that while BVAS has significantly improved the electoral process particularly in reducing over-voting and ensuring accurate voter verification technical challenges such as occasional malfunctions and delays were noted. Despite these issues, the majority of the respondents expressed increased trust in the electoral system due to BVAS. However, the study also highlights the need for further improvements, particularly in enhancing the system's reliability and exploring the integration of advanced technologies like blockchain to bolster security and transparency. The study recommends that the Independent National Electoral Commission (INEC) invest in continuous technical upgrades, comprehensive training for electoral officials, and robust public awareness campaigns to maximize the effectiveness of BVAS. Additionally, it suggests implementing backup systems to prevent disruptions during elections. By addressing these areas, BVAS can further solidify its role as a transformative tool in Nigeria's democratic process, ensuring more transparent, fair, and credible elections in the future.

Keyword: BVAS, Electronic Election, Technology, Election

1.0 Introduction

The quest to deliver free, fair, and credible elections in Nigeria has necessitated that the electoral body, the Independent National Electoral Commission in Nigeria, introduce technology into the electoral process. Introducing technology into the electoral processes in many jurisdictions has by

*Promise Aaron, Lecturer, School of Law and Security Studies, Babcock University. Email: aaronp@babcock.edu.ng
Tel: 07030098666

**Miller Nzewenta, Lecturer, School of Law and Security Studies, Babcock University. Email: nzwenram@babcock.edu.ng

***Aiyedogbon, Olorunfemi Alaba, Student, School of Law and Security Studies, Babcock University. Email:

no means reduced human errors or human baggage in the electoral processes and has improved and deepened democracy in those jurisdictions.⁴ INEC in 2011, introduced technology into Nigeria's electoral processes where the elections were conducted the election with the permanent voter card and card reader machine. In preparation for the 2015 general elections, it introduced the Bimodal Voter Accreditation System (BVAS) and Election Result Viewing Portal (IREV) for conducting elections to reduce, if not eliminate, rigging in the Nigerian electoral process.⁵

The Electoral Act 2022, passed in preparation for the 2023 general elections, allows the Independent National Electoral Commission to use digital technology to oversee Nigeria's election system. INEC implemented the Bimodal Voter Accreditation System (BVAS) and Election Result Viewing Portal (IREV) for conducting elections. The BVAS device authenticates voters' fingerprints and face recognition before voting, while collation and transmission of results were done manually. The electoral officers were also required to upload results from polling units across the federation to the IREV portal.⁶

There have been claims that the BVAS machine has failed to deliver free, fair, transparent, and credible elections. In the 2023 general elections, some voters claimed that the BVAS machine malfunctioned in some polling units, thereby scoring the BVAS machine low. Some experts have also questioned the effectiveness of the Bimodal Voter Accreditation System and Election Result Viewing Portal that the Independent National Electoral Commission used during the most recent national elections in Nigeria. Some believed that the BVAS and IREV underperformed in their national deployment debuts and that the Independent National Electoral Commission's Bimodal Voter Accreditation System and Election Result Viewing Portal did not live up to the expectations of the country during the presidential and national assembly elections.⁷

According to the Centre for Democracy and Development, the deployment of the BVAS machine delayed elections in many parts of Nigeria as a result of the late arrival of electoral officials, and

⁴ Promise Aaron et al, 'Electronic Elections in Nigeria: A Necessity' (2023) 4(2) *Carnelian Journal of Law and Politics* 32

⁵ Galadanci, Bashir, and Abdulwahab, L. 'Investigating the Impact Of Permanent Voter Cards in Reducing Election Rigging in Nigeria' (2020) *FUDMA Journal of Sciences* 4, (1) 1-12.

⁶ Promise Aaron et al, 'Electronic Elections in Nigeria: A Necessity' (2023) 4(2) *Carnelian Journal of Law and Politics* 32

⁷ Temitayo Jaiyeola, 'How BVAS, IREV failed first election's stress test' *Punch* (Lagos, 6 March, 2023)

the poor functionality of the BVAS machine hampered the flow of the elections as there were reports of various glitches in the BVAS machine during the accreditation process, which further contributed to the delay experienced in some parts of the country.⁸ The purpose of this study is to investigate the impact of the Bimodal Voter Accreditation System (BVAS) on the 2023 general elections.

2.0 Conceptual framework

The Bimodal Voter Accreditation System (BVAS) is an electronic device designed to read and access permanent voter cards (PVCs) for authenticating and verifying voters by marching the voters' fingerprints and facial capture. The BVAS machine displays the polling unit information, the total number of registered voters, and the entire number of accredited voters. It is also used to send an image of the result sheet at polling units to the INEC portal for the public to access.⁹ The permanent voter card (PVC) is an identification card issued by the Independent National Electoral Commission (INEC) to Nigerians who have attained the age of 18 and above and thus enable them to vote in any election in Nigeria.¹⁰ To authenticate the eligible voter, the BVAS machine scans the barcode or QR code on the PVC of the voter or the voter's register. The last six digits of the voter's Voter Identity Number (VIN) can also be entered into the BVAS to authenticate eligible voters. Another way to authenticate an eligible voter is by having the Assistant Presiding Officer (APO 1) enter into the BVAS machine the last name of the eligible voter.¹¹

3.0 Methods

The researcher conducted a survey of the electorate in the Ado-Odo Ota Local Government Area of Ogun State during the 2023 general elections. The survey was aimed at eliciting information on

⁸ Ibrahim Adeyemi, '#NigeriaDecides2023: Late Arrival of INEC Officials, BVAS Challenges Characterize Elections — CDD' Premium times (Abuja, 6 January 2023)

⁹ DailyTrust, 'EXPLAINER: What INEC's BVAS Means and How to Minimise its Failure during Elections' *DailyTrust* (Abuja, 27 April 2022) <<https://dailytrust.com/explainer-what-inecs-bvas-means-and-how-to-minimise-its-failure-during-elections/>> accessed 11 January 2024.

¹⁰ Govote, 'What is a PVC?' <<https://govote.ng/get-pvc/>> accessed 11 January 2024.

¹¹ Aluko Ahmad, 'Fact Shield: All you need to know about BVAS, INEC's new system for tackling electoral fraud' (10 January, 2023) <<https://cddfactcheck.org/?p=17364>> accessed 11 January 2024.

the impact of the BVAS machine on the 2023 elections. A draft questionnaire was administered to electorate residents in Ado-Odo Ota Local Government Area of Ogun State. The response rate was high, suggesting a significantly high level of impact of the BVAS machine in the 2023 general election in Ado-Odo Ota Local Government.

3.0.1 Method of Data Collection

The instrument used for the collection of primary data for this study was a questionnaire. The questionnaire is a suitable tool for this study because it enables the researcher to gather views of the electorate in the Ado-Odo Ota Local Government Area of Ogun State on the impact of the BVAS machine on the outcome of the 2023 general elections. It also has a higher response rate than email and other models. It is suitable for persons who do not have internet access. The questions used were close-ended; with a few open-ended questions employed to generate qualitative data and enable respondents to supply more detailed information. Another justification for employing the questionnaire is the lower costs compared to Google Forms or other electronic questionnaires and the ability to reach a wider reach geographically.

4.0. Presentation of Empirical data and Analysis

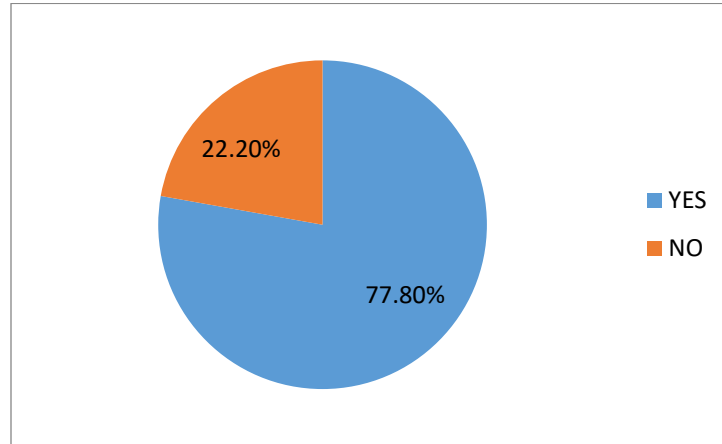
Table 4.1: Knowledge regarding, the role of BVAS in the electioneering process in Nigeria.

Items	Yes F (%)	No f (%)
The BVAS machine is used in elections for the accreditation and verification of voters, before voting	339 (91.4%)	32 (8.6%)
The BVAS machine uses fingerprints, and facial recognition and also scans the voter’s PVC to accredit and verify the voter	342 (92.4%)	28 (7.6%)
Since its introduction, has the BVAS been able to effect changes in the electioneering process in Nigeria?	288 (77.8%)	82 (22.2%)
Has the BVAS been able to provide for the loopholes the last accreditation system had?	258 (69.7%)	112 (30.3%)

Has the BVAS achieved fair, free, transparent, and credible elections in Nigeria?	188 (50.8%)	182 (49.2%)
Has the BVAS been able to increase the trust of the populace of Nigeria in elections and its processes?	183 (49.5%)	187 (50.5%)
Has the BVAS been able to curb electoral fraud in Nigeria, especially overvoting?	255 (68.7%)	116 (31.3%)
Has the BVAS faced any issues concerning its capability to send election results to the INEC portal?	270 (72.8%)	101 (27.2%)
The BVAS has been reliable in the elections held so far, since its introduction into the Nigerian electoral system	274 (74.1%)	96 (25.9%)
The BVAS has issued identifying and verifying voters before	92 (25.0%)	276 (75.0%)

Source: Researcher's Field Survey, 2024

Figure 4.1: Since its introduction, has the BVAS been able to effect changes in the electioneering process in Nigeria?



Source: Researcher's Field Survey, 2024

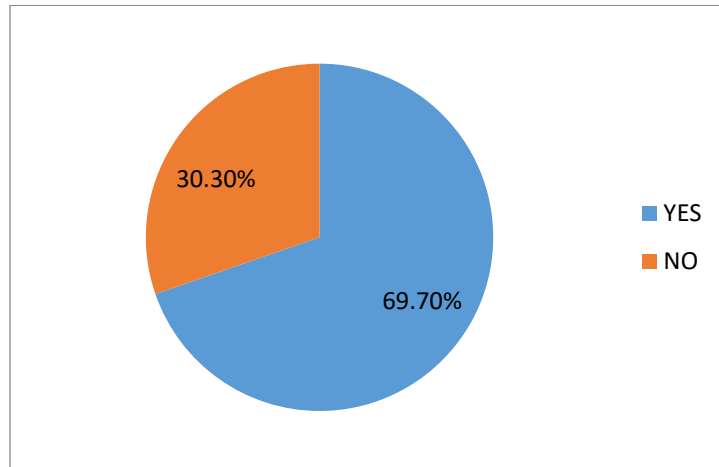
Figure 4.1 shows that 77.8% of the respondents affirmed that since its introduction, BVAS has been able to effect changes in the electioneering process in Nigeria while 22.20% of the respondents do not agree that BVAS has been able to effect changes in the electioneering process in Nigeria. This result supports the assertion of Ayeni and Aweh that the BVAS machine has made a significant impact on the electioneering process in Nigeria, especially in the 2023 elections, with the implementation of facial or finger authentication of voters by the BVAS, ensuring that each voter accredited by the polling officers is the holder of the card, hence upholding the integrity of the election.¹² Also, Bayode et al described the impact of the BVAS machine on the electioneering process in Nigeria as a vaccine against election rigging and manipulation and has increased election credibility and boosted voters' confidence in the electoral process. The use of BVAS or other electoral technology in the electioneering process in Nigeria tends to reduce election fraud while increasing public trust in the outcome of the election.¹³ The deployment of the BVAS in the

¹² Ayeni, Toba Paul and Aweh, Opani Meshark, 'Examining the Impact of Bimodal Voter Accreditation System (BVAS) as a Game Changer in Nigeria 2023 Elections' (2023) International Journal of Information and Communication Technology (IJICT) 20 (2) 25

¹³ Bayode, Elizabeth Funmilayo, et al. 'The Significance of BVAS in the Electoral Process in Nigeria' (2023) 2(2) Oguya International Journal of Contemporary Issues 16

2023 general elections made accreditation faster compared to the 2015 and 2019 elections.¹⁴ The improvement of the accreditation process during the 2023 general elections has a significant impact on electioneering in Nigeria.

Figure 4.2: Has the BVAS been able to increase the trust of the populace of Nigeria in elections and its processes?



Source: Researcher’s Field Survey, 2024

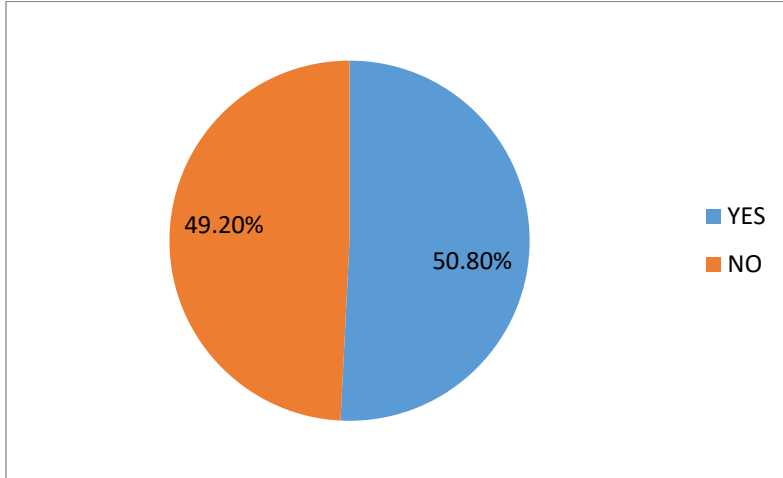
Figure 4.2 shows that 69.7% of the respondents agreed that the BVAS has been able to increase the trust of the populace of Nigeria in elections and its processes while 30.30% of the respondents did not agree that the BVAS has been able to increase the trust of the populace of Nigeria in elections and its processes. This result confirmed the position of Onyambayi et al. that the deployment of the BVAS machine during the 2023 elections is a further step to curbing election malpractice, enhancing election transparency, and boosting the credibility of the electoral process.¹⁵ The insistence on biometric verification of every voter on election day created an atmosphere where incidences of election fraud are deterred. The compulsory accreditation of

¹⁴ Yusufu, Ahmed Audu and Idrees, Mahmud Gana ‘Bimodal Voters Accreditation System (BVAS) Machines and Elections Integrity in Nigeria: An Appraisal of The 2023 General Election in Kogi State (2023) Wukari International Studies Journal 7 (3) 4

¹⁵ Edward Taiye Onyambayi and others, ‘BVAS and the Credibility of 2023 Kogi State Senatorial Elections in Nigeria’ (2024) 2 Journal of Public Administration, Policy and Governance Research 29 <<https://jppagr.com/index.php/research/article/view/81>> accessed 26 June 2024.

voters strictly by the BVAS machine has endeared the trust of Nigerians to INEC. It has raised the hopes of Nigerians for a clean electoral process.

Figure 4.3: Has the BVAS achieved fair, free, transparent, and credible elections in Nigeria?

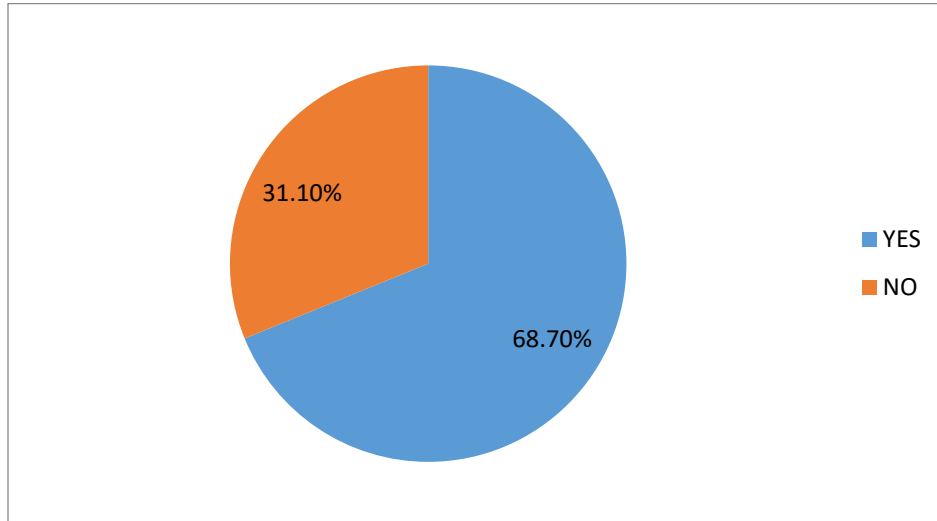


Source: Researcher's Field Survey, 2024

Figure 4.3 states that, 50.8% of the respondents agreed that the BVAS has achieved free, fair, transparent, and credible elections in Nigeria. In contrast, 49.5% of respondents did not agree that the BVAS has achieved fair, free, transparent, and credible elections in Nigeria. This data revealed little difference between the scores as many believe that the BVAS is yet to bring credible elections home in Nigeria. Notwithstanding the small margin in this data, the electorate has faith in the electioneering process that it will achieve free, fair, transparent, and credible elections. The integration of the BVAS and the IRev into the 2023 general elections marked the stepping stone toward achieving free, fair, transparent, and credible elections in Nigeria. The deployment of technology into the 2023 general elections has curtailed electoral fraud, improved the accuracy of voter rolls, enhanced transparency and credibility, reduced disputes, increased voter participation, deterred malpractice, and provided valuable data for data-driven decision-making.¹⁶

¹⁶ Bello, O. Wasiu and Celestina Ekene Chukwudi, 'Technology and Conduct of Election in Developing Countries: A Study of Nigeria's Fourth Republic (2023) 44 (6) Journal of Propulsion Technology 6947

Figure 4.4: Has the BVAS been able to curb electoral fraud in Nigeria, especially over-voting?



Source: Researcher’s Field Survey, 2024

It is shown in Table 4.1 and Figure 4.4 that the majority of the respondents 68.7% agreed that the BVAS machine has been able to curb electoral fraud in Nigeria, especially over-voting. About 31.10% of the respondents do not agree that the BVAS machine has been able to curb electoral fraud in Nigeria, especially over-voting. Electoral fraud has plagued the Nigerian electoral system since the introduction electoral system in Nigeria. It was further escalated since the return to democratic rule in 1999 when people seeking elective offices perpetuated electoral fraud to gain power by all necessary means including over-voting. This finding supports the view of authors describing the introduction of technology into the Nigerian electoral landscape as a vaccine against vote rigging.¹⁷ Ahmed on the other hand opined that the deployment of the BVAS machine during

¹⁷ The Guardian Editorial Board, ‘Electoral fraud, technology and the future of Nigeria’s democracy’ The Guardian Newspaper (Lagos, 8 April 2023) < <https://guardian.ng/electoral-fraud-technology-and-future-of-nigerias-democracy>> accessed 11 July 2024.

the just concluded 2023 general elections in Nigeria has eradicated double voting and enhanced public trust and confidence in the electoral process.¹⁸

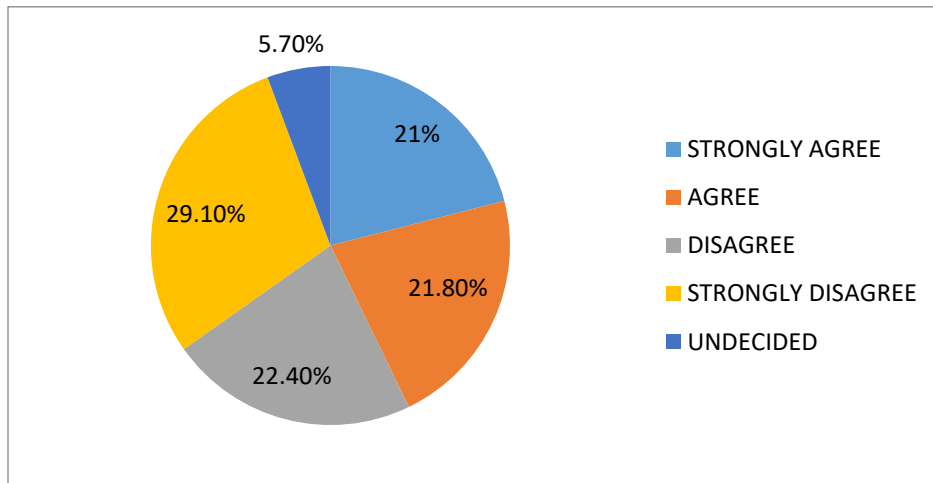
Table 4.2: Attitude towards the role of BVAS in the electioneering process in Nigeria

Items	Strongly Agree	Agree	Disagree	Strongly Disagree	Undecided	Total	
	f (%)	f (%)	f (%)	f (%)	f (%)	Mean	Standard Deviation
I don't think the BVAS has significantly impacted the Nigerian electoral system	78 (21.0%)	81 (21.8%)	83 (22.4%)	108 (29.1%)	21 (5.7%)	3.23	1.24
The BVAS is not reliable for the conduction of elections in Nigeria	56 (15.1%)	89 (24.1%)	89 (24.1%)	115 (31.1%)	21 (5.7%)	3.12	1.17
I believe the BVAS machine has been able to curb electoral malpractices	106 (28.6%)	122 (33.0%)	55 (14.9%)	54 (14.6%)	33 (8.9%)	3.58	1.28
I believe the BVAS machine can make use of an improvement	148 (40.0%)	122 (33.0%)	50 (13.5%)	28 (7.6%)	22 (5.9%)	3.94	1.17
To some extent, I believe the BVAS machine has brought about credible, free, and fair elections.	93 (25.1%)	139 (37.6%)	58 (15.7%)	44 (11.9%)	36 (9.7%)	3.56	1.25
Average Mean						3.48	1.22

¹⁸ Ahmed Usman Egye, 'Impact of Bimodal Voters Accreditation System (BVAS) on Election Integrity in Nasarawa State' (2024) 4 Journal of Advanced Research and Multidisciplinary Studies 31 <10.52589/jarms-sgbqxnwy> accessed 11 July 2024

Source: Researcher's Field Survey, 2024

Figure 4.6: I don't think the BVAS has significantly impacted the Nigerian electoral system.



It is shown in Table 4.2 and Figure 4.6 that the majority of the respondents either disagree or strongly disagree (51.50%) that I don't think the BVAS has significantly impacted the Nigerian electoral system.' About 21% of the respondents strongly agree that I don't think the BVAS has significantly impacted the Nigerian electoral system,' 21.80% of the respondents agree that I don't think the BVAS has significantly impacted the Nigerian electoral system', while a small percentage of the respondents 5.70% were undecided. These findings suggest that the BVAS machine significantly impacted the 2023 general elections in Nigeria. The majority of the

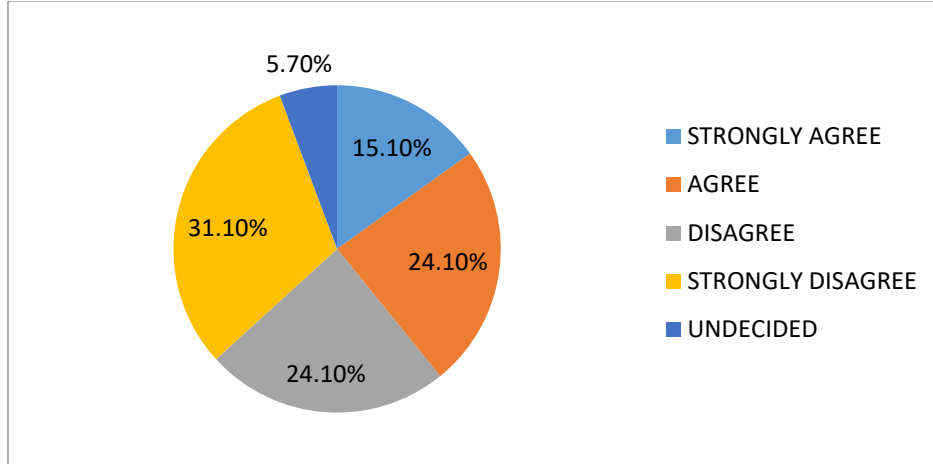
respondents either disagree or strongly disagree with the statement. This implies that the deployment of the BVAS machine as the only means of accreditation of voters in the just concluded elections in Nigeria significantly impacted the election. This result supports the assertion of Ayeni and Aweh that the BVAS machine has made a significant impact on the electioneering process in Nigeria, especially in the 2023 elections, with the implementation of facial or finger authentication of voters by the BVAS, ensuring that each voter accredited by the polling officers is the holder of the card, hence upholding the integrity of the election.¹⁹ Also, Bayode et al described the impact of the BVAS machine on the electioneering process in Nigeria as a vaccine against election rigging and manipulation and has increased election credibility and boosted voters' confidence in the electoral process. The use of BVAS or other electoral technology in the electioneering process in Nigeria tends to reduce election fraud while increasing public trust in the outcome of the election.²⁰ The deployment of the BVAS in the 2023 general elections made accreditation faster compared to the 2015 and 2019 elections.²¹ The improvement of the accreditation process during the 2023 general elections has a significant impact on electioneering in Nigeria.

Figure 4.7: The BVAS is not reliable for the conduction of elections in Nigeria

¹⁹ Ayeni, Toba Paul and Aweh, Opani Meshark, 'Examining the Impact of Bimodal Voter Accreditation System (BVAS) as a Game Changer in Nigeria 2023 Elections' (2023) *International Journal of Information and Communication Technology (IJICT)* 20 (2) 25

²⁰ Bayode, Elizabeth Funmilayo, et al. 'The Significance of BVAS in the Electoral Process in Nigeria' (2023) 2(2) *Oguya International Journal of Contemporary Issues* 16

²¹ Yusufu, Ahmed Audu and Idrees, Mahmud Gana 'Bimodal Voters Accreditation System (BVAS) Machines and Elections Integrity in Nigeria: An Appraisal of The 2023 General Election in Kogi State (2023) *Wukari International Studies Journal* 7 (3) 4

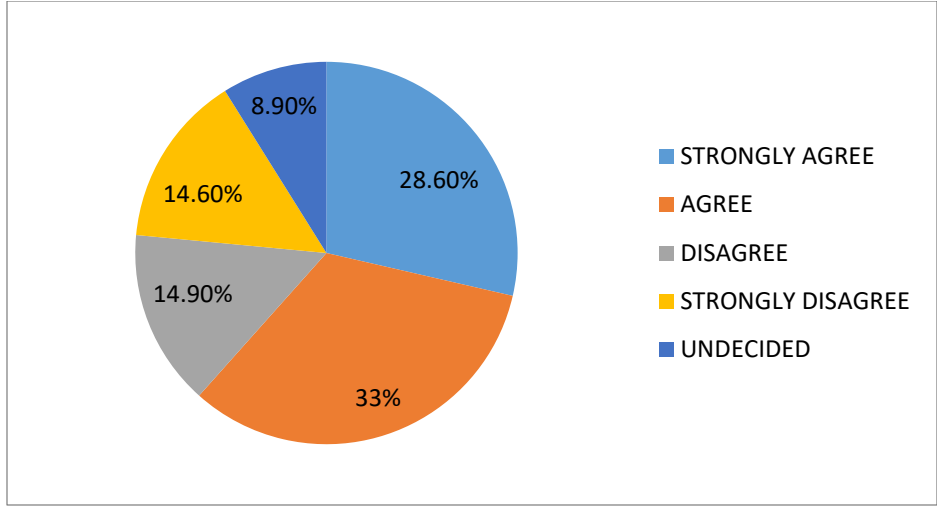


Source: Researcher's Field Survey, 2024

It is shown in Table 4.2 and Figure 4.7 that the majority of the respondents either disagree or strongly disagree (55.20%) that BVAS is not reliable for the conduction of elections in Nigeria.' About 15.10% of the respondents strongly agree that 'the BVAS is not reliable for the conduction of elections in Nigeria,' 24.10% of the respondents agree that 'the BVAS is not reliable for the conduction of elections in Nigeria', while a small percentage of the respondents 5.70% were undecided. These findings suggest that the BVAS machine was reliable for the conduct of the 2023 elections in Nigeria. The majority of the respondents either disagree or strongly disagree with the statement. This implies that the electorate finds the BVAS machine reliable during the 2023 elections. A study that discussed the above findings was conducted by Aaron et al.,²² The study examined the need for conducting electronic polls in Nigeria. One of the merits of conducting elections in Nigeria using electronic devices found in the study is that the electorate wants the entire electoral process to be free of human errors, efficient, and reliable. The authors assert that conducting elections with electronic devices will provide accurate and verifiable information on votes cast and accreditation. This will reduce electoral fraud, increase voters' confidence in the electoral process, and enhance the credibility of the electoral outcome.

Figure 4.8: I believe the BVAS machine has been able to curb electoral malpractices

²² Promise Aaron et al, 'Electronic Elections in Nigeria: A Necessity' (2023) 4(2) Carnelian Journal of Law and Politics 32



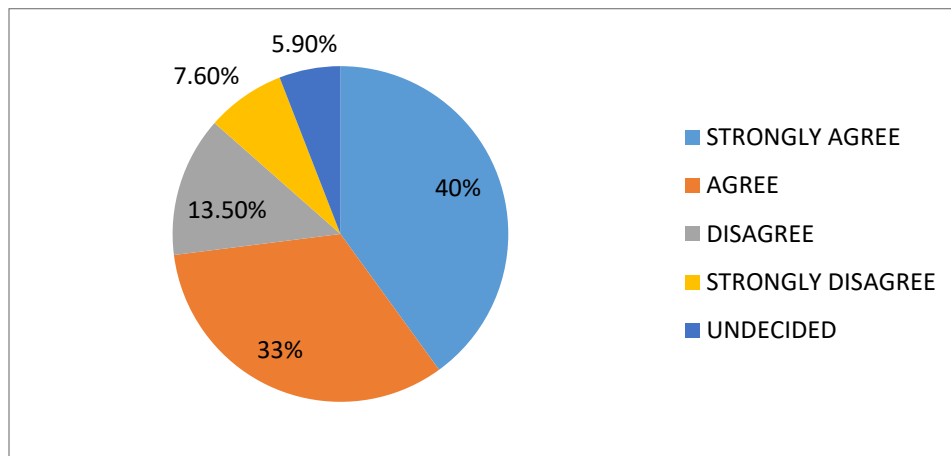
Source: Researcher’s Field Survey, 2024

It is shown in Table 4.2 and Figure 4.8 that the majority of the respondents either strongly agree or agree (61.60%) that I believe the BVAS machine has been able to curb electoral malpractices.’ About 14.90% of the respondents disagree that I believe the BVAS machine has been able to curb electoral malpractices.’ 14.60% of the respondents strongly disagreed that they believed the BVAS machine had been able to curb electoral malpractices, while 8.90% of the respondents were undecided. These findings suggest that the BVAS machine has been able to curb electoral malpractices in Nigeria, especially in the 2023 general elections. The majority of the respondents either strongly agree or agree with the statement. This implies that the electorate finds the BVAS machine reliable for the curbing of electoral malpractices in Nigeria during the 2023 general elections. A study that discussed the above findings was conducted by Bello et al.,²³ The authors assert that the deployment of the BVAS machine during the 2023 elections deterred potential wrongdoers who want to commit electoral malpractices because of their knowledge that the BVAS machine will be deployed for voter verification and authentication during accreditation. The use of the BVAS ensured that only eligible voters were accredited and their voter cards authenticated by the polling officers with the BVAS machine. According to reports, the BVAS machine assisted

²³ Bello, O. Wasiu and Celestina Ekene Chukwudi, ‘Technology and Conduct of Election in Developing Countries: A Study of Nigeria’s Fourth Republic (2023) 44 (6) Journal of Propulsion Technology 6947

in reducing incidences of multiple voting, impersonation, and other forms of electoral malpractices.²⁴ This has helped to improve the transparency and credibility of elections in Nigeria.

Figure 4.9: I believe the BVAS machine can make use of an improvement



Source: Researcher's Field Survey, 2024

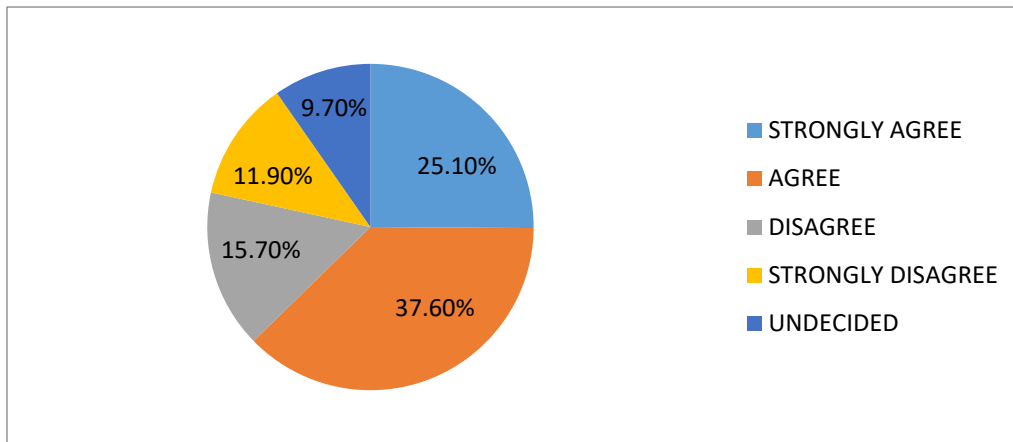
It is shown in Table 4.2 and Figure 4.9 that the majority of the respondents either strongly agree or agree (73%) that 'I believe the BVAS machine can make use of an improvement.' About 13.50% disagree that 'I believe the BVAS machine can make use of an improvement.' 7.60% of the respondents strongly disagreed that they believe the BVAS machine can make use of an improvement,' while 5.90% of the respondents were undecided. These findings suggest that the BVAS machine can make use of an improvement, not minding the ratings of the public, for the conduct of the 2023 general elections in Nigeria. The majority of the respondents either strongly agree or agree with the statement. This implies that the electorate wants improvements to the BVAS machine in future elections in Nigeria. The above findings are supported by the study conducted by Eleje and Abutu.²⁵ The authors concluded that integrating the current BVAS

²⁴ Edward Taiye Onyambayi and others, 'BVAS and the Credibility of 2023 Kogi State Senatorial Elections in Nigeria' (2024) 2 Journal of Public Administration, Policy and Governance Research 29 <<https://jpagr.com/index.php/research/article/view/81>> accessed 26 June 2024.

²⁵ Eleje, Onyedikachi, and Abutu, Daniel Ihotu, 'Augmenting Blockchain Solution to Nigeria's Bimodal Voter Accreditation System (BVAS), E-Voting System' (2023) Researchgate <https://www.researchgate.net/profile/Onyedikachi-Eleje/publication/376452450_Augmenting_Blockchain_Solution_to_Nigeria's_Bimodal_Voter_Accreditation_Syste

technology with blockchain will ensure the integrity of elections and address issues like electoral malpractice and fraud. The fortification of the BVAS technology holds the potential to foster free, fair, and transparent elections, which will improve voter turnout and discourage voter apathy in future elections in Nigeria. Yusuf, Idress, and Gana²⁶ argued, on the other hand, that INEC should deploy full electronic voting (EV) to enable eligible voters to vote from the comfort of their homes from an electronic device (ED).

Figure 4.10: I believe the BVAS machine has to some extent brought about credible, free, and fair elections.



Source: Researcher's Field Survey, 2024

Table 4.2 and Figure 4.10 reveal that 62.70% of the respondents either strongly agree or agree with the statement, 'I believe the BVAS machine has to some extent brought about credible, free, and fair elections.' About 15.70% of the respondents strongly agreed with the statement, 'I believe the BVAS machine has to some extent brought about credible, free, and fair elections.' 11.90% of the respondents strongly disagreed with the statement, 'I believe the BVAS machine has to some extent brought about credible, free, and fair elections,' while 9.70% of the respondents were

[m_BVAS_E-_Voting_System/links/65791da2ea5f7f020565f690/Augmenting-Blockchain-Solution-to-Nigerias-Bimodal-Voter-Accreditation-System-BVAS-E-Voting-System.pdf](https://www.researchgate.net/publication/381111111/m_BVAS_E-_Voting_System/links/65791da2ea5f7f020565f690/Augmenting-Blockchain-Solution-to-Nigerias-Bimodal-Voter-Accreditation-System-BVAS-E-Voting-System.pdf)> accessed June 30, 2024

²⁶ Yusufu, Ahmed Audu and Idrees, Mahmud Gana 'Bimodal Voters Accreditation System (BVAS) Machines and Elections Integrity in Nigeria: An Appraisal of The 2023 General Election in Kogi State (2023) Wukari International Studies Journal 7 (3) 4

undecided. These findings suggest that notwithstanding the perceived shortcomings of the BVAS at the last elections, the majority of the respondents agreed that the BVAS brought some credibility and fairness to elections in Nigeria. The above findings are supported by the study conducted by Ahmed²⁷ and Ogunbela²⁸ which concludes that the deployment and use of the BVAS machine at the last election in Nigeria have enhanced the public level of trust in the electoral process, ultimately improving the integrity of the democratic process.

Table 4.3: Perception of the role of BVAS in the electioneering process in Nigeria

Items	Strongly Agree (%)	Agree (%)	Disagree (%)	Strongly Disagree (%)	Undecided (%)	Total	Mean	Standard Deviation

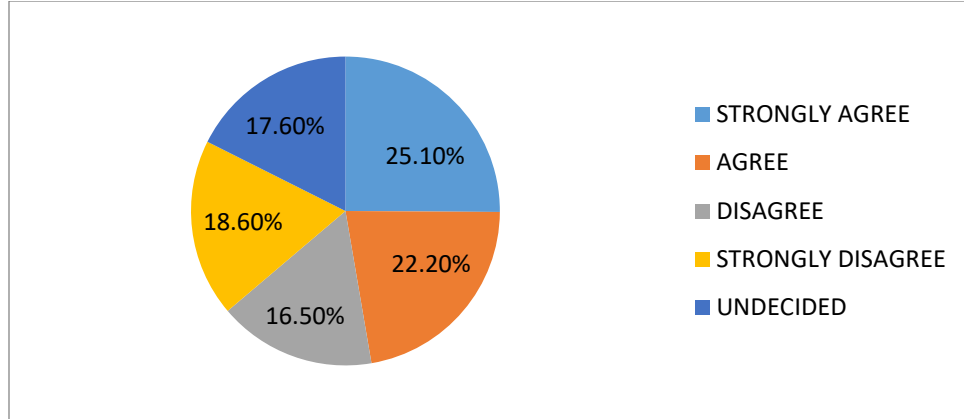
²⁷ Ahmed Usman Egye, ‘Impact of Bimodal Voters Accreditation System (BVAS) on Election Integrity in Nasarawa State’ (2024) 4 Journal of Advanced Research and Multidisciplinary Studies 31 <10.52589/jarms-sgbqxnwy> accessed 11 July 2024

²⁸ Ogunbela, Gbeminiyi Kazeem and Abdulrasheed, Kehinde Abayomi, ‘Election Technologies: BVAS and Public Trust in Nigerian Elections in Local Jurisdiction Context’ (2024) 6 Journal of Public Administration 11 <https://sryahwpublications.com/article/download/2642-8318.0601002> accessed 11 July 2024.

The BVAS machine has helped regain the trust of the citizens in the electoral system in Nigeria	93 (25.1%)	82 (22.2%)	61 (16.5%)	69 (18.6%)	65 (17.6%)	3.19	1.44
Has the BVAS created more problems rather than solved any?	42 (11.5%)	57 (15.6%)	100 (27.4%)	109 (29.9%)	57 (15.6%)	2.78	1.22
There is a need for a better accreditation and verification system.	131 (35.6%)	108 (29.3%)	70 (19.0%)	23 (6.3%)	36 (9.8%)	3.75	1.27
The BVAS has done a great job so far concerning the verification and accreditation of voters.	117 (31.6%)	144 (38.9%)	52 (14.1%)	32 (8.6%)	25 (6.8%)	3.80	1.17
Has the BVAS been able to achieve its purpose of creation?	109 (29.5%)	109 (29.5%)	59 (15.9%)	56 (15.1%)	37 (10.0%)	3.53	1.32
Average Mean						3.41	1.28

Source: Researcher's Field Survey, 2024

Figure 4.11: The BVAS machine has helped regain the trust of the citizens in the electoral system in Nigeria



Source: Researcher’s Field Survey, 2024

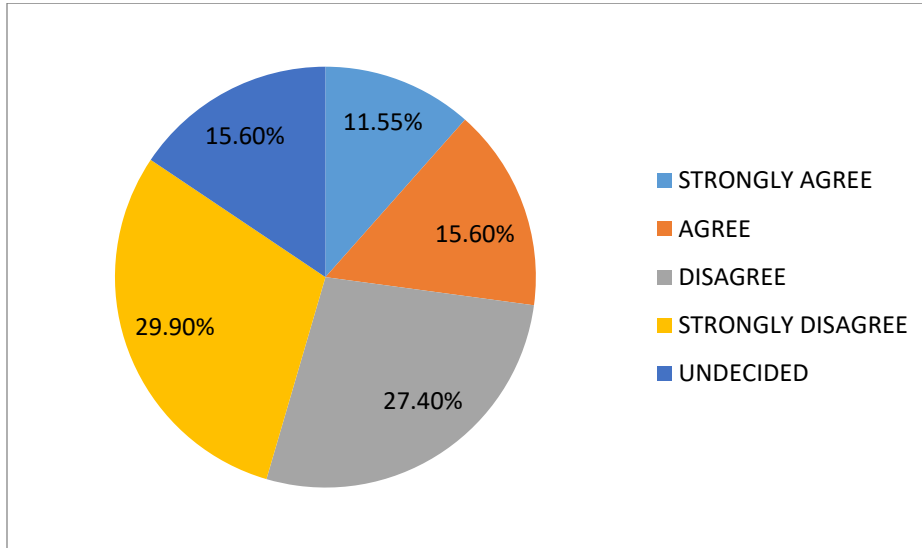
Table 4.3 and Figure 4.11 reveal that 47.30% of the respondents either strongly agree or agree that, ‘the BVAS machine has helped regain the trust of the citizens in the electoral system in Nigeria.’ About 16.50% of the respondents disagreed that ‘the BVAS machine has helped regain the trust of the citizens in the electoral system in Nigeria.’ 18.60% of the respondents strongly disagreed that ‘the BVAS machine has helped regain the trust of the citizens in the electoral system in Nigeria’ while 17.60% of the respondents were undecided. The findings suggest that the BVAS machine rekindled the trust of Nigerians in the electoral system in Nigeria. The above findings are supported by the study conducted by Ahmed²⁹ and Ogunbela³⁰ which concludes that the deployment and use of the BVAS machine at the last election in Nigeria have enhanced the public level of trust in the electoral process, ultimately improving the integrity of the democratic process. Also, the BVAS machine has assisted in reducing incidences of multiple voting, impersonation, and other forms of electoral malpractices.³¹ This has helped to improve the transparency and credibility of elections in Nigeria.

²⁹ Ahmed Usman Egye, ‘Impact of Bimodal Voters Accreditation System (BVAS) on Election Integrity in Nasarawa State’ (2024) 4 *Journal of Advanced Research and Multidisciplinary Studies* 31 <[10.52589/jarms-sgbqxnwy](https://jarms-sgbqxnwy.com)> accessed 11 July 2024

³⁰ Ogunbela, Gbeminiyi Kazeem and Abdulrasheed, Kehinde Abayomi, ‘Election Technologies: BVAS and Public Trust in Nigerian Elections in Local Jurisdiction Context’ (2024) 6 *Journal of Public Administration* 11 <<https://sryahwapublications.com/article/download/2642-8318.0601002>> accessed 11 July 2024.

³¹ Edward Taiye Onyambayi and others, ‘BVAS and the Credibility of 2023 Kogi State Senatorial Elections in Nigeria’ (2024) 2 *Journal of Public Administration, Policy and Governance Research* 29 <<https://jppagr.com/index.php/research/article/view/81>> accessed 26 June 2024.

Figure 4.12: Has the BVAS created more problems rather than solved any?

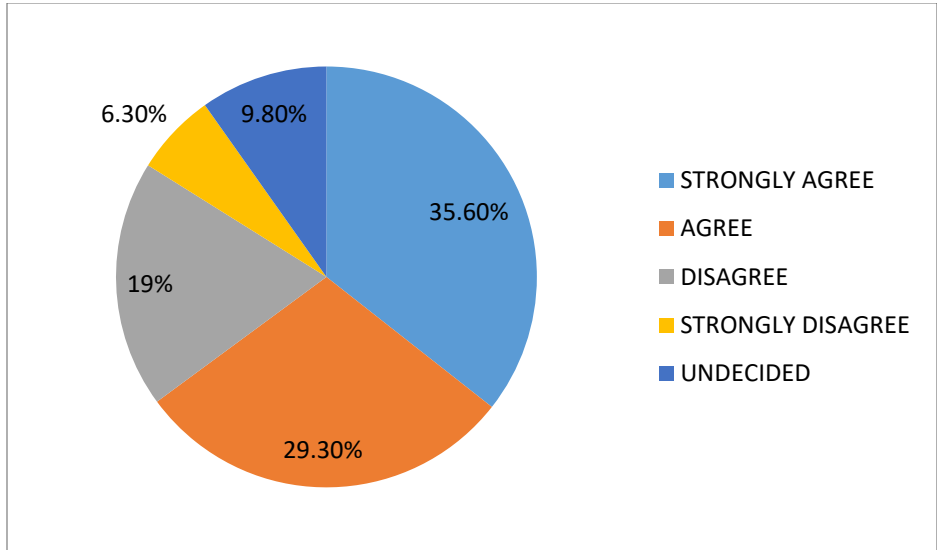


Source: Researcher’s Field Survey, 2024

Table 4.3 and Figure 4.12 reveal that 57.30% of the respondents either strongly disagreed or disagreed with the statement ‘Has BVAS created more problems rather than solved any.’ About 11.55% of the respondents strongly agree with the statement ‘Has BVAS created more problems rather than solved any’ 15.60% of the respondents agree with the statement ‘Has BVAS created more problems rather than solved any’ while 15.60% of the respondents were undecided. The findings suggest that the deployment of the BVAS machine during the 2023 election solved some of the challenges faced during the election before the introduction of the BVAS machine. The BVAS machine was introduced by the Independent National Electoral Commission (INEC) for voter accreditation and authentication of the voter card during the election. According to Ayeni and Aweh³², the BVAS machine deployment during the 2023 elections was a game changer as it was able to check over voting and other election fraud.

³² Ayeni, Toba Paul and Aweh, Opani, ‘Examining The Impact of Bimodal Voter Accreditation System (BVAS) As A Game-Changer In Nigeria 2023 Elections’ (2023) *The Information Technologist: An International Journal of Information and Communication Technology (ICT)* 20 (2) <https://www.researchgate.net/publication/377499582_Examining_the_Impact_of_Bimodal_Voter_Accreditation_System_BVAS_As_A_Gamechanger_In_Nigeria_2023_Elections> accessed 15 July 2024.

Figure 4.13: There is a need for a better accreditation and verification system.



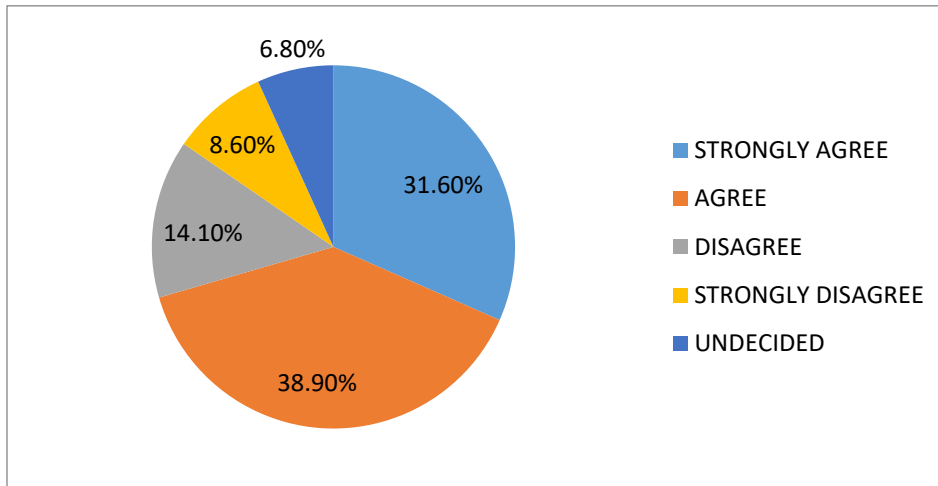
Source: Researcher’s Field Survey, 2024

Table 4.3 and Figure 4.13 reveal that 35% of the respondents strongly agree with the statement ‘there is a need for a better accreditation and verification system.’ 29% of the respondents agree with the statement ‘there is a need for a better accreditation and verification system.’ 19% of the respondents disagree with the statement ‘there is a need for better accreditation and verification system.’ 6.30% strongly disagree with the statement ‘there is a need for better accreditation and verification system.’ 9.80% of the respondents were undecided. This result revealed that the majority 64.90% of the respondents agreed that there is a need for a better mode of accreditation and verification of voters during elections in Nigeria. The findings suggest that the use of the BVAS machine for accreditation and verification during the last election in Nigeria was not perfect but there can be a better accreditation and verification system. The BVAS like any other technology has its shortcomings. The BVAS machine is programmed to upload accredited data whenever it is idle. The failure of the presiding officer to upload the remaining data will result in the data not being uploaded by the presiding amounting to overvoting.³³ The BVAS machine has also been faulted for its failure to capture the thumbprint and facial identification of elderly voters.

³³ Ochei, Anthonia ‘A loophole in BAVS?’ Business Day (Lagos, 9 February 2023)

There are also instances where the BVAS machine delayed in capturing the thumbprint and facial identification of voters.³⁴ It has been opined by Monday and Aluko that for the BVAS machine to be effective, there is a need to augment it with Artificial Intelligence.³⁵ Eleje on the other thinks that the augmentation of the BVAS with blockchain technology holds the promise of fostering free, fair, and transparent elections in Niger devoid of any electoral fraud.³⁶

Figure 4.14: The BVAS has done a great job so far concerning the verification and accreditation of voters.



Source: Researcher's Field Survey, 2024

Table 4.3 and Figure 4.14 reveal that 31.60% of the respondents strongly agree with the statement 'the BVAS has done a great job so far concerning the verification and accreditation of voters.' 38.90% of the respondents agree with the statement 'the BVAS has done a great job so far

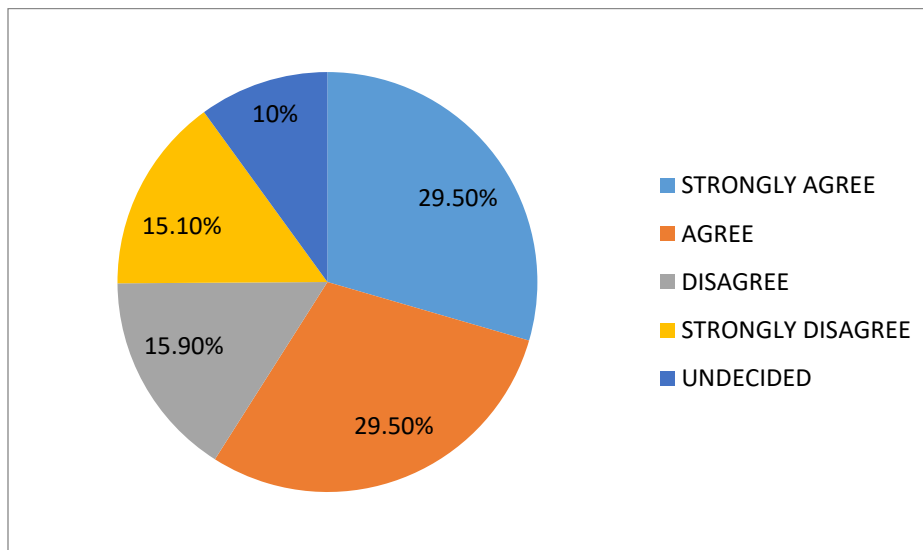
³⁴ Titus Utibe Monday and Bayode Aluko, 'Information Communication Technology (ICT) and the Management of Elections in Nigeria: A Study of Independent National Electoral Commission's (INEC) Bimodal Voter Accreditation System (BVAS), 2020 - 2023' (2024) 2 Contemporary Journal of Politics and Administration <<https://www.cjpa.com.ng/index.php/cjpa/article/view/23>> accessed 15 July 2024.

³⁵ Ibid.

³⁶ Eleje, Onyedikachi, and Abutu, Daniel Ihotu, 'Augmenting Blockchain Solution to Nigeria's Bimodal Voter Accreditation System (BVAS), E-Voting System' (2023) Researchgate <https://www.researchgate.net/profile/Onyedikachi-Eleje/publication/376452450_Augmenting_Blockchain_Solution_to_Nigeria's_Bimodal_Voter_Accreditation_System_BVAS_E_Voting_System/links/65791da2ea5f7f020565f690/Augmenting-Blockchain-Solution-to-Nigerias-Bimodal-Voter-Accreditation-System-BVAS-E-Voting-System.pdf> accessed July 15, 2024

concerning the verification and accreditation of voters.’ 14.10% of the respondents disagree with the statement ‘the BVAS has done a great job so far concerning the verification and accreditation of voters.’ 8.60% of the respondents strongly disagree with the statement ‘the BVAS has done a great job so far concerning the verification and accreditation of voters.’ 6.80% of the respondents of the respondents were undecided. This result revealed that the majority 70.50% of the respondents agreed that the BVAS machine has so far done a great job concerning the verification and accreditation of voters. The findings suggest that the BVAS machine did great in the verification and accreditation of voters during the last general elections in Nigeria. The BVAS was the sole mode for the verification and accreditation of the 2023 general election and has so far rekindled the trust of Nigerians in the electoral process. The BVAS machine to a great extent has put to an end the issues of multiple voting, impersonation, and other forms of electoral malpractices.³⁷

Figure 4.15: Has the BVAS been able to achieve its purpose of creation?



Source: Researcher’s Field Survey, 2024

Table 4.3 and Figure 4.15 reveal that 29.50% of the respondents strongly agree with the statement ‘Has the BVAS been able to achieve its purpose of creation.’ 29.50% of the respondents agree

³⁷ Edward Taiye Onyambayi and others, ‘BVAS and the Credibility of 2023 Kogi State Senatorial Elections in Nigeria’ (2024) 2 Journal of Public Administration, Policy and Governance Research 29 <<https://jpagr.com/index.php/research/article/view/81>> accessed 26 June 2024.

with the statement ‘Has the BVAS been able to achieve its purpose of creation.’ 15.90% of the respondents disagree with the statement ‘Has the BVAS been able to achieve its purpose of creation.’ 15.10% of the respondents strongly disagree with the statement ‘Has the BVAS been able to achieve its purpose of creation.’ 10% of the respondents were undecided. This result revealed that the majority 59.00% of the respondents agreed the BVAS machine has been able to achieve its purpose. This result supports the opinion of Ayeni and Aweh that the deployment of the BVAS machine during the 2023 general election significantly impacted the outcome. The implementation of facial or fingerprint authentication required voters to verify their identity, respecting the idea of “one person, one vote.”³⁸ Wahab on the other hand asserted that notwithstanding obstacles such as technological glitches and political intervention, the BVAS machine has had a positive impact on the voting process by eliminating concerns such as numerous registrations and results manipulation, resulting in less electoral violence.³⁹

5.0. Summary and Discussion of Findings

The findings from the empirical analysis of the Bimodal Voter Accreditation System (BVAS) in the Nigerian electoral process offer valuable insights into its impact, effectiveness, and the challenges it faces. This discussion will explore these findings in greater detail, examining their implications for the future of elections in Nigeria.

i. Impact on the Electoral Process

The finding that 77.8% of respondents believe BVAS has significantly improved the electioneering process in Nigeria underscores its transformative role in the country's electoral landscape. The system's ability to authenticate voters using biometric data has substantially reduced the risk of fraudulent voting, which has historically plagued Nigerian elections. By ensuring that only

³⁸ Ayeni, Toba Paul and Aweh, Opani, ‘Examining The Impact of Bimodal Voter Accreditation System (BVAS) As A Game-Changer In Nigeria 2023 Elections’ (2023) *The Information Technologist: An International Journal of Information and Communication Technology (ICT)* 20 (2) <https://www.researchgate.net/publication/377499582_Examining_the_Impact_of_Bimodal_Voter_Accreditation_System_BVAS_As_A_Gamechanger_In_Nigeria_2023_Elections> accessed 15 July 2024.

³⁹ Wahab Shehu Layiwola, ‘Technological Deployment and Its Effect on Credibility of Elections in Nigeria under the Fourth Republic’ (2024) 2 *Kashere Journal of Politics and International Relations* 15 <<https://journals.fukashere.edu.ng/index.php/kjpir/article/view/171>> accessed 1 July 2024.

registered voters can participate, BVAS has enhanced the legitimacy of electoral outcomes, contributing to a more transparent and fair process.

This positive reception aligns with previous studies, such as those by Ayeni and Aweh,⁴⁰ which describe BVAS as a “game-changer” in the 2023 elections. The implementation of facial and fingerprint authentication not only upheld the integrity of the voting process but also served as a deterrent to potential electoral fraud. The improvement in the accreditation process during the 2023 elections, compared to previous elections, marks a significant step forward in Nigeria's efforts to strengthen its democracy through technological innovation.

ii. Trust and Credibility

The finding that 69.7% of respondents believe BVAS has increased public trust in the electoral process is a critical indicator of the system's success. Trust is a cornerstone of any democratic process, and the BVAS has played a vital role in rebuilding confidence in Nigeria's electoral system. The system's capacity to deliver more accurate and verifiable results has reassured voters that their votes are counted correctly and fairly. However, the fact that only 50.8% of respondents believe that BVAS has fully achieved fair, free, and credible elections reveals lingering concerns about the electoral process. This split perception suggests that while BVAS has made significant strides, it has not yet completely eradicated doubts about the credibility of Nigerian elections. Factors such as technical glitches, inconsistent implementation, and political interference may still undermine confidence in the system.

iii. Curbing Electoral Fraud

The finding that 68.7% of respondents believe BVAS has been effective in curbing electoral fraud, particularly over-voting, highlights one of the system's most significant achievements. Electoral fraud, especially over-voting, has been a persistent issue in Nigerian elections. By ensuring that each voter can only vote once and that their identity is verified through biometric data, BVAS has

⁴⁰ Ayeni, Toba Paul and Aweh, Opani, ‘Examining The Impact of Bimodal Voter Accreditation System (BVAS) As A Game-Changer In Nigeria 2023 Elections’ (2023) *The Information Technologist: An International Journal of Information and Communication Technology (ICT)* 20
(2)<https://www.researchgate.net/publication/377499582_Examining_the_Impact_of_Bimodal_Voter_Accreditation_System_BVAS_As_A_Gamechanger_In_Nigeria_2023_Elections> accessed 15 July 2024.

significantly reduced the incidence of such fraud. This result aligns with the view of scholars like Bello et al.⁴¹, who argue that BVAS has acted as a deterrent to electoral malpractice. The system's ability to verify voter identity has made it much harder for individuals to manipulate the voting process, thereby enhancing the overall transparency and credibility of elections.

iv. Reliability

While a substantial majority (74.1%) of respondents view BVAS as reliable, a notable minority (31.1%) expressed concerns about its reliability. This divergence in opinion reflects the challenges that BVAS has faced in its implementation, particularly in terms of technical reliability. Issues such as delays in voter verification, system malfunctions, and difficulties in transmitting results to the Independent National Electoral Commission (INEC) portal have been reported. These challenges point to the need for ongoing technical improvements to the system. Ensuring the reliability of BVAS is crucial for maintaining public confidence in the electoral process. Continued investment in infrastructure, training for electoral officials, and the development of backup systems could help mitigate these issues and ensure that BVAS operates smoothly in future elections.

v. Room for Improvement

The widespread agreement (73%) that BVAS could benefit from further enhancements indicates that while the system has been successful, there is still room for growth. Respondents identified several areas where BVAS could be improved, including better handling of voter verification, faster processing times, and increased resilience against technical failures. This finding suggests that BVAS, like any technology, is not without its flaws. However, it also highlights the potential for the system to evolve and improve over time. Proposals for integrating BVAS with other technologies, such as blockchain, have been suggested by researchers like Eleje and Abutu,⁴² who

⁴¹ Bello, O. Wasiu and Celestina Ekene Chukwudi, 'Technology and Conduct of Election in Developing Countries: A Study of Nigeria's Fourth Republic (2023) 44 (6) Journal of Propulsion Technology 6947

⁴² Eleje, Onyedikachi, and Abutu, Daniel Ihotu, 'Augmenting Blockchain Solution to Nigeria's Bimodal Voter Accreditation System (BVAS), E-Voting System' (2023) Researchgate <
https://www.researchgate.net/profile/Onyedikachi-Eleje/publication/376452450_Augmenting_Blockchain_Solution_to_Nigeria's_Bimodal_Voter_Accreditation_System_BVAS_E-Voting_System/links/65791da2ea5f7f020565f690/Augmenting-Blockchain-Solution-to-Nigerias-Bimodal-Voter-Accreditation-System-BVAS-E-Voting-System.pdf> accessed June 30, 2024

argue that such innovations could further enhance the integrity and transparency of the electoral process.

vi. Achieving its Purpose

The finding that 59% of respondents believe BVAS has achieved its purpose reflects a generally positive assessment of the system's impact. However, this also means that a significant portion of the electorate remains unconvinced. This mixed perception could be due to the system's operational challenges, as well as broader concerns about the electoral process in Nigeria. The system's success in preventing multiple voting and impersonation has been widely recognized, but its full potential is yet to be realized. Addressing the system's limitations, particularly those related to technical glitches and political interference, will be crucial for ensuring that BVAS fully meets its objectives in future elections.

vii. Implications for Future Elections

The findings suggest that while BVAS has made significant contributions to improving the electoral process in Nigeria, there are still areas that require attention. Ensuring the system's reliability, enhancing its capabilities, and addressing public concerns about its effectiveness will be key to its continued success. Furthermore, as technology continues to evolve, it will be important for INEC and other stakeholders to stay ahead of the curve, implementing innovations that can further strengthen the integrity of Nigeria's electoral process.

6.0. Recommendations

Based on the findings of this study, the following recommendations are proposed to enhance the effectiveness and reliability of the Bimodal Voter Accreditation System (BVAS) in Nigeria's electoral process:

- i. **Continual Improvement and Technical Upgrades:** The Independent National Electoral Commission (INEC) should prioritize the continuous improvement of the BVAS technology. Regular technical upgrades are essential to address the system's shortcomings, such as delays in voter verification and occasional malfunctions.

Enhancing the system's capacity to handle the high demands of election days will ensure smoother operations and reduce instances of technical failures.

- ii. **Integration with Advanced Technologies:** To further bolster the integrity of the electoral process, INEC should explore integrating BVAS with advanced technologies like blockchain. This integration could provide an additional layer of security and transparency, thereby reducing the likelihood of electoral fraud. By utilizing blockchain, election results can be securely transmitted and stored, ensuring that they are tamper-proof and easily auditable.
- iii. **Comprehensive Training for Electoral Officials:** It is crucial to invest in the training of electoral officials who will operate the BVAS devices. Proper training programs should be implemented to ensure that all officials are proficient in using the technology and troubleshooting common issues. This will minimize errors during the election process and improve the overall efficiency of BVAS deployment.
- iv. **Enhanced Voter Verification Mechanisms:** INEC should consider improving the voter verification mechanisms within the BVAS system. This could include refining the biometric capture process to accommodate voters who face difficulties with fingerprint or facial recognition, such as elderly individuals. Additionally, alternative methods of verification should be explored to ensure that all eligible voters can be accurately and efficiently verified.
- v. **Strengthening Backup Systems and Support:** The establishment of robust backup systems is critical to the reliability of the BVAS. INEC should ensure that there are adequate contingencies in place, such as manual verification processes or alternative digital systems, to prevent disruptions in the event of a BVAS failure. This will help maintain the integrity of the election process even in the face of technical challenges.
- vi. **Evaluation and Feedback Mechanisms:** After each election, INEC should implement a systematic evaluation process to gather feedback from stakeholders, including voters, electoral officials, and independent observers. This feedback should be analyzed to

identify areas for improvement in the BVAS system, allowing INEC to make informed decisions on necessary adjustments and upgrades.

7.0. Conclusion

The implementation of the Bimodal Voter Accreditation System (BVAS) in Nigeria's electoral process represents a significant technological advancement aimed at enhancing the credibility, transparency, and fairness of elections. The findings of this study indicate that BVAS has had a substantial impact on the electioneering process, particularly in curbing electoral fraud and improving voter verification. However, despite these successes, challenges remain, particularly regarding the system's reliability and the need for ongoing technical improvements.

While the majority of respondents recognize the positive contributions of BVAS, there are concerns about its occasional malfunctions and the delays in voter verification. These issues highlight the importance of continuous refinement and upgrading of the BVAS technology to meet the demands of future elections. Additionally, the integration of advanced technologies such as blockchain could further enhance the system's security and transparency, making it a more robust tool in the fight against electoral malpractice.

To fully realize the potential of BVAS, the Independent National Electoral Commission (INEC) must invest in comprehensive training for electoral officials, strengthen public awareness initiatives, and establish reliable backup systems. By addressing these areas, INEC can build greater public trust in the electoral process, ensuring that BVAS not only achieves its intended goals but also becomes a cornerstone of Nigeria's democratic process.

In conclusion, while BVAS has made significant strides in improving the integrity of Nigeria's elections, its success depends on continued innovation, effective implementation, and the commitment of all stakeholders to upholding the principles of free, fair, and credible elections.

Through concerted efforts, BVAS can contribute to the realization of a more transparent and democratic electoral system in Nigeria.