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Vision Statement

To be recognized as the foremost Electoral Management Body engaged in conducting elections in Nigeria using innovative approaches.

Mission Statement

To organize, undertake and supervise elections into offices of Local Government Councils, render such advice as it may consider necessary to INEC, provide guidelines to political parties, conduct voter and civic education, and promote knowledge of sound democratic electoral process to meet the needs and aspirations of citizens of Kaduna State.

Values

In achieving the vision and mission, KAD-SIECOM considers as fundamental the values of quality, excellence, integrity, service, accountability and partnership. Our thrust has been to sustainably conserve these values to ensure that KAD-SIECOM enjoys tremendous State-wide goodwill.

FOREWORD

At the inauguration of the current Commission, His Excellency the Governor of Kaduna State, Malam Nasir Ahmad El-Rufa'i OFR made it clear that he would like the deployment of innovative technology to improve the credibility of Local Government Councils elections in the State. The Commission thereafter began to investigate the possibility of deploying technology in the 2018 Local Government Councils election.

Since the use of the Permanent Voter Cards (PVCs) and Smart Card Readers (SCRs) by INEC in the 2015 National Election were adjudged to have been a huge success in giving greater credibility to Nigerian elections, KAD-SIECOM considered the possibility of using them during its upcoming election. However, in order to further enhance the credibility of the elections, the Commission decided to further explore the possibility of actual voting on an electronic machine. This led to the development and use of the Electronic Voting Machines (EVMs) in the Local Government Councils election held on 12th May, 2018.

The purpose of this study was to have a feedback from the electorate on the introduction of the EVMs deployed during the election. Being the first time of introduction, we wanted to have their reaction to this innovation and also to get their views on how to improve election administration in Kaduna State. This study has shown without any doubt that the electorate in Kaduna State have whole heartedly accepted and acclaimed as highly successful, use of the Electronic Voting Machine in the Local Government Councils Election. By this election, KAD-SIECOM has succeeded in advancing the frontiers of credibility in Nigerian elections.

I wish to express our most profound appreciation toHis Excellency the Governor of Kaduna State, Malam Nasir Ahmad El-Rufa'i OFR for his visionary leadership, determination and full support for the development and use of the EVM in our Local Government Councils election. I must also appreciate the Secretary to the State Government (SSG), Malam Balarabe Abbas Lawal for his unflinching support of our activities at all times.I must appreciate Professor Joseph Gambo Akpoko, Commissioner, Public Affairs and Information for his wealth of knowledge and experience in putting this report together this is highly commendable and all our respondents who took time off their busy schedules to respond to our questionnaire.

Signed
Dr. Saratu Binta Dikko-Audu
Chairman, KAD-SIECOM.

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Signed
Prof. Joseph Gambo Akpoko,
Commissioner, Public Affairs and Information.

PREFACE

Nigeria is currently practicing democracy. Free, fair and credible elections are the cornerstone of every democracy and the primary mechanism for exercising the principle of sovereignty of the people and good governance. However, Kaduna State has over the years, been grappling with the challenges of conducting free, fair and credible elections.

Electronic Voting Machines (EVMs) are designed and developed to promote the conduct of free, fair and credible elections in the electoral process. Thus, many forward-thinking countries and Election Management Bodies (EMBs) are now keen on exploring how actual electronic voting could help them improve their elections and to hopefully conduct free, fair and credible elections.

The decision by KAD-SIECOM to adopt the use of EVM in the 2018 Kaduna State Local Government Councils Election (LGCE) was precisely to ensure the integrity of each vote cast, towards achieving free, fair and credible elections. This study was conducted between October and November,2019. Being the first time of introduction of the EVMs, the three main objectives of the study were:

(i) to examine the perception of voters on the use of the EVMs in the conduct of LGCEs in Kaduna State.

(ii) to analyse the effects of the use of the EVMs on the conduct of the election.

(iii) to obtain views on how to improve the use of EVM in the conduct of LGCEs in Kaduna State and Nigeria at large.

The report includes a comprehensive historical background to electronic voting, deployment of innovative technologies in the electoral process in Nigeria, and the deployment of electronic voting in Kaduna State. The voting procedure during the 2018 Kaduna State Local Government Councils election using the EVM is also included to show readers the pre-voting procedures, actual voting procedures and activities after casting of votes.

The study is unique in that it is the first carried out to investigate the views of the electorate on actual electronic voting at the grass-roots level in Nigeria. It is also special because it avoided the inclusion of people who did not vote in the 2018 Kaduna State LGCE and concentrated mainly on those who actually voted using the EVMs. A number of key findings which provide supporting evidence for the characteristic advantages of the EVMs over the manual ballot paper system previously used in LGCEs are provided. Most importantly, the results of this study could be used as a reference point to promote the use of electronic voting in Kaduna State and Nigeria at large.

Signed
Prof. Joseph Gambo Akpoko,
Commissioner, Public Affairs and Information.

ABBREVIATIONS

AFIS	Improved Automated Fingerprints Identification System
DDCM	Direct Data Capture Machine
DRE	Direct Recording Electronic
EMB	Electoral Management Body
EO	Electoral Officer
EVMs	Electronic Voting Machines
EVR	Electronic Voters' Register
HDD	External Hard Disk Drive
ICT	Information Communication Technology
INEC	Independent National Electoral Commission
KAD-SIECOM	Kaduna State Independent Electoral Commission
LGAs	Local Government Areas
LGCE	Local Government Councils Election.
NECO	National Examination Council
OFR	Officer of the Federal Republic
OMR	Optical Magnetic Recognition
PVCs	Permanent Voter Cards
SIECs	State Independent Electoral Commissions
SRCs	Smart Card Readers
SSG	Secretary to the State Government
TVCs	Temporary Voters Cards
VIS	Voters Identification System
VVPAT	Voter Verifiable Paper Audit Trail
SRCs	Smart Card Readers
WAEC	West Africa Examination Council

LIST OF APPENDICES

EXECUTIVE SUMMARY

Electronic voting is a term used to describe the act of balloting using electronic systems to cast and count votes. An Electronic Voting Machine (EVM) is therefore an electronic device used to register votes instead of the more familiar ballot paper voting system.

From its inception in 2002, all Local Government Councils elections in Kaduna State had been conducted by paper ballots. At the inauguration of the current Commission in 2015, however, His Excellency the Governor of Kaduna State, Mal. Nasir Ahmad El-Rufa'i OFR made it clear that he would like the deployment of innovative technology to improve the credibility of Local Government Councils Elections (LGCEs) in the State. The Commission thereafter began to investigate the possibility of deploying technology in the upcoming Local Government Councils election (LGCE). This led to the development of the Kaduna State Electronic Voting Machine that was used in the State LGCE held on 12thMay, 2018. Theelectronic voting machine is a stand-alone equipment which cannot be easily manipulated once programmed for an election.

This study was initiated to analyze the perception of the electorate on the use of the EVM in that election.The study was conducted in 22 Local Government Areas (LGAs) of the State. **Kaura** LGA and 4 Wards in Chikun LGA were omitted from the study because the election did not hold in these areas due to political class interference.

The results show that majority (96.5%) of the respondents were more satisfied with the EVM voting than the manual ballot paper system of voting. The survey further revealed that 95.8 percent of the respondents knew that the Chairmanship and Councillorship voting could be done at the same time on the same machine, while 88.7 percent knew that a person could vote for Chairman and ignore the Councillor and vice-versa. About 82 percent of them indicated that with the EVMs a person could not vote twice, while 86.6 percent of them rated the EVMs as very effective in controlling election fraud.Overall, less than 35 percent of the respondents indicated that there was political interference, and only 39.2 percent of them experienced one form of violence or the other. When asked to state the causes of election violence, only 8.6 percent of them reported interference by politicians as the major cause, while 5.4 percent of the respondents blamed the actions of political thugs.

Across the LGAs surveyed, 87.9 percent of the respondents were satisfied with the manner in which the EVMs were handled, and 62.6 percent of them did not observe any mal-function during the election. Similarly, 95.7 percent of the respondents across the State indicatedthat they were satisfied with the EVM approach, while the same number (95.7%) agreed that it made the voting

process faster compared to the manual ballot paper system. An important advantage of the use of electronic voting which could induce participation is its speed. The shortening of time lapses during an election is a key point since electronic voting represents a much quicker option than manual voting.

The analysis showed that 68.9 percent of the respondents assessed the attendance as very high compared with previous elections, and 82.1 percent of them attributed the very high attendance to the use of the innovative EVM technology. About 74 percent of them across the State agreed that the use of technology in the 2018 election was very impressive and 78.3 percent said, it increased the credibility of the 2018 election in Kaduna State. Only 3.1 percent of them indicated that it was not impressive, and they will prefer the manual ballot system to be used in future elections.

While 38.1% of respondents indicated that awareness campaigns should be increased and the EVMs up-graded to further expand and enhance its credibility in future elections, 20.7% of them want only adequately trained ad-hoc staff to be recruited and allowed to operate the EVMs during elections, and about 40 percent of them suggested the need for frequent voter and civic education to ensure a fully informed and mobilized voting public. For election offenders, 37.6% suggested severe punishment according to the electoral law. As a measure to improve the electoral process respondents suggested that efforts be made to always ensure that election materials arrive polling units on time.

Based on the findings of this study, the following recommendations are hereby made:-

(i) that KAD-SIECOM should create opportunities for regular interaction between stakeholders and the EVMs to increase the electorate familiarity with electronic voting machine and improve their trust in it,

(ii) up-grade the EVMs to expand and enhance their functionality,

(iii) there is need for frequent voter and civic education about electronic voting and the process of using the EVM to make the electorate more comfortable with the EVM

(iv) KAD-SIECOM should create a data bank of trained ad-hoc staff who could be used during elections. KAD-SIECOM could borrow a leaf from the wealth of experience of the West African Examination Council (WAEC) and National Examination Council (NECO) management authorities in the recruitment of their ad-hoc examination-marking staff.

The conduct of free, fair and credible elections has for long been a challenge facing Nigeria. As useful as the Smart Card Reader (SCR) technology introduced by INEC in the 2015 national election is, it has still not fully addressed the major issues of election fraud and credibility in the electoral process. The feedback from this study, justifies the need for a policy that will encourage

other State Independent Electoral Commissions (SIECs) and in particular the Independent National Electoral Commission (INEC) to emulate Kaduna State in the use of the innovative EVMs to enhance the credibility of the electoral process and safeguard the will of the people. During a conference organized to review outcomes of the 2019 national elections, the participants vehemently called for amendment of the Constitution to ensure that electronic voting is recognized in the Electoral Act to advance the country's democracy. It is time to implement this suggestion for the purpose of deepening democracy and the electoral process in Nigeria.

Part ONE

1.1 INTRODUCTION

In a democracy it is extremely important to conduct free, fair and credible elections to establish the legitimacy of political leaders. Nigeria is by far the largest democracy in Africa with more than 80 million voters and Kaduna state being the third largest State in terms of population, promotes the conduct of free, fair and credible elections. Voting forms an important part of democracy in every country and voter participation is key to sustainable democracy. The function of electoral systems is to implement elections in such a way that voters and election administrators have an understanding of how elections should be conducted.

A system of local governance built on democratic tenets, in which representatives to Local Government Councils are elected on the basis of free and fair elections, has eluded the Local Governments in Nigeria from colonial times to the present. Right from the 1950s when elections were first held in some Local Governments in Eastern Nigeria till date, most of the elections conducted into Local Government Councils cannot be said to be credible. What usually takes place amounts to "selection" and "appointment" of chairmen and councilors rather than elections. The usual practice is that those in control of political power at the State level use the incumbency factor to rig elections in favour of their preferred candidates.

Elections allow the populace to choose their representatives and express their preferences for how they wish to be governed. Naturally, the integrity of the election process is fundamental to the integrity of democracy itself. The election system must be sufficiently robust to withstand a variety of fraudulent behaviours and must be sufficiently transparent and comprehensible that voters and candidates can accept the results of an election. Unsurprisingly, history is littered with examples of elections being manipulated in order to influence their outcomes. The design of a good voting system, whether electronic or using manual paper ballots or mechanical devices must satisfy a number of competing criteria. The anonymity of a voter's ballot must be preserved, both to guarantee the voter's safety when voting against a malevolent candidate, and to guarantee that voters have no evidence that proves which candidates received their votes. The existence of such evidence would allow votes to be purchased by a candidate. A voting system must be understandable and usable by the entire voting population, regardless of age, infirmity or disability. The system must be resistant to a wide range of attacks which include ballot stuffing by voters and incorrect tallying by insiders. Flaws in any of these aspects of a voting system, however, can lead to indecisive or incorrect election results. Providing accessibility to

such a diverse population via electronic means if done well, could be a great improvement over current paper systems.

In the third world countries particularly the African continent the use of electronic voting is in its infancy; this is as a result of lack of technological advancement and other social and economic problems of underdevelopment. Electronic voting system is underway in Nigeria with Kaduna State Independent Electoral Commission being the first to fully implement it. The use of e-voting is presently being advocated both by election managers and the general public, with a view to reducing electoral fraud and corruption associated with the electoral process.
Electronic voting is defined as an election that involves use of an electronic device for the purpose of casting votes. With an e-voting system the voting process is done electronically with ease, from the registration to casting and counting of votes. Electronic voting is often seen as a tool for advancing democracy, building trust in electoral management, adding credibility to election results and increasing the overall efficiency of the electoral process. Therefore, electronic voting is one of the most credible voting systems that make election results acceptable to the public.

Historically most elections in Nigeria were manipulated in order to influence the outcome. There have been reported cases of delay in delivering election materials to the polling units as well as alteration of results in transit to the collation centers. In fact, results have been reported to be written without elections being held. It has also been reported that other factors that contribute to the problems of election credibility in Nigeria include the confusion about the registration process, inability to get to a registration point, inadequate ballot papers, lack of proper identity documents, inadequate staff, Long queues, political intimidation, victimization and lack of adequate security at Polling Units. All of these have been attributed to the weak electoral system in the country.

The conduct of free, fair, fast and credible elections is a very challenging and daunting task. Electronic Voting Machines (EVMs) were introduced by Kad-SIECOM in an effort to improve and strengthen the electoral process. In particular its objective is to minimize incidences of human error, rigging and manipulation and prevent abuse of government power in polls. In addition, the use of EVMs was also justified in terms of “commendable” reduction in cost and time involved in the conduct of elections.

1.2 Historical Background to Electronic Voting

Electronic voting is a term used to describe the act of balloting using electronic systems to cast and count votes. An Electronic Voting Machine (EVM) is an electronic device which voters use to register their votes instead of the more familiar ballot paper voting. When we speak of ballot paper voting, we mean those elections where the voter marks his/her choice(s) on a ballot and deposits it into a ballot box where ballots are later counted manually by the election officials in-charge of the process. By electronic voting we mean the use of electronic devices during the voting process, including vote input, local tallying, printing of vote receipts, and transmission of votes to a central facility where they are conglomerated and results are later published (Serdült, 2015). In recent time, electronic voting has been floated as a suggestion to promote transparency in the electoral process in Nigeria.

Innovative technologies in elections were first introduced in 1964when punch cards and computer tally machines were first used in the United States (US) presidential primaries in two counties in the State of Georgia (Emperor Tech., 2016).Since then, other technologies like Direct Recording Electronic (DRE)voting machines have been introduced in some countries to help improve the efficiency and transparency of voting/counting procedures (Toba and Adebimpe, 2018).

The voter verifiable paper audit trail (VVPAT) -an optional feature of a DRE, is a device that can be connected to an EVM and acts as an independent verification system designed to allow voters to verify that their vote is recorded correctly using a paper record.Later, DRE voting machines, which record and tabulate votes in a single machine, were introduced especially in countries with very large electorate (Toba and Adebimpe, 2018). Example of countries currently using electronic voting machines to promote the conduct of free, fair and credible elections in the electoral process include USA, Brazil, India, Bangladesh, Belgium, Bolivia, Haiti, Mexico, the Philippines, Venezuela, and Namibia in Africa. Thus, many forward-thinking countries and Election Commissions are now keen in exploring how EVMs can help them improve their elections.

1.3 Deployment of Innovative Technologies in theElectoral Process in Nigeria

It was the 2003 election in Nigeria that witnessed a technological leap with the introduction of Optical Magnetic Recognition (OMR) forms. While still retaining the manual approach as back up, the Independent National Electoral Commission (INEC) incorporated computerization, using the OMR technology. This involves the compilation on the form EC.1A of the names and particulars of all prospective voters (also known as Prospective Registrants) who present themselves physically for registration at the Registration Centers. The information so obtained is then transferred and shaded on computer readable OMR Forms, which were later, scanned into database on completion of field operation, and processed to produce the Register of Voters. Each OMR Form has a unique number, which is assigned to the registered voter who is then issued with a new Temporary Voters Card (TVC) bearing the same number and his/her particulars including his/her thumbprint (CCNDI, 1999). The Automated Finger Prints Identification System (AFIS) was then used to clean the register of double registrations. The database of voters was also created.

1.4 The Advantages of the OMR Technology

The Advantages of the OMR Technology over the previous one are as follows: it was faster to create; it was more accurate than previous manual method; register can be updated on continual basis; special features were added for security such as the thumbprints. **The limitations of OMR technology** included the following: absence of photograph of voters; absence of robust database of voters and inability to develop an electronic register.

The build-up to the 2007 general election marked the beginning of a new era in the history of Nigeria's electoral system with the registration of voters using the Direct Data Capture Machine (DDCM). The introduction of the DDCM for the registration of prospective voters introduced some level of credibility to the system.

The DDCM was introduced to eliminate double registration, double voting and other electoral malpractices. The DDCM components include: a computer system for capturing and storing voters' information, scanner for taking fingerprints of registrants; camera for taking pictures; back up batteries to forestall power failure, External Hard Disk Drive (HDD) for data backup and printer for printing Temporary Voters Card (TVC). Research revealed that the adoption of DDCM technology made the exercise more transparent, speedy and less cumbersome (Larry, Joseph and Ezekwe, 2015). Also, it is believed that the adoption of the DDCM was a giant stride in the history of Nigeria's electoral system, in eliminating double registration and double voting. Very Small Aperture Terminal (V-SAT) was also installed in all the 774 INEC Local Government Offices and State Headquarter Offices to enable the smooth transmission of election results from various Local Government Areas during the 2007 elections. However, these gadgets were not used effectively due to lack of proper training and the issues of non-transparency that trailed the 2007 general elections.

Improved Automated Fingerprints Identification System (AFIS) was introduced in 2011 to identify similar fingerprints on the register. This technology was internationally acclaimed to be credible and a great leap forward from the previous experiences (Larry *et al*., 2015).

The introduction of Electronic Voters' Register (EVR), Permanent Voter Cards (PVCs) and the Voters Identification System (VIS) popularly called Smart Card Reader (SCR) in the 2015 general election marked a new era in the deployment of more sophisticated and credible technology into the electoral process in Nigeria.

1.5 Deployment of Electronic Voting in Kaduna State

From its inception in 2002, all Local Government Councils elections in the State had been conducted by paper ballots. At the inauguration of the current Commission in 2015, however, His Excellency the Governor of Kaduna State, Mal. Nasir Ahmad El-Rufa'i OFR made it clear that he would like the deployment of innovative technology to improve the credibility of Local Government Councils elections in the State. The Commission thereafter began to investigate the possibility of deploying technology in the upcoming Local Government Councils election.

Since the use of the PVCs and SCRs by the INEC in the 2015 National Election were adjudged to have been a huge success in giving greater credibility to Nigerian elections, KAD-SIECOM considered the possibility of using the SCR during its upcoming election. However, in order to further enhance the credibility of the elections, the Commission decided to further explore the possibility of actual electronic voting. This led to the development of the special tailor-made EVM (Figure 1) which allows voters to vote on a machine that captures their choice, records and transmits electronically to a centrally controlled server at Headquarters in Kaduna. The Kaduna State Local Government Councils election was held on 12th May, 2018 using the EVMs, and a rescheduled election was held on 6th June, 2018 for areas where the 12th May election either did not hold or was cancelled.

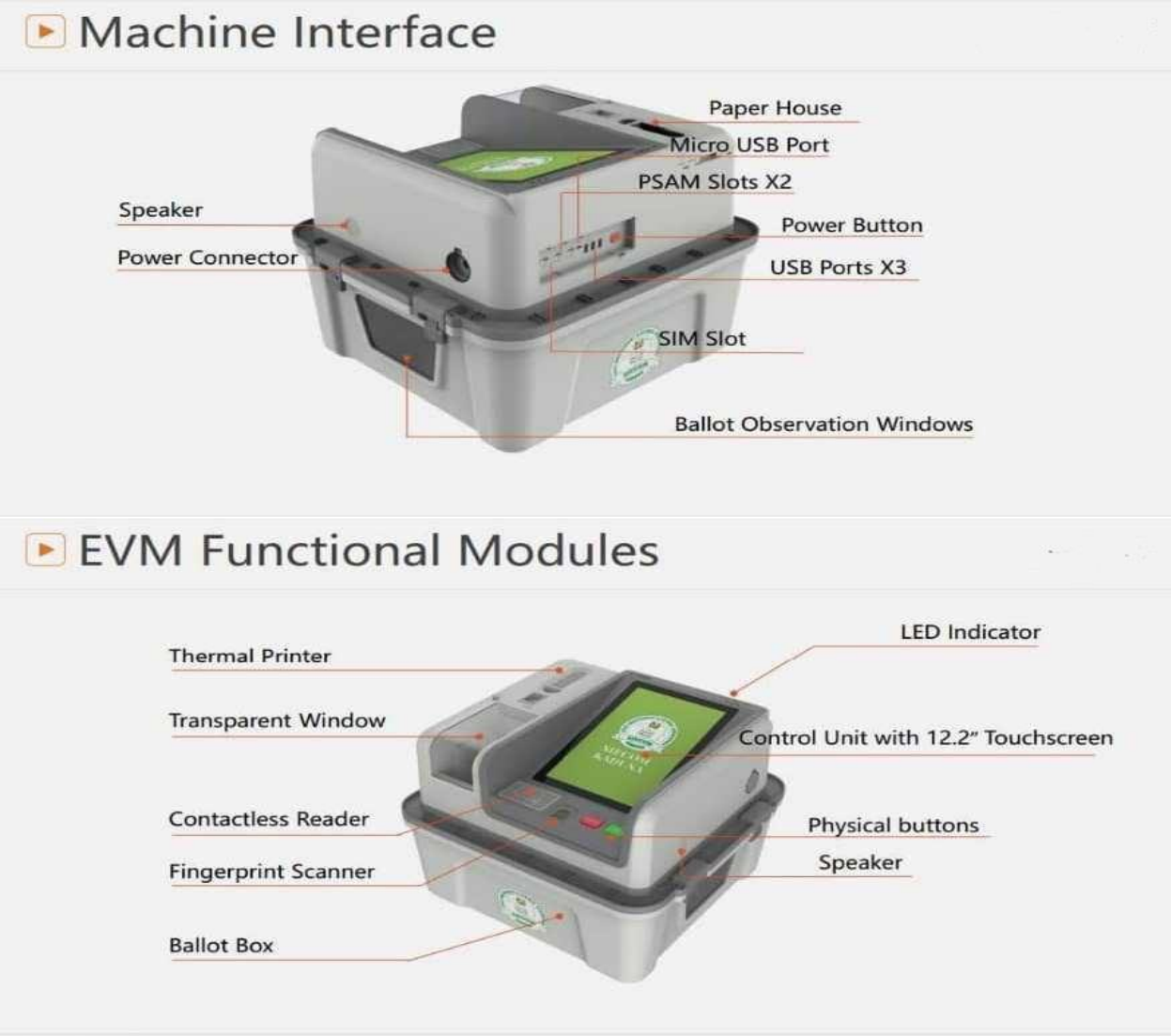


Figure 1: Samples of the EVM used in the 2018 LGC Election.

The voting procedure during the 2018 Kaduna State LGCE is as shown in appendix III.

At the close of polls, a summary is printed from the EVM which shows the activity on that machine. This summary can be confirmed by physically counting the ballot receipts generated for each voter and stored in the ballot box.

Essentially, electronic voting has the following distinguishable main advantages over the manual ballot paper voting system, some of which this study hopefully, intends to justify:-

i. speeds up and ensures accuracy of the voting and counting process
ii. increases voter turnout
iii. reduces fraud
iv. eliminates invalid votes (both null and blank votes)
v. reduces the use of bulky papers
vi. reduces the incidence of multiple voting
vii. greatly reduces direct human control and influence in the process
viii. the initial implementation represents an investment that always tends to stabilize future costs, and

ix. it builds trust and credibility in the electoral process in a democratic society.

On the other hand, operational costs in manual voting tend to increase during each election, manipulation of election results are common practice, and manual counting and tabulation processes often lead to delay in the announcement of election results.

However, it needs to be pointed out that electronic voting does not stop an Electoral Management Body (EMB) from improving its efficiency and transparency. Any malpractice or delay in release of results whatsoever, has nothing to do with the EVM but the efficiency of the EMB in human control/political interference, cooperation and experience of the voters and operators of the machines. It is also important to note that in the current Kaduna State electronic voting system, other processes in the polling station such as verification of voters identity against the voters register, marking of voters finger with indelible ink to prevent multiple voting still remain in place.

1.6 Objectives ofthe Study

The aim of this study was to assess the use of electronic voting machine (EVM) in the conduct of the 2018 Local Government Councils Election. The specific objectives were to:

i) examine the perception of voters on the use of the EVM in Kaduna State;
ii) analyze the effects of the use of the EVM on the conduct of the election,
iii) obtain suggestions on how to improve the conduct of LGCEs in Kaduna State, and how to improve the electoral process in general using the EVM.

1.7 Methodology of theStudy

The study was conducted via administration of structured questionnaires in 22 LGAs of the State namely:Birnin-Gwari, Chikun, Giwa, Igabi, Ikara, Jaba, Jema'a, Kachia, Kaduna North, Kaduna South, Kagarko, Kajuru, Kauru, Kubau, Kudan, Lere, Makarfi, Sabon-Gari, Sanga, Soba, Zangon-Kataf, and Zaria(Appendix II).KauraLGA and 4 Wards in Chikun LGA were omitted because elections were not held in these areas due to political class interference.

The total number of registered voters in Kaduna State in 2018 was 3,317,079, however, the sample frame for this study was the 1,362,428 voters who actually turned-out in the 2018 LGCE. A multi-stage sampling technique was used to arrive at the final sample size for the study. In the first stage, the list of LGAs was compiled with the total number of people who actually voted in the 2018 election. Secondly, the sample size was determined using the sample size and proportionate sample size models developed by Yamane (1967):

1) The sample size model:

$$n = \frac{N}{1+N(e^2)} \quad \text{----------} \quad \text{(i).}$$

Where:

n = Sample size for the ward being considered.
N = Total number of voters turn-out for the ward in the LGA being considered.
e = Tolerateable error level of 0.05.

2) Then applying the proportionate sampling model:

$$n_h = \frac{n(N_h)}{N} \quad \text{----------} \quad \text{(ii).}$$

Where:

n_h = The final sample size obtained for the ward being considered.

n = The sample size for the ward obtained in (i).

N_h = Total number of voters turn-out in the ward being considered.

N = Total number of voters turn-out in the LGA being considered.

After applying the Yamane formula on the sample frame of 1,362,428 being the voter turn-out in 22 LGAs and 240 Wards (Appendix II), the final sample size taking 25 percent assumed confidence margin was 2100. A sample size of n = 2100 satisfies the central unity theory which asserts that, a sample size of at least n = 30 is large enough to ensure a normal distribution in the sampling process (Webster, 1995). It also satisfies the findings of Runyon *et al*. (1991) who found that a sample larger than 100 has no appreciable gain in a target population. Election did not take place in Kaura, so also in 4 Wards of Chikun LGA and these were not included in the field data collection.

It was decided that the questionnaire must be administered in each Ward of the LGAs and participation was restricted to people who actually voted using the EVMs in the 2018 LGCE in Kaduna State. Consequently, purposive sampling technique was finally employed to select the respondents for the study. The data were collected mainly from primary sources using validated questionnaire administered under close supervision between October and November, 2019 by the Electoral Officers of each LGA after receiving some training. A total of 2,100 questionnaires were produced and distributed. However only 1,989 were returned.

The data were coded and analyzed using the Statistical Package for Social Sciences version 25 (SPSS/PC-25). Simple descriptive statistics such as percentages, tabulations and graphic representations have been employed to present the report.

1.8 Significanceof the Study

This study is unique because, with its purely quantitative approach, it sets out to be comprehensive, covering the 22 LGAs of the State; thus avoiding the usual selection of a few locations. The latter usually gives a fragmented view of what the actual situation is in the State as a whole. Secondly and more importantly, this study is the first of its kind in Nigeria, and indeed in Africa since Kaduna State is the only known place in Africa where electronic voting has been deployed in local government elections. It is, therefore, a study that can be relied upon by policy makers in making decisions on electronic voting. Furthermore, it is a topical issue for which social scientists have little explicit theory. The findings of the study may thus contribute toward adoption of electronic voting nation-wide.

Part TWO

FINDINGS AND DISCUSSION

2.1 Socio-Economic Characterization of the Respondents

In this sub-section, the major socio-economic characteristics of the respondents considered in the survey are described. The main characteristics considered relate to their ages, sex, religion, marital status, major occupation and highest educational qualification. Tables 1 and 2 show the socio-economic characteristics per LGA as well as the pooled analysis. As revealed in Table 1, a majority of the respondents in Birnin-Gwari (80.7%), Chikun (54.0%), Giwa (69.5%), Igabi (50.9%), Jema'a (76.8%) and Sanga (61.7%) fall within the ages of 31-50. The pooled analysis shows that a majority of them were about 40 years old. Age has been used as a determinant in assessing a person's activity and productivity. Since the majority of respondents were between 31 and 50 years old, a majority of the voters could be said to be in their highly productive years and should know the benefits of casting their votes in an election. Participating in politics is a hard-won right in Nigeria. However, young voters notoriously neglect the importance of voting, but their voice can be important for effecting political changes that concern them.

To corroborate the above assertion, young voters matter, so much so that the collective "youth vote" could actually sway an election. For instance, the youth have been credited with the decisive vote in the 2012 election of Barack Obama for a second term as President of America. Obama won 67% of the national youth vote, proving more popular in crucial States such as Florida, Virginia, Pennsylvania, and Ohio, over his opponent Mitt Romney. Therefore, in 2016, candidates campaigned hard for the young voters as a powerful electorate group. Why? Because they understood the necessity of winning approval from this voting majority.

Table 1: The Distribution of Respondents according to Age, Sex, Religion and Marital Status (%).

S/N	LGA	AGE DISTRIBUTION					SEX		RELIGION		MARITAL STATUS	
		18-30	31-40	41-50	51-60	>60	Male	Female	Islam	C/nity	Married	Single
1	B/Gwari	19.3	51.9	28.8	0.0	0.0	94.2	5.8	96.2	3.8	76.9	23.1
2	Chikun	34.1	33.1	20.9	9.9	2.1	83.5	16.5	26.4	72.5	70.3	29.7
3	Giwa	29.3	52.4	17.1	1.2	0.0	93.9	6.1	92.7	7.7	82.9	17.1
4	Igabi	49.1	36.4	14.5	0.0	0.0	80.4	17.9	96.4	3.6	25.5	74.5
5	Ikara	31.6	47.4	14.7	5.3	1.1	100.0	0.0	97.9	2.1	91.6	8.4
6	Jaba	26.9	32.8	23.9	9.0	7.5	89.7	10.3	1.5	98.5	70.8	29.2
7	Jama'a	16.8	52.6	24.2	6.3	0.0	90.4	9.6	23.2	76.8	83.2	16.8
8	Kachia	46.3	33.7	17.9	2.1	0.0	61.1	38.9	10.5	89.5	26.6	72.3
9	K/North	26.0	40.4	19.2	12.5	1.9	58.7	40.4	85.6	14.4	82.2	17.8
10	K/South	42.9	36.3	15.4	3.3	1.1	76.9	23.1	89.0	8.8	46.2	52.7

11	Kagarko	47.4	34.0	12.4	5.2	1.0	63.9	36.1	7.2	92.8	35.1	63.9
12	Kajuru	22.6	41.7	27.4	8.3	0.0	85.7	14.3	54.8	45.2	83.3	16.7
13	Kaura	ELECTION DID NOT HOLD										
14	Kauru	16.7	46.4	26.2	10.7	0.0	94.0	6.0	52.4	46.4	90.5	9.5
15	Kubau	49.0	27.6	13.3	9.2	1.0	88.8	19.4	80.6	19.4	55.1	44.9
16	Kudan	37.8	30.6	29.6	2.0	0.0	94.8	5.2	93.9	5.1	74.2	25.8
17	Lere	23.5	27.5	16.7	16.7	13.7	88.2	11.8	53.9	45.1	88.1	11.9
18	Makarfi	51.8	36.5	10.6	1.2	76.5	21.2	2.4	86.0	14.0	46.5	52.3
19	S/Gari	40.2	36.6	14.6	4.9	3.7	98.8	1.2	90.4	9.6	56.8	43.2
20	Sanga	14.7	33.8	27.9	20.6	2.9	82.4	17.6	30.9	69.1	83.8	16.2
21	Soba	56.3	34.4	6.3	1.0	2.0	68.8	31.3	78.4	216	39.2	60.8
22	Z/Kataf	30.3	48.7	18.4	2.6	0.0	92.0	8.0	10.7	89.3	70.7	29.3
23	Zaria	8.5	69.1	18.1	4.3	0.0	91.5	8.5	93.6	6.4	87.2	12.8
24	**State-Wide**	**33.0**	**39.9**	**18.8**	**6.2**	**1.8**	**83.4**	**16.1**	**61.1**	**38.9**	**71.7**	**27.5**

The findings in Table 1 further show that majority of the respondents across 22 LGA were male studied. This study confirmed the usual bias by previous researchers against women as respondents. Although theyare the leading voters in Nigeria, they are considered important in the electoral process only when it comes to voting for candidates. They are not considered important when it comes to contributing their views to deepening democracy and the electoral process. The official priority given to men is rooted in the Nigerian societal expectations which demand that women's position should always be one step behind men's. As such, official recognition of women as potential political aspirants, has continued to be ignored or peripheral,mainly at the voting level.

Since the 1995 Beijing Conference on Women and Development, gender and developmentissueshavebeen raisedhighontothe nationaldevelopmentagenda. Article 1 of the Convention on the Political Rights of Women and Article 7(a) of the Convention on the Elimination of All Forms of Discrimination against Women also states that **women are entitled to participate in the electoral process on equal terms with men**, without distinction as to race, colour, national or ethnic origin, and in particular the rights to participate in elections -- **to vote and to stand in election** to be voted for.

The results on Table 1 further show that a majority of them were married, an indication that they have some responsibilities to cater for.About 60 percent of the respondents across the LGAs studied were Muslims, while about 40 percent were Christians.

The major occupation and highest educational qualification of the respondents are provided in Table 2. As could be seen from the pooled analysis, a majority of the respondents were farmers (38.3%), while about 52 percent of them had tertiary education with either sub-university

training such as the Ordinary National Diploma (OND) and the Higher National Diploma (HND), the National Certificate of Education (NCE), etc. as their highest educational qualifications. About 30 percent of them had secondary education with only a paltry 11.8 percent of them who had the primary school education only.

Table 2: Distribution of Respondents according to Major Occupation and Highest Educational Qualification (%).

S/N	LGA	MAJOR OCCUPATION					HIGHEST QUALIFICATION				
		Trader	Farmer	Herder	Civil Serv	Others	Prim	Sec	Tert	Quranic	Others
1	B/Gwari	5.8	59.6	13.5	19.2	1.9	3.8	38.5	46.2	7.7	3.8
2	Chikun	19.8	33.0	6.6	9.9	30.8	11.0	16.5	72.5	-	-
3	Giwa	3.7	57.3	2.4	12.2	24.4	9.1	31.2	53.2	6.5	0.0
4	Igabi	10.7	66.1	10.7	12.5	0.0	14.3	39.3	39.3	3.6	3.6
5	Ikara	22.1	54.7	2.1	12.6	2.1	18.1	26.6	38.3	8.5	4.3
6	Jaba	17.9	38.8	1.5	17.9	7.5	22.2	77.8	0.0	0.0	0.0
7	Jama'a	17.9	37.9	10.5	33.7	0.0	4.3	34.4	61.3	0.0	0.0
8	Kachia	15.8	42.1	17.9	18.9	5.3	12.8	36.2	36.2	5.3	9.6
9	K/North	21.8	23.8	10.9	16.8	26.7	3.3	30.8	42.9	14.3	8.8
10	K/South	3.3	5.5	1.1	16.5	73.7	2.2	32.2	64.4	0.0	1.1
11	Kagarko	32.0	40.2	4.1	22.7	1.1	18.6	37.1	35.1	1.1	8.2
12	Kajuru	83.3	34.5	32.1	13.1	11.9	9.5	19.0	71.4	0.0	0.0
13	Kaura	ELECTION DID NOT HOLD									
14	Kauru	8.3	58.3	2.4	7.1	23.8	9.5	21.4	64.3	4.8	0.0
15	Kubau	24.5	21.4	1.0	15.3	17.3	14.6	29.2	56.3	0.0	0.0
16	Kudan	7.2	37.1	8.2	20.6	25.8	5.2	18.8	71.9	2.1	2.1
17	Lere	15.7	14.1	20.6	7.8	11.8	18.6	26.8	53.6	0.0	1.0
18	Makarfi	34.9	37.2	3.5	17.4	7.0	31.4	33.7	24.4	1.2	9.3
19	S/Gari	22.9	15.7	6.0	12.0	43.4	9.9	42.0	45.7	1.2	1.2
20	Sanga	20.6	48.5	1.5	8.8	20.6	13.2	36.8	46.1	0.0	1.5
21	Soba	33.0	34.0	14.4	11.3	7.2	31.9	27.7	35.1	3.2	2.1
22	Z/Kataf	2.6	40.8	14.5	34.2	7.9	2.7	24.3	66.2	1.4	4.1
23	Zaria	27.7	38.3	8.5	19.1	6.4	7.4	44.7	40.4	6.4	1.1
24	**State-Wide**	**17.8**	**38.3**	**6.0**	**17.9**	**20.0**	**11.8**	**30.3**	**52.2**	**2.8**	**2.9**

On the whole, women were particularly affected in terms of low qualifications. Education is important in political decision-making and it was assumed in this study that the use of the EVMs introduced in the 2018 election requires certain level of education for quicker comprehension and

that education can facilitate quicker acceptability which in turn is presumed to instill a favorable attitude towards the use of electronic voting, thus the importance of this variable in this study.

2.2 Participation inEVMs Demonstration

Before conducting the actual LGC Election in 2018, the Commission organized demonstration exercises on the use of the machine in every ward across the 23 LGAs of the State. Consequently, some questions were posed to the respondents to know whether or not they participated in the demonstration, their views on the quality of the demonstration, whether the exercise was useful to them as voters in performing their civic responsibilities during the election proper and whether the respondents noticed that all the PoliticalParty's logos were embedded in the EVMs. As revealed in Table 3, all the respondents from Birnin-Gwari, Igabi, Kachia, Sanga and Zaria participated in the demonstration. Also, over 74% of respondents participated in the demonstration from Ikara, Sabon-Gari and Soba. The pooled analysis indicates that 94.5 percent of the respondents participated across the State.

Table 3: Distribution of Respondents according their Participation in the EVMs Demonstration Exercise (%).

S/N	LGA	PARTICIPATED		VIEWS ON DEMOS.			HELP IN CIVIC RESPONSIBILITY			NOTICED EVMS CONTAINED PARTIES LOGO		
		Yes	No	Successful	Failure	Don't Know	Yes	No	Don't Know	Yes	No	Don't Know
1	B/Gwari	100.0	0.0	96.2	3.8	0.0	100.0	0.0	0.0	100.0	0.0	0.0
2	Chikun	97.8	2.2	95.6	3.3	1.1	93.4	2.2	4.4	95.6	1.1	3.3
3	Giwa	98.8	1.2	91.5	8.5	0.0	100.0	0.0	0.0	97.5	1.2	1.2
4	Igabi	100.0	0.0	100.0	0.0	0.0	100.0	0.0	0.0	100.0	0.0	0.0
5	Ikara	75.8	24.2	91.6	8.4	0.0	94.7	1.1	4.3	80.0	5.3	14.7
6	Jaba	91.2	8.9	79.4	14.7	5.9	86.4	8.5	5.1	91.0	4.5	4.5
7	Jama'a	98.9	1.1	100.0	0.0	0.0	100.0	0.0	0.0	100.0	0.0	0.0
8	Kachia	100.0	0.0	100.0	0.0	0.0	100.0	0.0	0.0	100.0	0.0	0.0
9	K/North	96.0	4.0	98.0	2.0	0.0	90.0	9.1	0.0	95.8	3.1	1.0
10	K/South	90.1	9.9	85.7	12.1	2.2	82.4	9.9	7.7	83.5	5.5	11.0
11	Kagarko	96.9	3.1	99.0	1.0	0.0	100.0	0.0	0.0	100.0	0.0	0.0
12	Kajuru	98.8	1.2	97.6	2.4	0.0	94.0	3.6	2.4	96.4	1.2	2.4
13	Kaura	ELECTION DID NOT HOLD										
14	Kauru	94.0	4.8	94.0	4.8	1.2	92.7	7.3	0.0	96.3	3.7	0.0
15	Kubau	96.9	3.1	85.7	12.2	2.0	93.7	6.3	0.0	91.8	5.2	3.1
16	Kudan	98.9	1.1	96.9	0.0	3.1	95.9	0.0	4.1	93.9	4.1	2.0

17	Lere	90.2	9.8	82.4	9.8	7.8	87.3	3.9	8.8	89.2	2.9	7.8
18	Makarfi	96.5	3.5	97.7	2.3	0.0	96.5	2.3	1.2	97.7	2.3	0.0
19	S/Gari	74.7	25.3	74.7	4.8	20.5	93.8	3.8	2.5	87.8	3.7	8.5
20	Sanga	100.0	0.0	97.1	2.9	0.0	94.1	2.9	2.9	97.1	1.5	1.5
21	Soba	87.5	12.5	91.8	4.1	4.1	87.6	8.2	4.1	83.3	6.3	10.4
22	Z/Kataf	98.6	1.4	100.0	0.0	0.0	100.0	0.0	0.0	100.0	0.0	0.0
23	Zaria	100.0	0.0	100.0	0.0	0.0	100.0	0.0	0.0	100.0	0.0	0.0
24	**State-Wide**	**94.5**	**5.5**	**93.4**	**3.9**	**2.6**	**94.5**	**3.2**	**2.3**	**94.1**	**2.4**	**3.5**

On their views about the demonstration, 100 percent of the respondents from Igabi, Jema'a, Kachia, ZangoKataf and Zaria rated it as a successful exercise. On the other hand, only a paltry percentage from Kaduna North (2.1%), Birnin-Gwari (3.3%), Kagarko (1.1), Makarfi (2.3%) and Sanga (2.9%) rated it as a failure. The pooled analysis shows that 93.4 percent of the respondents were satisfied with the demonstration exercise. Similarly, all the respondents from Birnin-Gwari, Giwa, Igabi, Jema'a, Kachia, Kagarko, Zango-Kataf and Zaria agreed that the demonstration helped them in performing their civic responsibilities as voters. A very high percentage of them across the State (94.1%) also indicated that they noticed that the EVMs contained all the Political Party logos (Table 3). Overall, 95.1 percent of the respondents who participated in the demonstration also voted in the 2018 LGCE conducted by Kad-siecom.

2.3 The Respondents Rating of Performance and Speed ofEVMs

The study also tried to determine the respondents' rating of the performance and speed of the EVMs during elections. As indicated by the data in Table 4, the highest rating of very good were reported in Igabi (100.0%, Kagarko (100.0%), Jama'a(93.7%), Makarfi (90.8%) and Zango-Kataf (97.4), while the state wide average of 78.2 percent of the respondents rated performance of the EVM as very good. A very negligible number across the State, rated the performance of the EVMs as poor.

Table 4: The Respondents Rating of Performance and Speed of EVMs (%).

S/N	LGA	PERFORMANCE			SPEED OF EVMs		
		V.Good	Good	Poor	V.Fast	Average	Slow
1	B/Gwari	76.9	7.7	1.9	90.4	5.8	0.0
2	Chikun	53.8	41.8	4.4	64.8	31.9	3.3
3	Giwa	70.4	29.6	0.0	74.1	24.7	1.2
4	Igabi	100.0	0.0	0.0	96.4	3.6	0.0
5	Ikara	78.9	21.1	0.0	85.3	14.7	0.0

6	Jaba	59.1	31.8	9.1	49.3	38.8	11.9
7	Jama'a	93.7	5.3	1.1	95.7	4.3	0.0
8	Kachia	100.0	0.0	0.0	93.7	6.3	0.0
9	K/North	82.8	15.2	2.0	86.9	11.1	2.0
10	K/South	23.3	35.6	11.1	43.3	51.1	5.6
11	Kagarko	100.0	0.0	0.0	100.0	0.0	0.0
12	Kajuru	79.5	18.1	2.4	86.7	10.8	2.4
13	Kaura	ELECTION DID NOT HOLD					
14	Kauru	52.4	41.7	6.0	72.3	24.1	3.6
15	Kubau	70.1	19.6	10.3	81.6	14.3	4.1
16	Kudan	86.6	13.4	0.0	84.7	15.3	0.0
17	Lere	49.0	43.0	8.0	59.8	34.3	5.9
18	Makarfi	90.8	9.2	0.0	85.9	9.4	3.5
19	S/Gari	73.5	24.1	2.4	70.7	22.0	7.3
20	Sanga	83.8	14.7	1.5	75.0	25.0	0.0
21	Soba	82.1	16.8	1.1	88.0	12.0	0.0
22	Z/Kataf	97.4	2.6	0.0	100.0	0.0	0.0
23	Zaria	86.3	13.7	0.0	95.7	4.3	0.0
24	**State-Wide**	**78.2**	**19.1**	**2.8**	**81.1**	**16.6**	**2.2**

When asked to rate the speed of the EVMs compared with the manual ballot paper voting system, 94.4 percent of them from Birnin-Gwari, 96.4 from Igabi, 95.7 from Jema'a, 93.7 from Kachia and 100.0 percent from Kagarko, rated the EVMs speed as very fast. The State-wide analysis also indicates that over 81 percent of the respondents rated it as very high. Virtually everybody believed that the machine was not slow at all (Table 4), and 95.8 percent of them confirmed that the EVMs were activated for voters to cast their votes by polls officials.

The proponents of electronic voting believe that unlike manual voting, a well-designed electronic voting system allows for a faster set-up of polling stations, since it requires less handling of physical materials and fewer personnel; voting is also faster implying shorter waiting times to vote, faster tallying and collation of results; which are also delivered and announced sooner. The shortening of time lapses during an election is a key advantage in the comparison between electronic voting and manual voting, since the former represents a much quicker option than the latter, not only during the voting itself, but throughout all the processes involved. This assertion has been proved by the responses obtained in this study.

2.4 The Views of Respondents on Whether EVMs are Simple to Operate and their Level of Satisfaction with Arrangement during Voting.

The survey sought to obtain information on the views of respondents on whether the EVMs are Simple to operate. It also sought information on their Level of Satisfaction with Arrangement at the PU. The responses are presented on Table 5. The results show that all (100.0%) of the respondents in Birnin-Gwari, Igabi, Kachia, Kagarko and Zango-Kataf agreed that the EVM was simple to operate and vote on. Similarly high ratings were reported in Kudan (99.0%), Jema'a (98.6%), Kaduna North (98.0%), Kajuru (97.6%), Giwa (96.3%), Kauru (95.1%), Kubau (92.9%), Sabon-Gari (92.8%), Makarfi (91.0%), Soba (90.5%); and 93.4 percent for the State-wide analysis.

Table 5: The Views of Respondents on Whether EVMs are Simple to Operate and Level of Satisfaction with Arrangement at Polling Units (%).

S/N	LGA	EVMs SIMPLE TO OPERATE			SATISFACTION WITH PU ARRANGEMENT		
		Yes	No	Don't Know	Yes	No	Don't Know
1	B/Gwari	100.0	0.0	0.0	100.0	0.0	0.0
2	Chikun	87.9	6.6	5.5	97.8	1.1	1.1
3	Giwa	96.3	3.7	0.0	100.0	0.0	0.0
4	Igabi	100.0	0.0	0.0	98.2	1.8	0.0
5	Ikara	96.8	3.2	0.0	93.5	1.1	5.4
6	Jaba	74.6	19.4	6.0	98.5	1.5	0.0
7	Jama'a	98.9	1.1	0.0	94.7	5.3	0.0
8	Kachia	100.0	0.0	0.0	100.0	0.0	0.0
9	K/North	98.0	2.0	0.0	92.9	7.1	0.0
10	K/South	78.9	15.6	5.6	91.2	3.3	5.5
11	Kagarko	100.0	0.0	0.0	100.0	0.0	0.0
12	Kajuru	97.6	2.4	0.0	97.6	2.4	0.0
13	Kaura	ELECTION DID NOT HOLD					
14	Kauru	95.1	3.7	1.2	97.6	1.2	1.2
15	Kubau	92.9	2.0	5.1	96.6	3.4	0.0
16	Kudan	99.0	1.0	0.0	96.8	3.2	0.0
17	Lere	78.4	2.9	18.6	94.9	4.1	1.0
18	Makarfi	91.0	3.8	3.8	93.0	7.0	0.0
19	S/Gari	92.8	4.8	2.4	91.5	1.2	7.3
20	Sanga	88.2	10.3	1.5	97.1	2.9	0.0
21	Soba	90.5	5.3	4.2	95.8	4.2	0.0
22	Z/Kataf	100.0	0.0	0.0	100.0	0.0	0.0

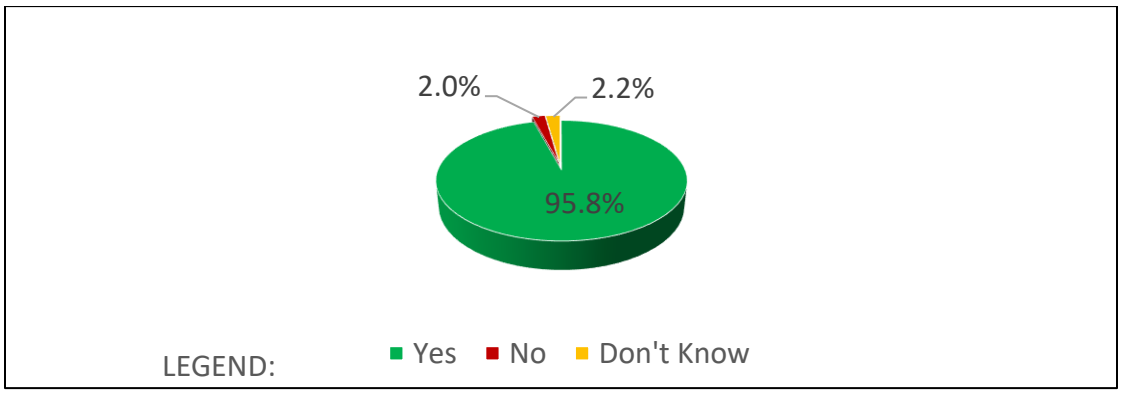
23	Zaria	96.8	3.2	0.0	97.9	2.1	0.0
24	**State-Wide**	**93.4**	**3.7**	**2.9**	**96.5**	**2.5**	**1.0**

In the manual paper ballot system of voting, before the commencement of poll, the officials will show the party agents and the general public that the ballot box is empty. Whereas with the EVM, the presiding officer will show that the ballot box is empty as well as printout the initial results with zero votes for each party. Majority of the respondents (96.5%) were more satisfied with EVM arrangement than the manual ballot paper system of voting as indicated on Table 5.

2.5 Pooled Responses on Knowledge of Voting for Chairman and Councillorat the Same Time on the Same Machine.

The pooled analysis of whether the respondents knew that voting of the Chairman and Councillor could be done at the same time on the same machine is as shown on figure 2. The figure reveals that 95.8 percent of the respondents knew that the Chairmanship and Councillorship voting could be done at the same time on thesame machine. The share of those who did not know was 2.0 percent, while those who had no idea was 2.2 percent or negligible.

Figure 2: Pooled Responses on Knowing that Chairmanship and Councillorship Voting can Be done at the Same Time on the same Machine



Similarly, 88.7 percent of the respondents knew that a person could vote for Chairman and ignore the Councillor and vice-versa. The share of those who said no and those who said they didn't know was 7.0 and 3.2 percent, respectively.

2.6 The Respondents' Views on whether with EVMs a Person Cannot Vote Twice and whether EVMs were manipulated by Officials during the Election.

Respondents wereasked whether they noticed that with the EVMs a person could not vote twice, and whether the EVMs were manipulated by officials in the 2018 LGCE. Most of the respondents (82.4%) (Table 6) indicated that with the EVMs a person could not vote twice. It should be noted that the EVMs are stand-alone units that worked independently on Election Day and couldnot have been manipulated during the 2018 election.

Table 6: The Respondents' Views on, with EVMs a Person Cannot Vote Twice, and Whether EVMs were manipulated by Officials in 2018 LGCE (%).

S/N	LGA	CANNOT VOTE TWICE			OBSERVED POLL OFFICIALS MANIPULATION		
		Yes	No	Don't Know	Yes	No	Don't Know
1	B/Gwari	78.8	20.2	0.0	9.6	90.4	0.0
2	Chikun	78.0	11.0	11.0	25.3	69.2	5.5
3	Giwa	84.0	14.8	1.2	40.0	56.3	3.8
4	Igabi	97.9	2.1	0.0	5.6	92.6	1.9
5	Ikara	78.7	10.6	10.6	59.6	39.4	1.1
6	Jaba	77.3	10.6	12.1	13.4	77.6	9.0
7	Jama'a	100.0	0.0	0.0	100.0	0.0	0.0
8	Kachia	95.8	2.1	2.1	10.6	66.0	23.4
9	K/North	87.8	8.2	4.1	16.7	80.4	2.9
10	K/South	68.1	16.5	14.3	23.1	59.3	17.6
11	Kagarko	94.8	0.0	5.2	83.0	10.6	6.4
12	Kajuru	75.0	21.4	3.6	36.9	57.1	4.8
13	Kaura	ELECTION DID NOT HOLD					
14	Kauru	53.6	25.0	20.2	19.5	72.0	8.5
15	Kubau	83.7	16.3	0.0	45.9	51.0	3.1
16	Kudan	87.6	7.2	5.2	22.7	77.3	0.0
17	Lere	84.3	11.8	3.9	29.7	56.4	13.9
18	Makarfi	82.9	4.9	12.2	36.4	51.5	12.1
19	S/Gari	77.8	19.8	2.5	19.8	71.6	8.6
20	Sanga	86.8	8.8	4.4	76.5	20.6	2.9
21	Soba	72.0	16.1	11.8	53.9	37.1	9.0
22	Z/Kataf	96.1	3.9	0.0	100.0	0.0	0.0
23	Zaria	100.0	0.0	0.0	100.0	0.0	0.0
24	**State-Wide**	**82.4**	**11.2**	**6.4**	**29.1**	**64.6**	**6.3**

The pooled analysis shows that 73.9 percent (Figure 3) of the respondents knew that with the EVMs, a person cannot vote twice. Similarly, figure 4 indicates that 62.9 percent of the respondents did not observe any manipulation of the EVMs by the polls officials.

Figure 3: Pooled Responses on knowing that with EVM a Person cannot Vote Twice

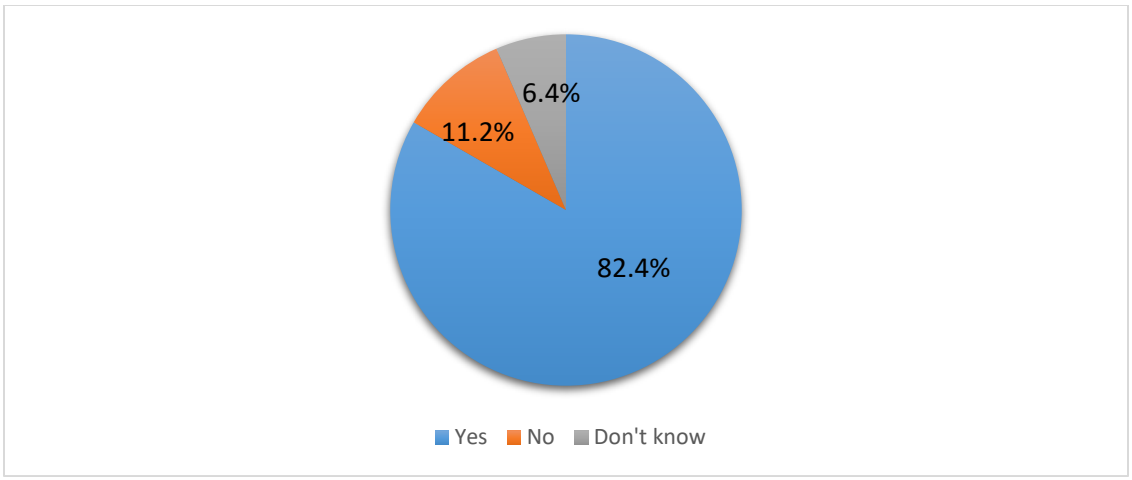
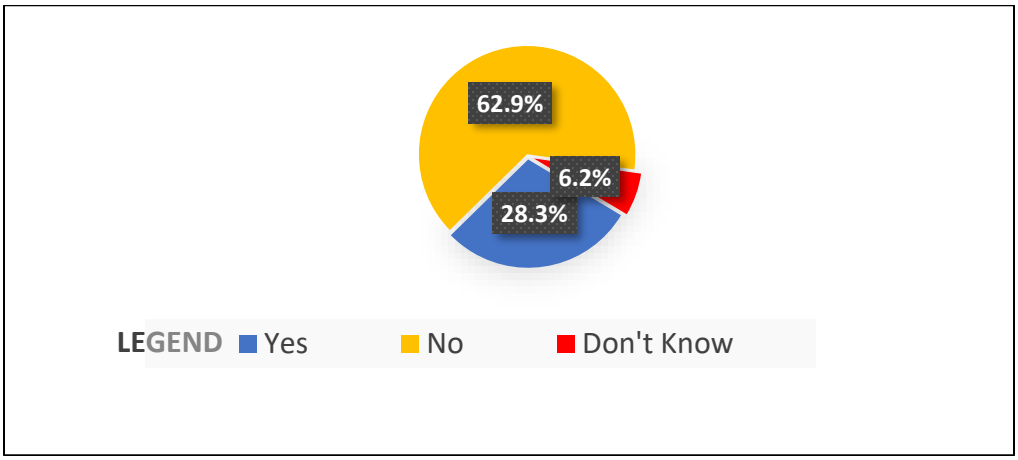


Figure 4: Pooled responses on whether Poll Officers Manipulated the EVMs.



2.7 Respondents Views on Whether Use of EVMs Effectively Reduced Electoral Fraud, and their Rating of Control of Electoral Fraud during the 2018 Election

The advantage of the EVMs over the manual ballot paper voting canbest be understood if the use of EVM effectively reduces electoral fraud. Disaggregationof the respondents according to those who agreed and disagreed shows that a majority of the respondents across the State agreed that it can effectively reduce and control electoral fraud (Table 7).

Table 7: Views of Respondents on whether Use of EVMs Effectively Reduced Electoral

Fraud and Rating in Controlling Electoral Fraud (%).

S/N	LGA	EVM REDUCES ELECTORAL FRAUD			RATING OF EM IN CONTROL OF FRAUD		
		Agreed	Disagreed	Don't Know	Very-Effective	Not Effective	Don't Know
1	B/Gwari	90.4	3.8	7.8	100.0	0.0	0.0
2	Chikun	67.0	26.4	6.6	63.7	25.3	11.0
3	Giwa	100.0	0.0	0.0	90.9	7.8	1.3
4	Igabi	100.0	0.0	0.0	98.2	1.8	0.0
5	Ikara	89.6	6.3	4.2	80.2	15.6	4.2
6	Jaba	74.6	17.9	7.5	73.0	19.0	7.9
7	Jama'a	83.2	15.8	1.1	97.9	2.1	0.0
8	Kachia	96.8	2.2	1.1	97.8	1.1	1.1
9	K/North	93.1	5.9	1.0	93.0	7.0	0.0
10	K/South	72.5	20.9	6.6	66.3	22.5	11.2
11	Kagarko	97.9	2.1	0.0	97.9	2.1	0.0
12	Kajuru	89.3	7.1	3.6	86.9	6.0	7.1
13	Kaura	ELECTION DID NOT HOLD					
14	Kauru	76.8	14.6	8.5	75.3	18.5	6.2
15	Kubau	80.6	18.4	1.0	78.9	17.9	3.2
16	Kudan	89.7	9.3	1.0	93.9	5.1	1.0
17	Lere	78.8	16.2	5.1	74.5	17.6	7.8
18	Makarfi	95.3	3.5	1.2	95.2	3.6	1.2
19	S/Gari	86.6	9.8	3.7	78.8	15.0	6.3
20	Sanga	91.2	4.4	4.4	89.7	55.9	4.4
21	Soba	90.5	7.4	2.1	83.0	14.9	2.1
22	Z/Kataf	100.0	0.0	0.0	97.4	2.6	0.0
23	Zaria	100.0	0.0	0.0	100.0	0.0	0.0
24	**State-Wide**	**88.3**	**9.1**	**2.7**	**86.6**	**9.9**	**3.5**

Figure 5: Pooled Responses on Effectiveness of Fraud Reduction by Use of EVM

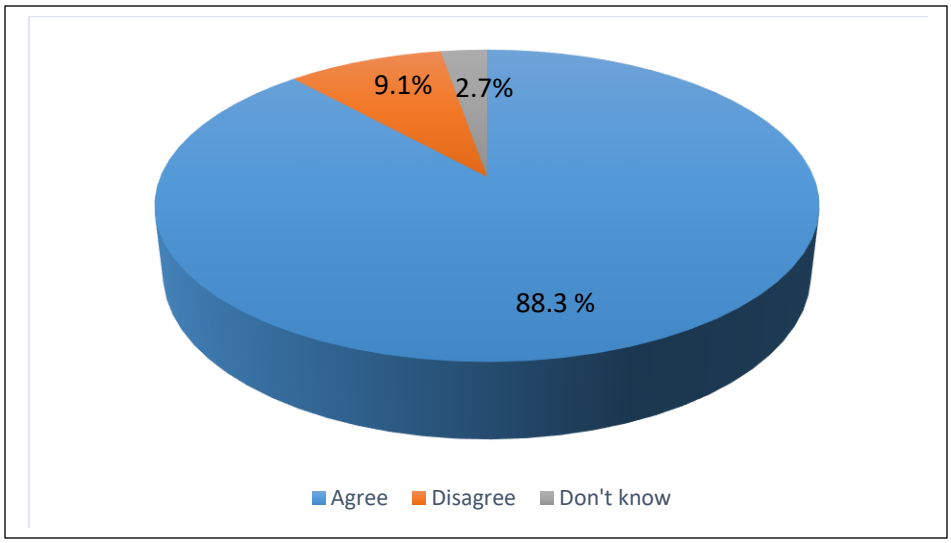
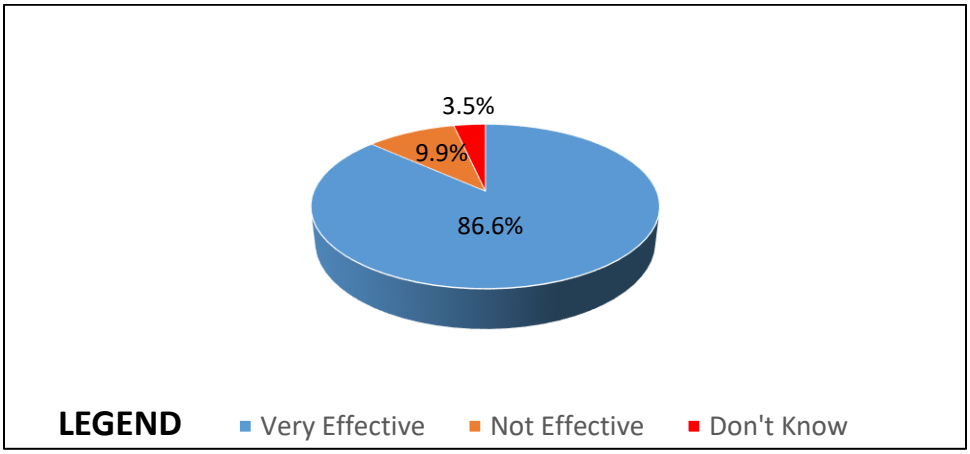


Figure 6: Pooled Responses on Rating Use of EVM in Controlling Election Fraud.



In other words, 88.3 percent of the respondents believed thatthe use of the EVMs in the 2018 LGCE improved the integrity of the election. Also, 86.6 percentof them rated the EVMs as very effective in protecting against fraud. The introduction of the EVMs for the first time in the 2018 elections, therefore, created a tradeoff between reducing fraud and disenfranchising certain voters. In fact, one of the advantages of electronic voting is that it can improve the efficiency and integrity of the electoral process. That assertion has been proved by this study.

2.8 Responses on Interference by Politicians and Violence at Polling Units During the 2018 Election.

Experience elsewhere has shown that the greatest difficulty to conducting free, fair and credible election is outside interference particularly by politicians. In such a situation, electing a person who can represent the interest of the people, and who knows the very basic task he/she is

supposed to perform becomes a nightmare, while quality is jettisoned in favor of opportunistic quests. Less than 35 percent of the respondents in this study indicated that there was interference, while more than 60 percent (Table 8) said there was no interference at all.

Table 8: Distribution of Respondents according to Views on Election Interference by Politicians and Violence in Polling Units (%)

S/N	LGA	POLITICIANS INTERFERENCE			VIOLENCE IN POLLING UNITs		
		Yes	No	Don't Know	Yes	No	Don't Know
1	B/Gwari	1.9	94.2	0.9	63.5	36.5	0.0
2	Chikun	37.4	52.7	9.9	28.6	64.8	6.6
3	Giwa	35.9	50.0	12.8	53.7	41.5	4.9
4	Igabi	11.3	84.9	3.8	55.4	41.1	3.6
5	Ikara	15.6	82.3	2.1	52.1	43.8	8.2
6	Jaba	22.4	61.2	13.4	33.8	63.2	2.1
7	Jama'a	1.1	96.8	2.1	97.8	2.2	0.0
8	Kachia	5.4	81.7	12.9	55.8	43.2	1.1
9	K/North	18.4	76.5	5.1	9.2	86.7	4.1
10	K/South	36.3	46.2	17.6	29.7	61.5	8.8
11	Kagarko	89.5	9.5	1.1	94.2	4.7	1.2
12	Kajuru	45.2	41.7	13.1	57.1	40.5	2.4
13	Kaura	ELECTION DID NOT HOLD					
14	Kauru	27.7	67.5	4.8	21.2	78.8	0.0
15	Kubau	42.9	51.0	6.1	34.7	64.3	1.0
16	Kudan	26.8	72.2	1.0	6.2	90.7	3.1
17	Lere	40.2	47.1	12.7	97.0	3.0	0.0
18	Makarfi	68.2	29.4	2.4	46.5	33.7	19.8
19	S/Gari	33.8	61.3	5.0	26.3	72.5	1.3
20	Sanga	80.9	16.2	2.9	72.1	26.5	1.5
21	Soba	59.6	37.2	3.2	42.5	48.3	9.2
22	Z/Kataf	4.1	90.4	5.5	2.6	96.1	1.3
23	Zaria	5.4	94.6	0.0	97.9	2.1	0.0
24	**State-Wide**	**33.1**	**60.6**	**6.3**	**39.2**	**57.1**	**3.8**

Nigeria has, over the years, grappled with the challenge of violence at elections. For the typical Nigerian politician, the golden rule of politics is victory at all costs and by all means necessary. The process does not matter, and therefore, is often desecrated with impunity, often leading to widespread violence and needless loss of lives and properties. Mostof the respondents (57.1%)

indicated that there was no violence at their PUs, while 39.2 percent of them experienced some form of violence at their polling Units.

The consequences of election violence are numerous. The most visible ones include physical injuries, maiming/killing of political opponents and innocent people, voter apathy, cancellation, postponement or re-scheduling of elections, all of which diminish the credibility of an election. Voter apathy may arise because voters may be afraid to come out to vote in future elections. Re-scheduling an election is very expensive to both the election management body and the political parties who may need to go round again to convince the electorate to come out to vote.

2.9 Distribution of Respondents according to Causes of Violence during Elections.

Election violence is a sub-category of political violence, which deserves special consideration in the context of this study. Indeed, election violence is the unlawful use of force during or after elections. It is the employment of force by political parties or their supporters to inflict injury or cause damage to a person's property, or to intimidate their supporters with the intention of influencing the outcome of elections or deterring elected officials from consolidating their positions after winning elections.

Nigeria has over the years, grappled with the challenges of conducting violence free elections and deepening the electoral process. In spite of some modest improvement due to the introduction of the Permanent Voters Cards (PVCs) and Smart Card Readers, there is widespread perception that politicians rarely win elections in Nigeria. Rather, it is generally believed that winners are declared dubiously and their victories are subject to election Tribunals/Courts decisions. In other words, the name Independent Electoral Commission is a mere nomenclature. The independence is actually with those in power. Thus, according to this belief, the golden rule for a typical Nigerian politician is "victory at all costs and by all means necessary". The process is, therefore, desecrated with impunity, often leading to widespread violence with the concomitantmanifestation of election violence such as murder, arson, abduction, assault, seizure and destruction of election materials,needless loss of lives and properties, and voter apathyperpetuated by individuals or groups with the intension to influence the outcome of elections. Voter apathy often arises because voters are afraid to come out and vote.

In this study, the respondents were asked to state from their understanding, three causes of violence during election. Table 9 reveals the responses recorded. More (8.6%) of the respondents reported that interference by politicians was the major cause. This was followed by 5.4 percent of the respondents who mentioned the presence of political thugs, late commencement of elections (5.0%), security compromise (4.9%), poll officials compromise (4.8%), and 4.2 percent of them reported use of bad language. A large majority of the respondents (58.1%) opted not to answer this question.

Table 9: Respondents Opinion on Causes of Violence during Elections

S/NO	VARIABLES	PERCENT (%)
I	Use of bad language	4.2
Ii	Presence of political thugs	5.4
Iii	Vote buying	2.1
Iv	Election manipulation/rigging of election	6.9
V	Interference by stakeholders	8.6
Vi	Late commencement of election	5.0
Vii	Poll officials compromise	4.8
Viii	Security compromise	4.9
Ix	No idea	58.1

2.10 Respondents Level of Satisfaction with EVMs Handling, Malfunction Experienced and Times EVM Failed during Voting Period.

Duringthe field survey,respondentswereaskedto state their level of satisfaction with handling of the EVMs, malfunction experienced and the number of times the EVMs failed in their Polling Units. Results (Table 10) indicate a high level of satisfaction with handling of the EVMs in Zaria (100%), Kachia (98.9%), Birnin-Gwari (98.1%), Kaduna North (96.9%), Zango-Kataf (97.3%) and Makrfi (96.5%). Very high number of the respondents also reported malfunction of the EVMs in Zaria (100%), Jama'a (98.9%), Kagarko (83.2%), Makarfi (76.5%), Soba (48.9%), Giwa (48.8%) and Kubau (44.9%). As for the number of times the EVMs failed, all (100%) of the respondents in Zaria LGA,80.0% in Ikara LGA, Makarfi (90.5%) and Kudan (84.7%) all reported they failed once, while 98.1% in Birnin-Gwari reported they failed twice.

Table 10: Respondents Level of Satisfaction with EVMs Handling, Malfunction Experienced And Times EVMs Failed during the Voting (%).

S/N	LGA	EVMs HANDLING SATISFACTION			EXPERIENCED MAL-FUNCTION			TIMES EVMs FAILED		
		Yes	No	Don't Know	Yes	No	Don't Know	Ones	Twice	More Than Two Times
1	B/Gwari	98.1	1.9	0.0	3.8	90.4	5.8	1.9	98.1	0.0
2	Chikun	87.9	8.8	3.3	36.3	59.3	4.4	27.0	8.1	64.9
3	Giwa	3	4.2	1.4	48.8	50.0	1.3	36.4	47.7	15.9
4	Igabi	81.8	18.2	0.0	12.5	78.6	8.9	78.9	21.1	07.0
5	Ikara	89.4	6.4	4.3	11.8	82.8	5.4	80.0	10.0	10.0
6	Jaba	86.8	13.2	0.0	34.3	62.7	3.0	48.1	18.5	33.3
7	Jama'a	97.9	2.1	0.0	98.9	1.1	0.0	95.8	4.2	0.0
8	Kachia	98.9	1.1	0.0	30.1	58.1	11.8	75.0	10.0	15.0
9	K/North	96.9	1.0	0.0	20.6	77.3	2.1	40.7	55.6	3.7

10	K/South	75.8	12.1	12.1	37.4	52.7	9.9	54.5	13.6	31.8
11	Kagarko	90.6	7.3	2.1	83.2	14.7	2.1	78.9	7.9	13.2
12	Kajuru	90.5	6.0	3.6	38.1	60.7	1.2	72.2	8.3	19.4
13	Kaura	ELECTION DID NOT HOLD								
14	Kauru	81.8	16.9	1.3	40.0	57.5	2.5	67.5	25.0	7.5
15	Kubau	85.1	12.8	2.1	44.9	54.1	1.0	70.7	9.8	19.5
16	Kudan	88.5	7.3	4.2	26.0	72.9	1.0	84.7	9.7	5.6
17	Lere	84.2	13.9	2.0	27.5	64.7	7.8	76.9	7.7	15.4
18	Makarfi	96.5	3.5	0.0	76.5	22.4	1.2	90.5	7.9	1.6
19	S/Gari	89.0	11.0	0.0	34.6	63.0	2.5	67.6	17.6	14.7
20	Sanga	89.7	7.4	2.9	27.9	29.1	2.9	26.2	21.1	15.8
21	Soba	87.1	8.6	4.3	48.9	44.4	6.7	75.6	17.1	7.3
22	Z/Kataf	97.3	2.7	0.0	5.3	94.7	0.0	69.6	21.4	8.9
23	Zaria	100.0	0.0	0.0	100.0	0.0	0.0	100.0	0.0	0.0
24	**State-Wide**	**90.5**	**7.3**	**2.2**	**32.2**	**64.1**	**3.7**	**69.4**	**15.3**	**15.2**

Overall, 90.5 percent of them were satisfied with the manner in which the EVMs were handled by the officials and 64.1 percent of them did not observe any mal-function. In all instances where the EVMs failed or broke-down, technical support by trained ICT technicians was swift to resolve the problems without any major impact on the voting process.

2.11 Respondents Level ofSatisfaction with EVM Approach, Ballot Receipts shown before Dropping and EVM Makes Voting Fast.

With the EVMs, the ballot receipts dropped into the ballot box for voter confidence in the system and the total number of votes cast could easily be determined from the summary print-out.Whereas in the manual paper ballot system the votes cast have to be physically counted. The respondents were asked if they were satisfied with the EVM approach, the ballot receipts shown before dropping, and whether the EVMs made voting faster in the 2018 LGCE. As revealed in Table 11, the respondents were satisfied with the EVM approach and the ballot receipts viewing before dropping into the ballot box.

Table 11: Distribution of Respondents according Satisfaction with the EVM Approach,

Ballot Receipts shown before Dropping and EVMs Made the Voting Faster (%).

S/N	LGA	SATISFACTION WITH EVMs APPROACH			BALLOT RECEIPTS SHOWN BEFORE DROPPED			EVMs MADE VOTING FASTER		
		Yes	No	Don't Know	Yes	No	Don't Know	Agree	Not Agree	Not Sure
1	B/Gwari	96.2	1.9	1.9	100.0	0.0	0.0	92.3	3.89	1.9
2	Chikun	90.0	3.3	6.7	83.5	14.3	2.2	90.1	6.6	3.3
3	Giwa	100.0	0.0	0.0	94.7	4.0	1.3	97.3	1.4	1.4
4	Igabi	98.2	1.8	0.0	100.0	0.0	0.0	100.0	0.0	0.0
5	Ikara	91.4	3.2	4.3	93.7	3.2	3.2	96.8	3.2	0.0
6	Jaba	93.9	6.1	0.0	92.4	6.1	1.5	89.2	6.2	4,6
7	Jama'a	100.0	0.0	0.0	100.0	0.0	0.0	94.7	5.3	0.0
8	Kachia	100.0	0.0	0.0	98.9	1.1	0.0	100.0	0.0	0.0
9	K/North	93.9	4.1	2.1	82.7	15.3	2.0	98.0	2.0	0.0
10	K/South	81.3	7.7	11.0	87.9	2.2	9.9	91.2	1.1	7.7
11	Kagarko	94.6	5.4	0.0	96.8	2.1	1.1	97.6	1.2	1.2
12	Kajuru	97.6	2.4	0.0	94.0	2.4	3.6	97.6	1.2	1.2
13	Kaura	ELECTION DID NOT HOLD								
14	Kauru	97.5	2.5	0.0	98.8	1.2	0.0	96.3	1.2	2.5
15	Kubau	93.8	4.1	2.1	96.9	2.1	1.0	93.8	6.3	0.0
16	Kudan	93.8	5.2	1.0	94.8	1.0	4.1	94.9	3.1	2.0
17	Lere	95.0	3.0	2.0	96.0	1.0	3.0	94.1	5.0	1.0
18	Makarfi	100.0	0.0	0.0	91.8	4.7	3.5	100.0	0.0	0.0
19	S/Gari	93.8	1.2	4.9	96.3	3.7	0.0	92.7	7.3	0.0
20	Sanga	95.6	1.5	2.9	95.6	1.5	2.9	95.6	2.9	1.5
21	Soba	93.1	5.7	1.1	89.9	6.7	3.4	89.9	7.9	2.2
22	Z/Kataf	97.4	2.6	0.0	96.0	2.7	1.3	100.0	0.0	0.0
23	Zaria	97.8	2.2	0.0	100.0	0.0	0.0	100.0	0.0	0.0
24	**State-Wide**	**95.2**	**3.0**	**1.8**	**94.3**	**3.5**	**2.2**	**95.7**	**2.9**	**1.5**

A majority (95.2%) of the respondents across the State (Figure 7) indicated that they were satisfied with the EVM approach and95.7% agreed that it made the voting process faster (Figure 8) when compared with manual ballot papers used in previous elections.

Figure 7: Pooled Respondents Satisfaction with EVM Approach Compared with ManualSystem.

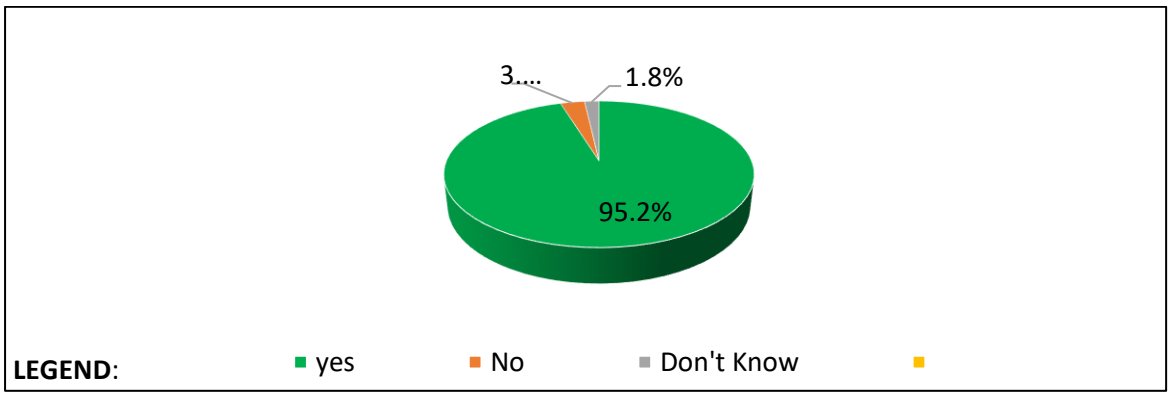
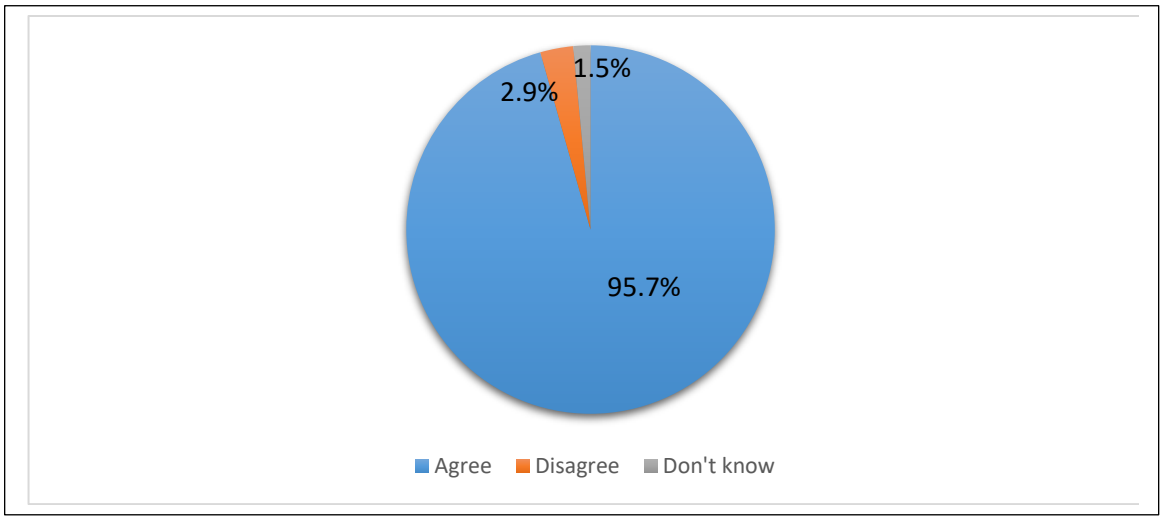


Figure 8: Pooled Responses on EVM making Voting Process Faster than Manual System.



An important advantage of the use of electronic voting is its speed. The shortening of time lapses during an election is a key point in the comparison between electronic voting and manual voting, since the former represents a much quicker option than the latter, not only during the voting itself, but throughout all the processes involved.

2.12 Assessment of Voters Attendance during the Election and whether Attendance was as a Result of the Use of EVMs.

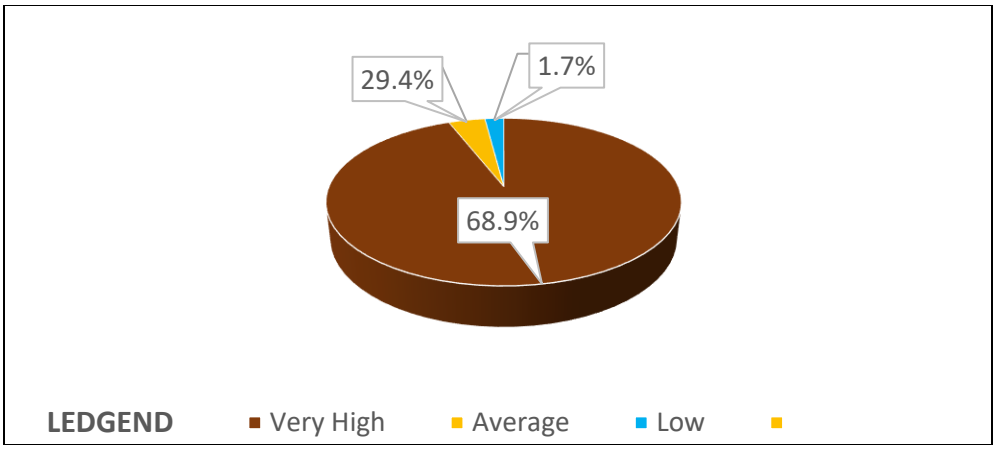
The surveycaptured the respondents' views on voter attendance during the 2018 election and whether the attendance could be linked to the use of the EVMs. Table 12 and Figure 9 belowshow that 68.9 percent of the respondents assessed the attendance as very high compared with previous elections, while 82.0 percent of them indicated that the very high attendance was as a result of the use of the EVMs.

Table 12: Respondents Assessment of Voters Attendance during the Election and Whether

Attendance was as a Result of the Use of EVMs (%).

S/N	LGA	VOTERS ATTENDANCE			ATTENDANCE LINKED TO EVMs		
		Very High	Average	Low	Yes	No	Don't Know
1	B/Gwari	94.2	3.8	0.0	86.5	13.5	0.0
2	Chikun	53.8	86.2	0.0	38.5	46.2	15.4
3	Giwa	59.0	39.7	1.3	84.0	5.3	10.7
4	Igabi	94.6	5.4	0.0	98.2	1.8	0.0
5	Ikara	83.0	14.9	2.1	62.4	31.2	6.5
6	Jaba	43.1	52.3	4.6	61.9	27.0	11.1
7	Jama'a	92.6	7.4	0.0	100.0	0.0	0.0
8	Kachia	97.8	2.2	0.0	97.8	1.1	1.1
9	K/North	65.3	33.7	1.0	82.8	14.1	3.0
10	K/South	34.1	62.6	3.3	51.6	25.3	23.1
11	Kagarko	95.6	2.2	2.2	98.9	1.1	0.0
12	Kajuru	59.5	35.7	4.8	73.8	16.7	9.5
13	Kaura	ELECTION DID NOT HOLD					
14	Kauru	47.0	51.8	1.2	80.7	14.5	4.8
15	Kubau	59.4	35.4	5.2	85.3	3.2	11.6
16	Kudan	56.1	42.9	1.0	93.6	4.3	2.1
17	Lere	36.3	61.8	2.0	80.4	12.7	6.9
18	Makarfi	86.0	12.8	1.2	90.6	3.5	5.9
19	S/Gari	53.8	41.3	3.8	93.6	3.8	2.6
20	Sanga	72.1	26.5	1.5	77.9	13.2	8.8
21	Soba	64.8	34.1	1.1	66.7	20.7	12.6
22	Z/Kataf	92.0	6.7	1.3	100.0	0.0	0.0
23	Zaria	90.4	9.6	0.0	100.0	0.0	0.0
24	**State-Wide**	**68.9**	**29.4**	**1.6**	**82.0**	**11.8**	**6.2**

Figure 9: Pooled Assessment of Attendance of Voters during the Election.



The above responses lend credence to the fact that generally, unlike manual voting, a well-designed electronic voting system allows for a faster set-up of polling stations, since it requires less handling of physical materials and less personnel. It also implies shorter waiting times to vote, faster voting, tallying and collation of results, which are also delivered and announced faster.

After the polls are closed, the tallying of results can be done in minutes, depending on the data sending and tallying mode selected by the voting authorities. A faster voting experience, with results that are presented sooner, tend to boost voter confidence and participation. In fact, places that have adopted electoral technology have seen an increase in participation, especially if voting is made easier for people with disabilities, the elderly and the illiterate, as well as motivating young voters that are attracted by the technological innovations in the process.

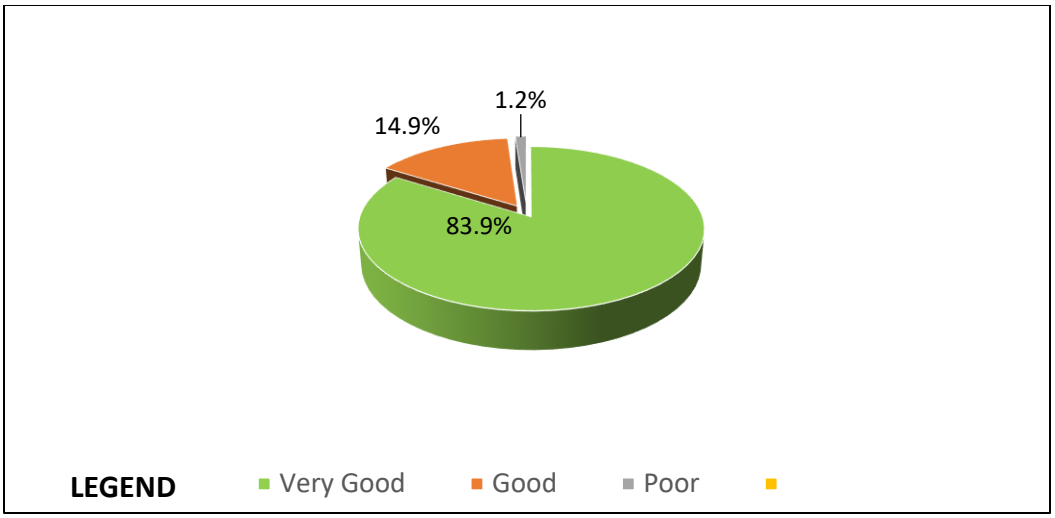
2.13 Respondents Assessment of Election Officials Performance, Commencement of Voting and Assessment of Closing of Polls by Officials.

All (100.0%) the respondents in Birnin-Gwari, Igabi, Jema'a and Zango-kataf assessed the performance of the election officials on the Election Day as very good. Similarly, respondents in Kachia (98.9%), Zaria (98.9%), Kagarko (97.9%), Kudan (93.8%), Ikara (93.5%) and Makarfi (91.9%) also rated the performance as very good. The State-wide summary shows that 83.9 percent (Table 13 and Figure 10) of the respondents assessed the performance as very good.

Table 13: Respondents Assessment of Election Officials Performance, Commencement of Voting and Assessment of Closing of Polls by Officials (%).

S/N	LGA	ASSESSMENT OF PERFORMANCE			VOTING COMMENCED AT 8:00 AM			ASSESS CLOSING OF POLLS		
		Very Good	Fair	Poor	Yes	No	Don't Know	Highly Organized	Organized	Dis-organized
1	B/Gwari	100.0	0.0	0.0	94.2	1.9	3.9	98.1	1.9	0.0
2	Chikun	54.9	42.9	2.2	23.1	73.6	3.3	23.1	69.2	7.7
3	Giwa	73.1	25.6	1.3	90.8	9.2	0.0	55.7	40.5	3.8
4	Igabi	100.0	0.0	0.0	100.0	0.0	0.0	100.0	0.0	0.0
5	Ikara	93.5	6.5	0.0	76.1	13.0	10.9	69.3	28.4	2.3
6	Jaba	53.0	43.9	3.0	54.5	42.4	3.0	40.3	53.7	68.0
7	Jama'a	100.0	0.0	0.0	100.0	0.0	0.0	94.7	3.2	2.1
8	Kachia	98.9	1.1	0.0	92.4	3.3	4.3	96.7	1.1	2.2
9	K/North	87.8	12.2	0.0	80.2	17.7	2.1	67.3	32.7	0.0
10	K/South	70.3	27.5	2.2	35.6	50.0	14.4	38.5	52.7	8.8
11	Kagarko	97.9	2.1	0.0	95.7	1.1	3.2	96.8	1.1	2.1
12	Kajuru	79.8	20.2	0.0	72.6	21.4	6.0	58.3	41.7	0.0
13	Kaura	ELECTION DID NOT HOLD								
14	Kauru	54.2	44.6	1.2	47.6	41.5	11.0	21.7	69.9	8.4
15	Kubau	82.5	11.3	6.2	71.6	27.4	1.1	68.1	23.4	8.5
16	Kudan	93.8	5.2	1.0	86.5	12.5	1.0	58.3	41.7	0.0.
17	Lere	63.7	33.3	2.9	38.2	58.8	2.9	16.8	78.3	8.9
18	Makarfi	91.9	8.1	0.0	87.2	8.1	4.7	87.2	11.6	1.2
19	S/Gari	89.9	8.9	1.3	45.0	51.2	3.8	55.7	40.5	3.8
20	Sanga	85.3	14.7	75.0	23.5	1.5	0.0	52.9	44.1	2.9
21	Soba	80.7	14.8	4.5	80.5	13.8	5.7	87.5	9.1	3.4
22	Z/Kataf	100.0	0.0	0.0	94.6	5.4	0.0	100.0	0.0	0.0
23	Zaria	98.9	1.1	0.0	98.9	1.1	0.0	95.6	2.2	2.2
24	**State-Wide**	**83.9**	**14.9**	**1.2**	**73.9**	**22.4**	**3.7**	**66.4**	**30.0**	**3.5**

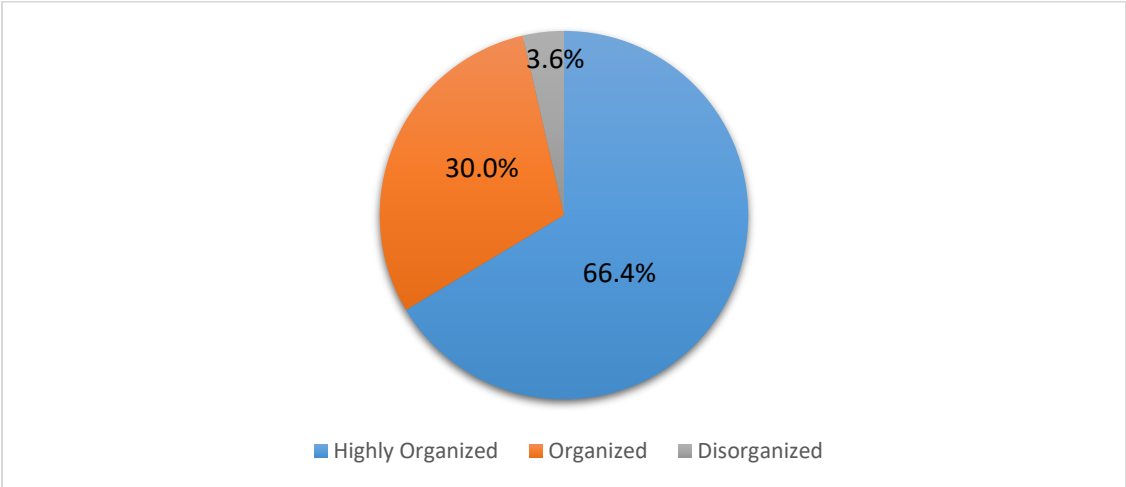
Figure 10: Pooled Assessment of Election Officials' Performance at PUs.



The commencement of voting time of 8.00am and closing of polls by the officials were also assessed as timely (73.9%) and very satisfactory (66.4%) across the State (Table 15, figure 10). The Kaduna State guidelines on election clearly states that voting shall take place on the same day and time throughout the State. This study confirms that commencement and closing of polls were strictly adhered to by a majority of the polls officials and therefore the polls staffs deserve commendation for these actions.

The pooled analysis shows (Figure 11) that 66.4 percent of the respondents assessed the closing of polls by PUs workers as highly organized.

Figure 11: Pooled Assessment on Closing of Polls by PUs Workers.



2.14 Responses on Provision of Voting Points at PUs and Merging Voting Pointwith Mother PU Votes.

Duringthe field survey, respondents wereaskedif voting points had been established where they voted. All (100%) the respondents in Igabi, Jema'a, Kachia, Zango-kataf, and Zaria indicated that they had voting points. Overall, 75.2 percent (Table 14) of the respondents indicated that they had voting points. The results also indicate that the votes from the voting points were merged with those of the mother polling units.

Table 14: Provision of Voting Points at PUs and Merging Voting Point-votes with Mother Votes (%).

S/N	LGA	VOTING POINT AT PUs			VOTES OF VOTING POINTS MERGED		
		Yes	No	Don't Know	Yes	No	Don't Know
1	B/Gwari	98.1	1.9	0.0	98.1	1.9	0.0
2	Chikun	67.0	25.3	7.7	53.1	22.2	24.7
3	Giwa	78.8	11.3	10.0	92.7	3.6	3.6
4	Igabi	100.0	0.0	0.0	100.0	0.0	0.0
5	Ikara	40.9	53.4	5.7	54.5	40.9	4.5
6	Jaba	48.4	48.4	3.1	79.4	14.7	5.9
7	Jama'a	100.0	0.0	0.0	98.9	1.1	0.0
8	Kachia	100.0	0.0	0.0	100.0	0.0	0.0
9	K/North	87.4	10.5	2.1	95.3	2.3	2.3
10	K/South	59.3	25.3	15.4	37.0	29.6	33.3
11	Kagarko	97.9	1.1	1.1	100.0	0.0	0.0
12	Kajuru	63.1	36.9	0.0	56.7	31.7	11.7
13	Kaura	ELECTION DID NOT HOLD					
14	Kauru	51.2	17.1	31.7	57.1	14.3	28.6
15	Kubau	62.1	37.9	0.0	76.7	13.7	9.6
16	Kudan	85.3	13.7	1.1	90.0	8.9	1.1
17	Lere	66.7	20.6	12.8	66.7	7.5	25.8
18	Makarfi	85.9	11.8	2.4	83.8	8.8	7.5
19	S/Gari	47.4	47.4	51.1	69.7	28.8	1.5
20	Sanga	16.2	80.9	2.9	56.4	0.0	43.6
21	Soba	85.1	9.2	5.7	73.4	19.0	7.6
22	Z/Kataf	100.0	0.0	0.0	100.0	0.0	0.0
23	Zaria	100.0	0.0	0.0	100.0	0.0	0.0
24	**State-Wide**	**75.2**	**20.1**	**5.3**	**80.3**	**10.8**	**8.9**

2.15 The Respondents Comparison of Credibility of EVMs with the Manual Ballot Paper System.

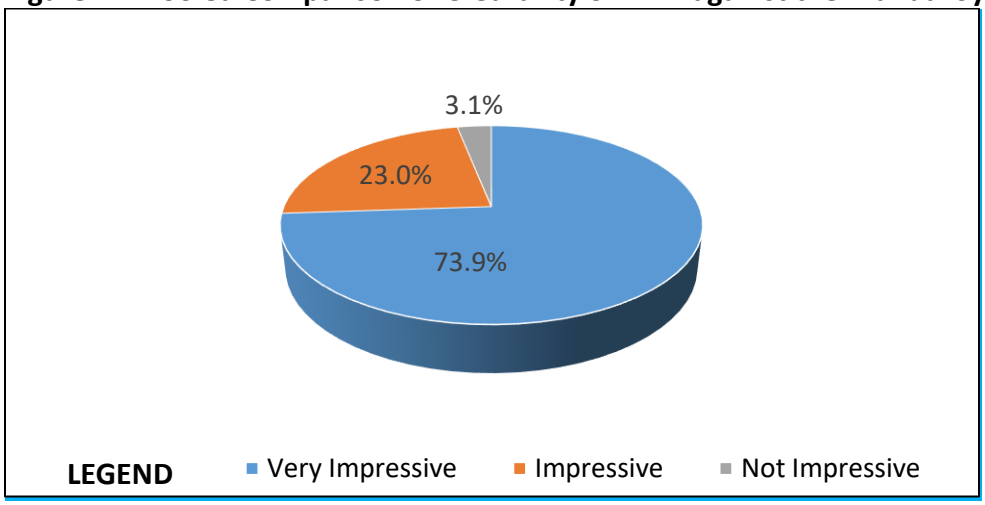
In this sub-section, the respondents were asked to compare the credibility of using electronic voting with that of the manual ballot paper system. In doing this, they were required to indicate whether the use of the EVM was very impressive, impressive or not impressive. The Resultsindicatethat all the respondents in Igabi, Jama'a, Zango-katafand Zaria reported that the EVM approach was very impressive (Table 15).

Table 15: Comparison of Credibility of EVMs with Manual Ballot Paper Voting System (%).

S/N	LGA	VERY IMPRESSIVE	IMPRESSIVE	NOT IMPRESSIVE
1	B/Gwari	92.3	7.7	0.0
2	Chikun	42.9	52.7	4.4
3	Giwa	67.5	32.5	0.0
4	Igabi	100.0	0.0	0.0
5	Ikara	83.1	14.6	2.2
6	Jaba	52.2	37.3	10.4
7	Jama'a	100.0	0.0	0.0
8	Kachia	93.5	3.2	3.2
9	K/North	68.8	26.9	4.3
10	K/South	45.5	46.6	8.0
11	Kagarko	98.9	1.1	0.0
12	Kajuru	78.6	19.0	2.4
13	Kaura	ELECTION DID NOT HOLD		
14	Kauru	41.3	52.5	6.3
15	Kubau	73.7	16.8	9.5
16	Kudan	75.0	25.0	0.0
17	Lere	30.6	62.2	7.1
18	Makarfi	88.2	11.8	0.0
19	S/Gari	83.1	15.6	1.3
20	Sanga	45.6	51.5	2.9
21	Soba	78.2	18.4	3.4
22	Z/Kataf	100.0	0.0	0.0
23	Zaria	100.0	0.0	0.0
24	**State-Wide**	**73.9**	**23.0**	**3.1**

A total of 73.9 percent (Figure 12) of respondents across the State agreed that the use of the EVMs in the 2018 election was very impressive compared with the previous manual ballot paper approach. When asked why the use of the EVMs was more impressive, a majority (78.3%) of them said, it can promote transparency and increase credibility in the electoral process if the issues of human errors and interference are controlled.Only 3.1 percent of them indicated that it was not impressive, and they preferred the manual ballot system.

Figure 12: Pooled Comparison of Credibility of EVM against the Manual System.



Those floating the use of electronic voting believe strongly that it is more transparent and credible than the manual ballot paper voting system. When we speak of manual ballot paper voting, we mean a situation where the electoral procedures are handled in their entirety by humans and where the voter marks his/her choice(s) on a ballot and deposits it into a ballot box where ballots are later counted manually by the people in charge of the process.

In this approach, safety precautions are usually focused mainly on the physical safekeeping of the electoral kit and the supervision of critical processes. The most frequent irregularities include ballot stuffing, tampering of electoral materials (loss or deterioration of the ballots, ballot boxes or electoral records), problems in the transportation and/or delivery of electoral kits, tampering with results in scenarios where the transcription of data takes place in intermediate tallying centres, and exposure to human error when other tallying methods are used, among others.

On the other hand, an Electronic Voting Machine (EVM) is an electronic device which voters use to register their votes instead of the manual ballot papers voting. By electronic voting we mean the use of electronic devices during the voting process, including vote input, local tallying, printing of vote receipts, and transmission of votes to a central facility where they are conglomerated and results are later announced.

Its advantages include:guarantees faster voting, elimination of accidental null votes, totaling and transmission of results, and the immediate availability of official results, provides total security in the tallying process and eliminates human errors and fraud when it is properly implemented.

Election is one of the key components in ensuring democracy because it enhances citizens' participation in governance, ensures government accountability and encourages political competition. Credible election is one of the basic and crucial prerequisites and elements of democratic government and governance. From the above discussion, election would be credible, when rules, regulations and laws governing the electoral process are followed and credible candidates are freely and fairly elected to represent the electorate. According to Diamond (……), free and fair elections have four major components. These are: (i) independent political parties compete in the electoral process freely and fairly, (ii) individuals are free to participate in politics and the election process based on their own choice, (iii) the election process is free and fair such that every adult franchise can apply his/her voting right equally with equal weight, and (iv) the outcome of the election is accurate and legitimate.

Rajasingham (2005) also reported three elements of free, fair and credible election as: (i) the presence of an enabling legislative framework, (ii) an election management body that is impartial and neutral, and (iii) on electoral process that is competitive and acceptable to all the political parties. Thus, an election could be considered to be free, fair and credible when there is an absence of fraud and threats, and where the election management body operates in accordance with the law.

In other words, for a voting system, be it manual or electronic, exactness is essential during the act of voting, counting, transmission and broadcast of results, so that the intention of every voter is respected and taken into account. Indeed, electronic voting possesses all these attributes if properly deployed, and therefore is more credible than manual ballot paper voting. This is what has been confirmed in this study with the use of the EVMs in the 2018 LGCE in Kaduna State.

2.16 Distribution of Respondents according to Suggestions Offered towards Improving the Use of EVM in Local Government Council Elections.

The distribution of respondents according to suggestions offered towards improving the use of EVM in Local Government Council Elections is shown in Table 16 below. As shown on the table, 38.1% of them indicated that awareness campaign should be increased 37.8% suggested the EVMs should be up-graded to accredit and verify voters in order to improve its credibility,while20.7% want only trained personnel to be allowed to operate the EVMs during elections.

Table 16: Respondents Suggestions towards Improving the Use of EVMs in Local Government Council Elections.

S/NO	VARIABLES	PERCENT(%)
I	EVM upgrade to accredit and verify voters	37.8
Ii	Awareness campaign should be increased	38.1
Iii	Only trained personnel should be allowed to operate EVMs	20.7
Iv	No suggestion	3.4

2.17 Distribution of Respondents according to Suggestions Offered towards Improving the Electoral Process in Nigeria.

Whenasked tooffer suggestions towards improving the electoral process across the country, 40.3%oftherespondents suggested the need for frequent voter and civic education, while 37.6% said election offenders should be punished strictly according to the electoral law. Other respondents (18.5%) suggested that efforts should always be made to ensure that election materials arrivePUs on time (Table 17).

Table 17: Respondents Suggestions towards Improving the Electoral Process in Nigeria.

S/NO	VARIABLES	PERCENT (%)
i	Offenders punished	37.6
ii	Late arrival of election materials should be avoided	18.5
Iii	Voter and civic education should be regular and not periodic	40.3
iv	No suggestion	3.6

Part THREE
CONCLUSION AND RECOMMENDATIONS

3.1 Conclusion

The 2018 Kaduna State Local Government Councils Election was adjudged by observers as relatively free, fair and credible. This study lends further support to that observation as there is a general consensus among the respondents that the electronic voting was very impressive and eliminated some of the election malpractices commonly experienced with the manual ballot paper voting system. Overall, they said it addressed the issue of fraud and contributed to the quick tabulation of the results as they were released immediately after the close of voting. Majority of the respondents recommended its permanent adoption for LGCEs in Kaduna State. There were, however, some areas that require improvement, both in the system, its deployment and management, and in the public perception about it. Below are presented a number of recommendations to address these issues.

3.2 Recommendations

While the findings of this study are by no means exhaustive, they provide a useful basis for the following recommendations. These recommendations include:

i) The need for increased awareness campaigns on the use of the EVM technology. In this regard, it is recommended that KAD-SIECOM should create opportunities for regular interaction between stakeholders and the system, through presentations and simulations, to increase their familiarity with electronic voting and improve their trust in it.

ii) Up-grading of the EVMs to expand and enhance their functionality, and to improve their credibility

   a) Since the EVM has provision for a card reader, there is therefore, the need to make special and deliberate efforts to load the voters register and Identification Number (VIN) in the EVM.
   b) Geo-location tagging which can show location of EVM and EVM works only when taken to designated PU, and configuration settings whereby the operators will have limited data to input manually.
   c) At the moment, these important components are not embedded in the EVM, thus giving room for manipulation by desperate politicians. With these features integrated, un-registered voters will not be able to vote nor can anybody vote more than once and EVM works only when taken to its designated PU thereby improving transparency and increasing public trust in the system.

iii) The need for frequent voter and civic education to deepen the electoral process. We recommend continuous voter and civic education about electronic voting using the EVM to make the electorate familiar and comfortable with both the concept and practice to ensure a fully informed and mobilized voting public.

   a) Voter education is a term generally used to describe the dissemination of basic information, materials and programmes designed to inform voters about the specifics of the voting process for a particular election. It involves providing information on who is eligible to vote; where and how to register; how voters can check the voters list to ensure

they have been duly included; what type of elections are being held; where, when and how to vote; who the candidates are; and how to file complaints by citizens in a democracy.

b) Civic education is a broader concept aimed at conveying knowledge of a country's political system and context. Civic education might include information on the system of government; the nature and powers of the offices to be filled in an election; the principal economic, social and political issues facing the nation; the value of democracy; the equal rights of women and men; and the importance of peace and national reconciliation.

c) Voter and civic education can be critical in enhancing voters' participation in elections, particularly where the electorate arepolitically weak and voter apathy is high. Therefore, before every election, voter and civic education are necessary to ensure that all constituents—men, women and youth alike, understand their rights, their political system, the contests they are being asked to decide, and how and where to vote. For an election to be successful and democratic, voters must understand their rights and responsibilities, and must be sufficiently knowledgeable and well informed to cast ballots that are legally valid and to participate meaningfully in the voting process. Voter and civic education are even more critical where the EMBs appear to be active only during election periods and remain idle thereafter. Implementation of this recommendation will keep the EMBs busy all-year round.

iv) The need to have a data bank of trained personnel who can always be used during elections. It is now time to implement this suggestion which has been proffered in many other fora. Advantage could be taken of the experience already acquired by the WAEC and NECO management authorities in the recruitment of their ad-hoc examination-marking staff.

Election offenders should be punished according to the Constitution and Electoral Act/Law. The Law and regulations should always be strictly followed in the electoral process and erring politicians and ad-hoc staff (illegal diversion of EVMs, vote buying and selling, breach of peace, manipulation of election results, etc.) should be punished according to the Law.

Efforts should always be made to ensure that election materials arrive as scheduled in order to encourage more voter turn-out. From field experience, delays in election materials arrival have the tendency to discourage voter turn-out.

There is the need for KAD-SIECOM to constantly conduct test-runs of the EVMs to keep them in good operational conditions.

v) Finally, KAD-SIECOM has taken a pioneering decision to introduce the use of electronic voting in the 2018 LGCE. This study has lent support to its effectiveness in reducing election frauds. It is, therefore, recommended that the other SIECs across the country should try to transit from the manual ballot paper voting to electronic voting in order to enhance integrity of the electoral process and safeguard the will of the electorate. The feedback from this study should be used to also stimulate INEC to emulate Kaduna State

in the use of the innovative EVMs to enhance the credibility of future elections in this country.

3.3 Policy Implications

i) The conduct of free, fair and credible elections has for long been a challenge facing Nigeria. While a number of factors have contributed to making the situation so, the yearning, longing and desire of the Nigerian electorate remains strong that one day, the country will get it right. But it appears that the more the longing for it as a way of further deepening our democracy, the more it has continued to elude us. Overtime, INEC, the body saddled with the responsibility to midwife elections in the country has come up with new policies and ideas to see that the country gets it right, such as introduction of the Smart Card Reader machine to verify and authenticate voters, which was experimented in the 2015 election. The Smart Card Readers were upgraded to expand and enhance their functionality for the 2019 general election.

Useful as the Smart Card Reader technology is, it is also riddled with inadequacies and, therefore, has brought disappointment, not only on the electorate, but also INEC because it has failed to meet the expectations of Nigerians as it has not addressed the major issues of accuracy of the voting and counting, the incidence of multiple voting,rigging and building trust and credibility in the electoral process. Nigerians were elated with the news of the Smart Card Reader technology in the conduct of election with the expectations that it had come to change experiences of the past. But the 2015 and 2019 general elections were still fraught with all manner of irregularities.

The feedback from this study, therefore, justifies the need for a policy that will stimulate other SIECSs and INEC to emulate Kaduna State in the use of the innovative EVMs to enhance the credibility of the electoral process and safeguard the will of the people. During a conference organized to review outcomes of the 2019 elections, participants also called for an amendment of the Constitution to ensure that electronic voting is recognized in the Electoral Act to accommodate issues that will advance the country's democracy and development of the society. It is time to implement this suggestion. We should know that the Constitution and Electoral Act are man-made. They have been amended several times before now, but that cannot be the end; they need to be amended whenever necessary.

Information and communication technology (ICT) is very critical in all spheres of human endeavor and is now used invirtually all that we do. Therefore, Nigeria cannot close the door against something universally practiced. So, the country should amend the Electoral Act to allow for the use of electronic voting machines to take advantage of the benefits of ICT.

Strict implementation of the policy on year-round voter and civic education is necessary to ensure that all stakeholders:- men, women, youth, people with disability alike, understand their rights, their political system, the contests they are being asked to decide, who, how and where to vote.

This is especially necessary in view of the weak political consciousness of the people. Voter and civic education can awaken and enhance the voters' participation in the electoral process.

REFERENCES

Emperor Tech. (2016). One-Stop Voting Solution. Manufacturing Centre, Schenzhen, China.

Larry, E. U., Joseph, O. N., and Ezekwe, E. A. (2015). The Imperative of Credible Elections for Sustainable National Development in Nigeria: Lessons from the Ekiti State Elections. Canadian Center of Science and Education.

Serdült, U. (2015). Fifteen Years of Internet Voting in Switzerland: History, Governance and Use. IEEE Xplore CFP1527Y-PRT.doi:10.1109/ICEDEG.2015.7114487. ISBN 978-3-9075-8910-6. Pp. 126–132.

Toba, P. A. and Adebimpe, O. E. (2018). The Impact of ICT in the Conduct of Elections in Nigeria. In American Journal of Computer Science and Information Technology.

Runyon, R. P.; Haber, A.; Pitenger, D., and Colleman, K. A. (1991). Fundamentals of Behavioral Statistics, 2nd Edition), McGraw-Hill, New York.P.104.

Webster, A. L. (1995). Applied Statistics for Business and Economics, 2nd Edition. McGraw-Hill, Chicago, USA.

Yamane, T. (1967). Statistics: An Introductory Analysis. 2nd Edition, New York: Harper and Row.

Appendix I

QUESTIONAIRE ON THE ASSESSMENT OF THE USE OF ELECTRONIC VOTING MACHINE (EVM) IN THE CONDUCT OF 2018 LOCAL GOVERNMENT COUNCIL ELECTION IN KADUNA STATE

SECTION A: BACKGROUND INFORMATION

1. Name of respondent (optional)…….
2. Phone number……

3. Age.....
4. Sex.....
5. Tribe.....
6. Religion.....
7. Major Occupation.....
8. Highest Educational qualification.....
9. Marital status.....
10. Polling unit name and Code.....
11. Ward.....
12. Local Government Area.....

SECTION B: EVM DEMONSTRATION

1. Did you participate in the EVM demonstration in your Local Government Area?
   a. Yes
   b. No
   c. Don't know
2. How do you view the EVM demonstration conducted by the KAD-SIECOM in your Local Government Area?
   a. Successful
   b. Failure
   c. Don't know
3. If the exercise was successful, did it help you in discharging your civic responsibility during the 2018 Local Government Councils Election?
   a.Yes
   b. No
   c. Don't know
4. Did you notice that the EVM screen contained logos of all the registered political parties?
   a. Yes
   b. No
   c. Don't know

SECTION C: USE EVM ON ELECTION DAY

1. Did you vote in the last Local Government Councils Election conducted by KAD-SIECOM?
   a. Yes
   b. No
   d. Don't know
2. If your answer to question 2 is YES, how do you see the performance of the EVM?
   a. Very Good
   b. Good
   c. Poor

3. How would you rate the speed of the EVM during the election?
   a. Very fast
   b. Average
   c. Slow
4. Who activated the EVM for voters to cast their votes?
   a. Poll officials
   b. Party agent

c. Election observer

5. Do you think that the EVM is simple to operate?
   a. Yes
   b. No
   c. Don't know
6. In the manual paper ballot system of voting, before the commencement of poll, the poll officials will show the party agents and the general public that the ballot box is empty. Whereas with the EVM the presiding officer will show that ballot box is empty as well as printout the initial result with zero vote for each party. Are you satisfied with this arrangement?
   a. Yes
   b. No
   c. Don't know
7. If your answer to question 6 is NO, what do you suggest should be done before commencement of voting?

   ……
   ……
   ……
8. Did you notice that the Chairmanship and Councillorship election was done at the same time on the same machine?
   a. Yes
   b. No
   c. Don't know
9. Did you notice that you can vote for Chairman and ignore the councillor or vice-versa if you so wished?
   a. Yes
   a. No
   b. Not sure
10. Do you know that with the EVM you cannot vote twice?
    a. Yes
    b. No
    c. Don't know
11. Did you observe any manipulations of the EVM by the poll officials during the conduct of the 2018 Local Government Councils Election?
    a. Yes
    a. No
    b. Don't know
12. If your answer to question 11 is YES, what kind of manipulation did you observe?

    .....
    .....
    .....
13. In your view do you agree that EVM effectively reduced electoral fraud?
    a. Agree
    b. Disagree
    c. Don't know
14. How do you rate the use of EVM in controlling Election fraud?
    a. Very Effective
    b. Not Effective
    c. Don't know

15. Did election officials encounter any interference from politicians during conduct of their official duty?
    a. Yes
    b. No
    c. Don't know
16. Did you witness any form of violence in your polling unit during election?
    a. Yes
    b. No
    c. Don't know
17. State three (3) causes of violence during Election in your own understanding
    .....
    .....
    .....
18. Did the poll officials handle the EVM to your satisfaction at the polling unit?
    a. Yes
    b. No
    c. Don't know
19. In the area where you voted, did you experience mal-functioning of the EVM?
    a. Yes
    b. No
    c. Don't know
20. If your answer to number 19 above is YES, how many times did the EVM fail to function in your polling unit?
    a. Once
    b. Twice
    c. More than 2 times
21. With the EVM the ballot receipts drop into the ballot box and the total number of votes cast can be easily determined from the summary printout, whereas in the manual paper ballot system the votes cast have to be physically counted. Are you satisfied with the EVM approach?
    d. Yes
    e. No
    f. Don't know
22. If your answer to question number 21 is NO what suggestions do you have to offer?
    .....
    .....
    .....
23. Did you notice that the ballot receipt was shown to you before it dropped into the ballot box, to signify that your vote has been recorded and the EVM is working?
    a. Yes
    b. No
    c. Don't know
24. The EVM makes the voting process faster than the manual paper ballot system?
    a. Agree
    b. Not agree
    c. Not sure
25. If your response to question 24 above is that you do not agree, state what you consider as the disadvantages of the newly introduced technology over the manual paper ballot voting system.

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……
……

26. How do you assess the attendance of voters during the election?
    a. Very high
    b. Average
    c. Low
27. Could the attendance be linked to the feelings of the electorate towards the introduction of the EVM?
    a. Yes
    b. No
    c. Don't know
28. How do you assess the election officials' performance at your polling unit?
    a. Very Good
    b. Fair
    c. Poor
29. Did voting commence at 8:00am in the Polling Unit where you voted?
    a. Yes
    b. No
    c. Don't know
30. How do you assess the closing of the polls by the poll workers at your polling unit?
    a. Highly organised
    b. Organised
    c. Disorganised
31. At the polling unit where you voted was there a voting point?
    a. Yes
    b. No
    c. Don't know
32. If your answer to question 31 is YES, were the voting point votes cast merged with those of the mother polling unit?
    a. Yes
    b. No
    c. Don't know
33. How do you compare the use of EVM deployed in the 2018 Local Government Councils Election in Kaduna State to the manual paper ballot system?
    a. Very impressive
    b. Impressive
    c. Not impressive
34. What other suggestions would you offer towards improving the use of EVM in Local Government Councils Election

    ……
    ……
    ……..

35. What other suggestions would you offer towards improving the electoral process?

    ……
    ……
    ……..

Thank You

Appendix II: The Survey Sample Size

S/N	LGA	SAMPLE SIZE
1	B/Gwari	93
2	Chikun	94
3	Giwa	92
4	Igabi	92
5	Ikara	93
6	Jaba	86
7	Jama'a	96
8	Kachia	106
9	K/North	101
10	K/South	97
11	Kagarko	96
12	Kajuru	96
13	Kaura	Election did not hold
14	Kauru	103
15	Kubau	90
16	Kudan	98
17	Lere	94
18	Makarfi	91
19	S/Gari	89
20	Sanga	93
21	Soba	96
22	Z/Kataf	98
23	Zaria	95

Appendix III: Kaduna State Independent Electoral Commission
Electronic Voting Procedures duringthe KadunaState 2018Local Government Councils Election

1.0 Introduction:

The Kadauna State Independent Electoral Commission **(KAD-SIECOM)** to ensure the integrity of each vote cast, has adopted an electronic voting system towards achieving free, fair and credible Local Government Elections in Kaduna State. This flyer is intended to show you:

- Items of Kaduna State electronic voting system;
- Pre-voting procedures;
- Actual voting procedures, and
- Activities after casting of votes.

2.0 Items of Electronic Voting System:

- The Permanent Voters Card (PVC) is issued by Independent National Electoral Commission (INEC) to enable persons of 18 years and above to vote and must be presented to be allowed to vote.
- The voters Register is produced by INEC and contains a list of all those that have been registered to vote. It contains same details as in the PVC.
- The Voters Register is displayed in loose pages for each voter to check and identify his/her number in the Register.
- The marker and Ink bottle contain indelible Ink for marking the thumb nail of each voter.
- Operation Smart Cards are used to activate the EVM foreach voter to enable him/her to vote.
- Security Smart Cards are coded Security Cards used by only those persons authorized to turn on the EVM in preparation for voting and to shut it down at the completion of voting.
- The EVM is made up of:
    - The brain box containing the electronic components for managing and storing data and a printer for printing voting receipts and the final tallied results
    - The Soft Touch Screen on which Political Party Logos are displayed and on which voters vote, is at the top of the Electronic Machine.
    - Receipt/Ballot Box is where the receipts for each vote drop and are stored and also serves as cover for the Electronic Voting Machine.
    - The Voting Buttons;Red and Green. Red is to cancel when wrong Logo is shown and Green is to vote when correct Logo is shown on the screen.
- The different items of Electronic Voting have been shown and except for the EVM, all other items are familiar because they are the same as those used in manual voting.

3.0 Pre-Voting Procedure:

- Check the Displayed Voters Register to find your name and Number.
- Go to the Poll Clerk to have your name and number confirmed in the Voters Register
- Assistant Presiding Officer will mark your thumb nail with indelible Ink to clear you to vote.

4.0 Actual Casting of Vote:

You must know the candidate you have decided to vote for and the Logo of the Political Party presenting him/her

5.0 VOTING FOR CHAIRMAN:

- Presiding Officer will permit you to vote by confirming your thumb nail has been marked with indelible ink.

- Presiding Officer will use Smart Card to activate the Electronic Voting Machine for you to cast your vote.
- You will see display of Logos of Political Parties.
- Identify and press lightly with yourforefinger, the Logo of Political Party of your candidate.
- Enlarged Logo of thePolitical Party will appear.
- If wrong Party Logo appears, press RED Button to cancel.
- Logos of all Political Parties again appear on thescreen.
- Select correct Logo of Political Party of your candidate.
- Press GREEN Button as correct Party Logo appears and your vote is cast.
- You will see on the screen action of your vote being printed and see your ballot receipt in the window on the left side of the electronic voting machine.
- You have completed voting for Chairman.

6.0 VOTING FOR COUNCILOR:

- You will again see Logos of all Political Parties on the screen.
- Identify and press lightly with forefinger Logo of Political Party of your candidate.
- Enlarged Logo of Political Party will appear.
- If wrong Party Logo appears, Press RED Button to cancel.
- Logos of all Political Parties again appear on screen.
- Select correct Logo of Political Party of your candidate.
- Press GREEN Button as correct Party Logo appears and vote is cast.
- You will see on the screen action of your vote being printed and see your ballot receipt in the window on the left side of the electronic voting machine.
- You have completed voting for Councilor.
- Electronic Voting Machine will shut down until Presiding Officer activates it for next voter.

7.0 Completion Activities:

- Presiding Officer will print out tallied results and distribute copies as appropriate.
- Presiding Officer will announce votes cast for all Political Parties at Polling Unit.
- Presiding Officer will shut down the EVM using Security Smart Cards.
- Presiding Officer will submit the tallied results to the Ward Collation Officer.
- Ward Collation Officer will collate and announce votes from all Polling Units for Councillorship Results at Ward Level.
- Ward Collation Officer will submit collated results for chairmanship position to Local Government Collation Officer.
- Local Government Returning/Collation Officer will collate and announce results from wards for chairmanship election, at Local Government level.
- Local Government Returning/Collation Officer will then proceed to SIECOM Headquarters to submit results.