ICT AND ELECTORAL MANAGEMENT: THE NEED FOR FORENSIC INVESTIGATION IN ELECTORAL PROCESS IN NIGERIA

MICHAEL ABIODUN ONI AND EMMANUEL OLUWOLE
maabino@yahoo.com   eoluwole@yahoo.com
+2348036147947   +2348068246178

DEPARTMENT OF POLITICAL SCIENCE AND PUBLIC ADMINISTRATION
BABCOCK UNIVERSITY
ILISHAN REMO
OGUN STATE

Abstract

Two of the contentious problems generating crisis at election years in Nigeria has been the issue of multiple registration and multiple voting. These were discovered at the 2007 Governorship Elections in Ekiti and Osun States. These two forms of electoral malpractices were subject of litigations for years after the election and led to upturning of electoral victory of elected governors when the forensic experts tendered evidences before Electoral Petition Tribunals and later confirmed by Appeal Court. This paper therefore argued that though a step was taken by INEC in 2011 elections to guard against multiple registrations by introducing data capturing machine. This however, is not foul-proof. There are still cases of collusion by INEC Officials to frustrate efforts to guide against multiple registration and consequently, multiple voting. The position of this paper therefore is that, instead of waiting for years to prove cases of multiple registrations and voting by forensic experts hired by the political parties and their candidates, the Electoral Act can be amended to accommodate forensic investigation by finger-print experts before the declaration of election results. The investigation will however be determined by the type and scope of the election. The forensic investigation will also save the nation credibility crisis and non-violent conduct of election. The device will sort out the wheat from chaff in term of multiple voting. The paper which traces history of electoral crisis in Nigeria and adopted documentary method concluded that it is only this technological/ICT device that can discourage multiple registration and voting. This will enhance electorate confidence in the electoral process and non-violent conduct of elections.

Keywords: Contentious, Crisis, Forensic, Multiple voting, Multiple Registration

Introduction
The general acceptability of electoral results as an instrument of selecting political office holders in Nigeria have remained contentious. These electoral outcomes in virtually all the Republics have been subjected to manipulations and distortions that, the published results on each occasion were not acceptable as the true reflection of wishes of the electorate as expressed through the ballot boxes. However, these manipulations were not restricted to the actual voting and the distortions of the election results, these irregularities have been applicable to almost all the processes involved in the conduct of election since the inception of electoral politics in Nigeria. These manipulations usually predates voting, counting and announcement of results. This paper which is divided into sub sections, looks at the historicity of electoral malpractice/fraud in Nigeria; electoral politics and efforts at introducing ICT into the management of electoral politics in Nigeria; problems associated with ICT and electoral politics in Nigeria and the need to complement ICT with forensic investigation at every stage of the electoral process in Nigeria. The paper reviews literature on the concept of ICT and Forensic Investigation.

Concept of Information Communication Technology
The importance of Information and Communication Technology in human societies can never be relegated. According to Kroeker, (2010) and Yonck, (2010), the use of information and communication technologies in recent times have become inevitable and fundamental to operations and activities of organizations and societies.

Statistics Canada, (2008) opines that information and communication technology is a field of work and study that includes technologies such as the desktop and laptop computers, software, peripherals, and connections to internet primarily for information processing and communications functions. This conceptualization points to the fact that ICT involves the use of computer software and hardware to process information for both private and public use.

UNESCO (2002), averred that ICT is the combination and integration of informatics technology with other related technologies, specifically communication technology to process and disseminate vital information. This explains the role of modern communication technologies in enhancing information sharing.

To Burt and Taylor, (2000), Information and communication technology encompasses potential innovations within organizations by enabling and promoting the use and sharing of information. The benefits of ICT in organizations and society include the capacity to reshape and reformulate, restructure and revitalize organizations internally and their interactions with other organizations and individuals within the networks in which they lay.

Various corporations and business enterprises including not for profits, political campaigns such as seen in the 2008 US presidential campaign, and governments have incorporated the ICT network. (Cardoso *et al* 2004). As a result of the omnipresence nature of ICT, it has become an integral part of the process of governance. The last two decades has witnessed an ICT driven society and by logical extension, an ICT driven government.

E-governance is usually referred to as the integration of ICTs in the process of governance and delivery of quality public services to the people. In this context, the use of information and communication technologies in elections has become pertinent since the manual method is fraud-ridden and practically becoming clumsy for government to manage. Therefore, in order to control the atrocious level of electoral fraud, information communication technology has become an important tool for electoral management in Nigeria.

Forensic Investigation

According to Brian and Spafford (2003), forensic investigation is a process that uses science and technology to develop and test theories, which can be used in the court of law, to answer questions about events that occurred. The requirements to presenting digital evidence in a court of law are specific to the court. This conceptualization suggests that forensic investigation involves the use of technology to test and retest or even affirm the situation or the result of an event.

It is pertinent to state that in the conduct of forensic investigation of any kind, preparation is paramount and key to the conduct of a successful forensic investigation. According to Kohn *et al* (2006), whereas preparation is important in the conduct of a successful forensic investigation, it is practically impossible to scientifically prepare for all kinds of occurrences that may warrant forensic investigation, however, past cases and previous complete resolution may not be adequate but could go a long way to helping in forensic investigation.

Baryamureeba and Tushabe (2004) argued that an ICT driven forensic investigation methodology has three basic components. They are: acquiring the evidence; authenticating the evidence, and analyzing the data. In electoral management parlance, acquiring evidence on the case (s) under investigation, authenticating evidences acquired primarily for the investigation and analyzing and sorting of data gathered from investigation on a particular election trial are imperative for a successful conduct of forensic investigation in an ICT driven electoral process.

The United States of America's Department of Justice argued that forensic investigation should involve four stages. These stages are: collection, examination, analysis and reporting, (Reith et al 2002). This model is suitable to ensuring justice in electoral cases as there should be adequate documentation which will ensure reporting to the public on electoral matters. It is pertinent to underscore the importance of reporting in this paper because, the use of ICT promotes privacy of electorates, and however, it should be designed to reflect transparency and accountability in justice delivery.

According to the Digital Forensics Research Workshop, digital forensic investigation involves the use of scientific methods to preserve, collect, validate, identify, analyze, interpret, document and present digital evidences generated from digital sources for the primary purpose of

facilitating and enhancing the reconstruction of events found to illegal, or helping to pre-empt unauthorized actions.

Although, forensic investigation is the umbrella concept, however, in discussing the use of ICT in electoral process, digital forensic science is needed for quality and sustainable conduct of successful forensic investigation at all levels of government.

Electoral Politics and Electoral Fraud in Nigeria

The history of electoral politics is synonymous with electoral fraud in Nigeria. Thus the two, electoral politics and fraud are almost like siasme twins. Although, political analysts have argued that only two elections in Nigeria (1959 and 1979) can be exonerated from "systematic rigging". The belief was that two elections were regulated and moderated by both colonialists and disengaging military who were regarded as unbiased umpire, (NIPSS Report 1983:3) cited in Ibrahim and Aturu (2000:34). This report by NIPSS is inaccurate as there were lots of "systematic rigging" associated with the 1979 elections starting from voters' registration and of political parties. Were those who wrote the NIPSS reports had access to some information, they could not have praised 1979 elections. The elections were full of irregularities and the disengaging military was not neutral. The military wanted a friendly successor in Alhaji Shehu Shagari. The twelve two-thirds historic judgement was a testimony and still part of the electoral fraud.

Aside the twelve two-thirds crisis, the registration of voters was accompanied by a lot of questionable figures. The juxtaposition of the voters' registration and the 1963 population used as a base line and the comments on the personal experiences of some people regarding the 1963 census and voters registrationin Nigeria will convince doubting Thomases that the voters' registration adopted for 1979 election were full of dead men and women, living, travelled, concocted, not born/expected babies in the families across the nation. All these "voted" at the elections. The voters registration table is hereby presented:

Table 1   Comparison of Nigeria Population and 1979 Voters' Register

STATE	POPULATION	REGISTERED VOTERS	DIFFERENCE
Anambra	3,596,618	2,606,663	989,955
Bauchi	2,431,296	2,096,162	335,134
Bendel	2,460,962	2,400,174	60,788
Benue	2,399,408	1,636,371	76,3037
Borno	2,997,497	2,945,925	5,1572
Cross River	3,534,018	2,464,184	106,9834
Gongola	2,626,536	2,308,355	31,8181
Imo	3,672,654	3,490,484	18,2170
Kaduna	4,098,287	3,455,047	64,3240
Kano	5,776,743	5,226,598	55,0145
Kwara	1,716,184	1,108,029	60,8155
Lagos	1,454,004	1,829,369	-37,5365

Niger	1,194,502	1,051,160	14,3342
Ogun	1,550,966	1,663,608	11,2642
Ondo	2,729,790	2,573,960	15,5830
Oyo	5,208,884	4,534,779	67,4105
Plateau	2,026,837	1,748,868	27,7969
Rivers	1,719,925	1,675,934	4,3991
Sokoto	4,549,170	3,818,094	73,1076

Source: Adamu, H. and Ogunsanwo, A. (1982) Nigeria: The Making of the Presidential System, 1979 General Elections

In the analysis of the two figures above, it will be unthinkable that in most of the states of the federation, the margin between the estimated population figures and the registered voters were incoherent. In Lagos for example, total population was 1,454,004 and it was statistically illogical to have 1,829,369 total registered voters. The question would be, where did 375,365 emerge from?

The registered voters figures above were spurious for at least two reasons. It is either the population figures were exaggerated or the voters' register were loaded with fictitious figures. Secondly, in a population where procreation was unrestricted at that time because of the relatively boom economy, hence children below the registerable age of 18 years were expectedly to be in the majority. How therefore can we explain the narrow margin between the population figures and registered voters in 1979?.

To further buttress the facts that the 1979 general elections cannot be given a clean bill of health, there is need to compare the registered voters' with those that actually voted at the election, using 1979 presidential election as the baseline.

Table 2: Comparison of Registered Voters and Total Votes Cast at the 1979 Presidential Elections

State	Voters Register	Total votes cast including invalid	Difference
Anambra	2,606,663	1,209,038	1,397,625
Bauchi	2,096,162	998,683	1,097,479
Bendel	2,400,174	669,511	1,730,663
Benue	1,636,371	538,879	1,097,492
Borno	2,945,925	710,968	2,234,957
Cross River	2,464,184	661,103	1,803,081
Gongola	2,308,355	639,138	639,138
Imo	3,490,484	1,153,355	2,337,129
Kaduna	3,455,047	1,382,712	2,072,335
Kano	5,226,598	1,195,136	4,031,462
Kwara	1,108,029	354,605	753,424
Lagos	1,829,369	828,414	1,000,955

Niger	1,051,160	383,347	667,813
Ogun	1,663,608	744,668	918,940
Ondo	2,573,960	1,384,788	1,189,172
Oyo	4,534,779	1,396,547	3,138,232
Plateau	1,748,868	548,405	1,200,463
Rivers	1,675,934	687,951	987,983
Sokoto	3,818,094	1,348,697	2,469,397
Total	48,633,782	16,846,633	31,787,149

Source: Adamu, H. and Ogunsanwo, A. (1982) Nigeria: The Making of the Presidential System, 1979 General Elections

Oyediran, O. (1983): The 1970 General Elections.

Though an impression was being created at that time by FEDECO, the electoral umpire that handled the 1979 elections that voters apathy accounted for the low voters turnout at the election, this could not be taken seriously as observed by Oyediran and Arowolo 1982 : 133

> *It should be obvious from the arguments presented here that misconceptions about the seeming apathy of the electorate during the 1979 elections arose from the demographic misinformation. FEDECO accepted the results of the voters' registration exercise without performing any critical evaluation. If the voters' list were correct, then we must accept that Nigeria now has over 96 million population but if the official estimates of the population which are considered plausible are to be accepted then the observed apathy is ecstasy conceded by poor statistics. Again, this type of issue raises the important point about the need for an accurate population census in Nigeria.*

According to the duo, we need adequate population as a panacea for accurate voters' registration. They said that, this is capable of providing a yardstick by which to measure the accuracy of the registration figures. This according to them means that the inflated figures were to the benefits of politicians and their corrupt supporters who want to have favourable results at the expense of the other at the elections.

Adamu and Ogunsanwo (1982:28) confirmed the inflation of the voters registration in these words

> *FEDECO declared the whole exercise a huge success. In our view the only statement that is correct to make about the 1979 registration figures is that FEDECO issued out voters cards totaling 48,633,782 and NOT that Nigerians of 18 years and above were registered to the tune of the number. It could not have been so. Several people, including one of the authors, were counted at least twice-in their home towns where they did not reside and also in their normal place of residence.*

As for the 1979 voters' registration exercise, one of the authors of this paper also claimed to have witnessed a situation where his late great grandmother who died in 1965 was registered and "voted" at the election. This was aside several fictitious names supplied to the registration officer

who issued the cards, without verification. Again, the same authorof the paper was also forced to vote 12 times even as Polling Clerk in the election.

Other electoral malpractices experienced in the 1979 elections as recorded by Adamu and Ogunsanwo were presented on these tables as documented by them.

Table 3: Incidents occurring more than ten times or more

Incidents	No of	% of Total
Dereliction of Duty	168	10.4
Impersonation	271	16.8
Canvassing for Votes	287	17.7
Unlawful Possession of Voters Cards	145	9.0
Disorderly conduct at polling station	149	9.2
Juveniles voting	77	4.8
Voting by unregistered person	38	2.4
Assaulting officials	37	2.3
Improper use of voters cards	64	4.0
Unlawful possession of ballot papers	31	1.9
Unlawful possession of ballot boxes	22	1.4
Campaigning on election day	20	1.4
Attempting to vote twice	18	1.1
Alteration of voters cards	18	1.1
Bribery	14	0.9
Loitering after voting	14	0.9
Possession of unauthorised voters cards	12	0.7
Unlawful possession of party poster symbol	27	1.7
Missing ballot papers	11	0.7

Source:Adamu, H. and Ogunsanwo, A. (1982) Nigeria: The Making of the Presidential System, 1979 General Elections

Table 4: Incidents Indicating Insecure Arrangements by FEDECO

Incidents	Frequencies	Percent of Total
Unlawful Possession of ballot boxes	22	1.4
Unlawful possession of ballot papers	31	1.9
Unlawful possession of voters cards	145	9.0
Unlawful possession of unauthorized voters cards	12	0.7
Stealing ballot box keys	3	0.2
Unlawful possession of voters list	3	0.2
Missing ballot papers	11	0.7
Stamped ballot papers found in polling stations	7	0.4
Destroying of ballot papers	6	0.4
Tampering with ballot boxes	2	0.1
Improper use of registration cards	64	4.0
Voting by unregistered persons	38	2.4

Losing booklet of ballot papers	2	0.1
Ballot papers supplied without envelops	1	0.1
Duplication of ballot boxes	4	0.2
Conveying ballot boxes without Police and party agents	2	0.1
Alteration of voters cards	18	1.1

Source:Adamu, H. and Ogunsanwo, A. (1982) Nigeria: The Making of the Presidential System, 1979 General Elections

If 1979 general elections were fraught with irregularities, 1983 and 2007 general elections have been competing for which one was the worst in the annals of electoral management in Nigeria. This confusion about the statement of finality was based on several similarities of electoral irregularities in the two elections. The two elections witnessed situations in which the sitting governors who had actually won elections were declared as the losers; the two elections also witnessed a situation where these were total disregard for electoral results at the collation centres and announcement of results not related to them. The two elections therefore witnessed situations where results were manufactured or manipulated to declare the winner a loser and vice versa.

However, Kurfi (2005:97) differed. He was categorical about the 1983 election as being the worst in Nigeria. He stated that, "the election witnessed all forms of strategies and stratagems' in the local domain of the opposition parties to retain power or improve its performance vis a vis other parties". According to him, federal might were deployed to rig out the governors of Anambra, Borno, Oyo, Kaduna and Gongola States by the ruling NPN. This according to him made the then ruling party to increase its state of control from seven to twelve states.

The above position on the election being the worst was corroborated by Ibrahim and Aturu(2000:36) when they asserted that "the 1983 elections occupy a special place in the history of electoral fraud in Nigeria. Competitive rigging reached its apogee".

The rigging of the election started from the voters' registration. If 1979 voters' register was describe as appalling, the 1983's was nonetheless despicable and distorted and an insult and assault to the dignity and integrity of Nigeria and Nigerians in the comity of nations.

The compiled voters register defied all statistical and demographic logic. Oyediran and Ogunsanwo in a newspaper analysis described the figures arising from the voters register as fantastic, ridiculous, unbelievable outrageous and incredible and statistical scandal for which Nigeria should bury her head in shame.

The 1983 register when compared with 1979 figures was found to be statistically abnormal and unthinkable.

Table 5: Percentage Increase in Voter Registration, 1979-1983, by State

S/No	State	Percentage Increase %	Dominant Party
1	Kaduna	93.6	NPN
2	Rivers	79.6	NPN
3	Benue	46.8	NPN

4	Kano	46.1	NPP (PRP)
5	Cross River	36.6	NPN
6	Anambra	35.5	NPP
7	Sokoto	34.2	NPN
8	Bendel	31.5	UPN
9	Gongola	28.5	NPP (GNPP)
10	Bauchi	28.1	NPN
11	Lagos	22.1	UPN
12	Borno	21.8	UPN/GNPP
13	Imo	21.8	NPN
14	Niger	20.8	NPN
15	Ondo	18.8	UPN
16	Kwara	18.6	NPN
17	Oyo	13.6	UPN
18	Ogun	11.4	UPN
19	Plateau	11.8	NPN

Source: Akinsanya, A. A. And Idang G. J. (2002): Nigerian Government and Politics (1979-1983

Diamond asserted that these figures were alarming and most unreasonable even with the best of assumption that Nigeria population could have risen from 55 million using 1963 census as the baseline to an estimated 82.2 million in 1983. Then according to him;

> *If half of the Nigerian population were under the age of 18, and if truly 80 percent of adults registered to vote, then Nigeria would have had 32.8 million registered voters in 1983- just about half the total Official Registered and almost exactly what Ayodele Awojobi asserted to be the legitimate figures. It is possible of course that there are more than 82 million people in Nigeria today (as at then). But it is also possible (some believe probable) that less than 80 percent of them registered to vote. On balance, it is obvious that the Register is massively inflated probably by as much as 100 percent.*

Diamond again using the 1983 estimated population by state, to argue that the 1983 Voters' register was wilfully manipulated. The table is presented below for the purpose of clarity.

Table 6: 1983 Voter Registration and Estimated Population by State

State	Estimated 1983 population (in millions)	Estimated Population Over 18 (in millions)	1983 Voter Registeration	Voter registration as Percentage of Estimated Population
Anambra	6.156	3.386	3.532	104.3
Bauchi	4.163	2.290	2.684	117.2
Bendel	4.212	2.317	3.165	136.1

Benue	4.155	2.285	2.401	105.0
Borno	5.132	2.823	3.588	127.1
Cross River	5.953	3.274	3.365	102.8
Gongola	4.460	2.453	2.965	120.9
Imo	6.622	3.444	4.252	123.5
Kaduna	7.002	3.851	6.688	173.7
Kano	9.897	5.443	7.639	140.3
Kwara	2.969	1.633	1.314	80.5
Lagos	2.911	1.601	2.233	139.5
Niger	2.045	1.125	1.277	113.5
Ogun	2.932	1.613	1.865	114.9
Ondo	4.671	2.569	3.059	119.1
Oyo	8.916	4.904	5.154	105.1
Plateau	3.468	1.907	1.542	80.9
Rivers	2.962	1.629	3.008	184.6
Sokoto	7.770	4.274	5.124	119.8
Total	96.078	52.821	65.304	123.4

Source: Akinsanya and Idang (2002): Nigerian Government and Politics (1979-1983)

Doubting the authenticity of the voters' figures, Diamond (2002) stated that these were registration across group of states controlled by both the opposition and the ruling parties. His observation was that, each party tried to inflate the figures in its area of domination and control to the exclusive of the other parties. He stated further "NPN controlled states reported the most implausible figures and the fraud was most extensive in those states. But it should be noted that the NPP- and UPN- controlled states also presented totals which were beyond credibility.

Other forms of electoral fraud associated with the conduct of 1983 general elections as documented by various sources were, denial of party agents of access to polling booths and denied the result, oppositions party agents were disallowed from the collation centres, multiple voting and counting some were said to have voted more than ten times, announcement of fictitious results are figures, careless checking of voters cards with a view to perpetrating fraud; not using indelible ink by polling officers to allow for several voting opportunities, bribing of FEDECO officials to aid and abet malpractices, ballot box stuffingbefore the election day, alteration of election results among other electoral misdemeanours.

Many Nigerians were of the opinion that the monumental electoral fraud witnessed in 1983 in the country culminated into the military take-over of government on December 31, 1983.

There was no election in Nigeria until 1991 when the two party system-Social Democratic Party (SDP) and National Republican Convention (NRC) was introduced into the Nigeria's body politic. The period also witnessed the introduction of Open Ballot System and Modified Open Ballot System. This was with a view to guarding against inflation of voters registers as witnessed in the conduct of previous elections. The option almost worked magic as credible election results were witnessed. But for the annulment of the June 12, 1993 election, both the Open and Modified Open Ballot had impacted on the credibility of electoral process in Nigeria. The

annulment orchestrated the military taking over of the government in 1993 and the nation never witnessed a full blown democracy until 1998.

In the 1991 and 1993 general elections in Nigeria, there were few cases of electoral fraud because of two reasons. The adoption of Open Ballot and Modified Open Ballot System minimized the desperation of the politicians and their cohorts to inflate figures with a view to achieving the hallmark of democracy-the majority rule fraudulently. The problems of secrecy, which is essential in democracy, the essence of causing disaffection among others led to the modifications of the Open Ballot System. However, the system was about to curb all forms of previous electoral malpractices.

1999 elections were also almost electoral malpractices free because the disengaging military was an impartial arbiter coupled with only two presidential candidates who were almost equally match.

The above relatively malpractice free 1999 general elections could not be said of the 2003 general elections. The election was characterized by series of electoral malpractices. In the first instance, the number of differences between the 1999 and 2003 presidential election was unbelievable and defied all demographic logic and explanations. In the 1999 presidential election, the total votes cast were 29,484,044 and within four years, when there were 20 presidential candidates, the votes cast were 42,018,735. In spite of complaints of non performance against the PDP, Federal Government, Obasanjo's had 24,109,157 votes. This was 61.80 percent of the total vote cast. The party also increased the states under its control from 21 to 28.

Garba (2005) captured some of the irregularities witnessed in the election to include: falsification of results, intimidation of opposition party at polling units, disenfranchisement of qualified voters, abuse of incumbency powers, bribery of voters and electoral officers, ballot stiffing, snatching of the electoral materials among some electoral misdemeanour.

Alluding to the monumental fraud at the election, ***The Patriots***, the body of Nigerian elderstatemen whose chairman was late Rotimi Williams stated thus about the 2003 general elections:

> *It is wholly unacceptable to allow the result obtained by these well attested electoral malpractices described by the CNPP and also International Electoral Observer Team to stand. To allow them.....will subvert democratic form of government instituted by the constitution and worse still, would entrench elections rigging as a permanent feature of the Nigerian polity.*

If the 2003 general elections were full of irregularities, 2007 elections were the one in which different crude and rude methods/attempts were made to thwart the biometric data capturing machines used in voters' registration in Oyo and Ekiti States.

Efforts at Introducing ICT into Nigerian Electoral Process

No doubt, one of the problems facing electoral politics in Nigeria is the falsification of figures through spurious voters' registration, hence INEC under different leadership, since the beginning of the Republic has tried and still trying to introduce Information Communication Technology (ICT) into electoral politics in Nigeria. In the 2003 general elections, the electoral body introduced biometrics data capturing machine to register voters. The general belief at that time was that the introduction of this modern technology into electoral politics will curb double or multiple registration. This is because every individual has unique personality and identity which cannot be replicated. Even though, some commentators who extolled the virtue of the biometrics data capturing machine then said that "there may be two or more people bearing same name, born in the same village/town/city, local or state and the nation, yet no two people have same finger print identity.

Consequent upon the above thinking, the general belief was that at least when people cannot register more than one time, such could not vote twice. Hence, the introduction of the biometrics was like the restoration of hope into Nigerian electoral politics as the one capable of enhancing and reinforcing democratic government as a people's wish and aspiration.

However, the above logic was frustrated by desperate politicians who would stop at nothing to pollute electoral politics in Nigeria in spite of the introduction of scientific attempt to sanitize the political system.

Unfortunately, no sooner the biometric voters registration exercise started than politicians in collusion with both adhoc and regular staff of INEC took the possession of the data capturing machines on alleged cost. Consequent on this, the data capturing machines were not available at the INEC designated registration centres. With the machines now in the possession of politicians particularly of the ruling party, they engaged in registrations of its members in private

homes and depriving the opposition partiesmembers the opportunity to register. Again, it gave undue opportunity to the ruling party to engage in double/multiple registration. Some of these politicians were allegedly assisted by INEC Staff. Apopular politician in Ibadan allegedly took the possession of almost half of the data capturing machines to his homeand such became the "registration centre". While this was going on, there were cries across Oyo State that, the machines were not at the registration centres. It took the intervention of the well-meaning Nigerians and security agencies before the machines were rescued and made available to the people. These were the complaints across Nigeria.

At the end of the exercise, INEC conducted fingerprint examination on the purported registered voters and it was found that not less than 6,000,000 multiple registrations were discovered across the country. In the Southwest alone, 1,648,224 voters were disqualified for double registration. These are presented along the states in the geopolitical zones as follows:

Table 7: Summary of Voters' Registration in the South West

State	Total Number of Applications Processed	No of registered voters	No of disqualified applications
Ekiti	1,334,957	981,753	353,204

Lagos	4,781,724	4,558,216	223,508
Ondo	1,696,555	1,504,181	192,374
Osun	1,710,014	1,367,621	342,367
Oyo	2,454,262	2,209,957	244,309
Ogun	1,869,337	1,576,875,	292,462
Total	12,337,935	12,198,609	1,648,224

Source: Oni, M. A. (2005): "Predictions of 2003 Elections in the Southwest Nigeria: A Credibility Crisis for Traditionalist and Behaviouralist Arguments?

Aside these multiple registration, there were other cases of genuine but fraudulently processed registration. The first type was the coercing or encouraging some artisans,market women, some members of the National Union of Road Transport Workers (NURTW) and National Road Transport Employers Association (NRTEA) to register. Also, aliens were brought in from neighbouring countries (Cameroun, Niger and Chad) to register as Nigerian electorate. These cards were either collected from them instantly for pecuniary measures or forced them to use it to vote at elections for particular candidates. In the extreme, when the cards were collected from them, they were used by others to vote at the election or their names were used to engage in multiple voting at the elections, the embossment of pictures on them notwithstanding.

In some cases particularly as witnessed in Ondo State, the politicians made mockery of the biometrics data capturing machine when pictures of prominent Nigerians who were not indigenes of the state were purportedly registered to vote at the 2007 elections. They were purportedly registered by the data capturing machine. According to experts, who conducted forensic investigation on the votes cast at the elections, the pictures of these Nigerians were used.

In Osun State, but for the Adrian Forty, an expert in Forensic investigations, PDP would have run away with their stolen mandate in 2007 gubernatorial election. Apart from falsification of or concocted results, objects such as palm kernel, feathers and stones were used to thumbprint ballot papers to guard against being detected by forensic investigation. Thanks to the Re trial Tribunal Judges who later accepted the forensic investigation as evidence in court of law and the election was upturned.

In the 2007 governorship and 2009 re-run elections in Ekiti State, all these irregularities were discovered by the foreign experts who separated the weeds from shafts in the election. At the end of the day, after the conduct of forensic investigations, four different results were produced at different points. Although, judiciary was also implicated in the election. In the first announcement of theelection, INEC after the April 14, 2007 governorship election, declared that Segun Oni scored 177,780 votes and KayodeFayemi had 108,305. After the tribunal judgement, the election result stood at Segun Oni 135,400 and KayodeFayemi 141,306. Moreover, after the rerun, another election result emerged. Segun Oni PDP 114,140 votes and KayodeFayemi 107,017 votes. However, after about two years of legal tussle on the election, the Appeal Court after the re-run election returned the following votes- KayodeFayemi 78,091 and Segun Oni 65,743. Thus, KayodeFayemi was later declared as the winner after about three years of legal rigmarole. The present Permanent Voters' Cards (PVC) were not error proof. Those who

registered in two registration centres have collected their cards in spite of the scanning of the biometrics registration by INEC. The claim by INEC that over four million multiple registrations were discovered after the registration is a confirmation that Nigerian double registered. Hence there is need for forensic investigation as a complement.

ICT and Management of Electoral Process
The graphic demonstrationof efforts of Nigerians to make mockery of the biometrics registration is a conviction,that INEC needs to go beyond the introduction of ICT into electoral politics in Nigeria. There is need to complement the biometric registration by forensic investigation at all stages/process of elections in Nigeria.This is the only way that the nation's electoral politics can be credible
Thus, the following process in the electoral management in Nigeria should be verified/complemented through forensic investigation to guard against multiple registration and falsification of figures.

ICT and Point of Registration: Information Technology can be deployed in the voter's registration process to guard against multiple registration. The voter's card may also double as a form of identity and can help in verifying census figures which the politicians have been playing up to serve as basis for multiple registration. Forensic investigation will be able to discover malpractices in form of multiple registrations arising from biometric registration. This would not have been necessary as the biometric is a unique identifier. Notwithstanding the introduction of biometrics, some unscrupulous Nigerians have been registering ten to twenty times in different registration centres. Hence, the need to conduct forensic investigation of the biometric registration process after the registration exercise has been concluded to uncover multiple registration and remove same from the database

ICT and Voters' Verification/Accreditation: This is the art of matching the credentials on the PVC cards to the physical voter. At the point of voting, the voter will insert the registration card into the card reader and thumbprint. This will confirm/disconfirm if the voter who brings the card to the voting centre is the owner. This forensic investigation is to guard against the use of cloned of voters cards. The accredited voters are reconciled with the votes cast at the end of the voting exercise to see if there is a disparity. The Smart Card Reader must contain the database for all registered voters in each polling unit.

ICT and Voting: In this process, voters only need to insert their PVC into the voting machine and select their candidate of choice. This is capable of achieving greater accuracy and authenticity of voters as they guard against multiple voting. It also has the advantage of generating instant result. The result can be verified through audit trail. The audit trail is a continuous recording of all actions/activities taking place on the device. For example, if the total voter count was 1,234 and on the voting machine, it was observed that 2345 was cast. Then

from the audit trail, evidence of manipulation can be deduced as the trail will reveal all forms of manipulations. The in thing is that the number of cards inserted into the voting machine and the number of votescast must be equal at the end of the voting exercise.

Counting of Votes and Forensic Investigation: In spite of the above precautions, the process can still be tampered with programmatically by a computer programmer or a hacker who could manipulate the voting machine in favour of a particular candidate/party.For example, a tprogrammeror hacker may manipulate the programme code of voting machine to read 3 votes for every single vote cast for party XYZ. However, a good examination of the audit trail, by a forensic experts will be able to discover this manipulation.

Benefits of ICT to Electoral Management
Time Saving: The use of information and communication technology saves time through the electoral process. From the registration of electorate through the counting and declaration of winner, ICT networks can contribute meaningfully by saving time since it takes the use of computer software and hardware. The manual process can take several weeks for the registration of electorate, while voting, counting and result announcement can take days all together. However, ICT can simplify the process through the use of one time applications that enhances performance, transparency and relative perfections in the electoral process.

Reduced Cost Implication in the Long Run: Although, the use of ICT in electoral process is expensive at the initial stage, however, the cost implication of the use of ICT in elections in the long run is relatively low compared to the manual electoral process. The use of ICT may reduce the number of personnel, reduce the number of materials to be used during elections. The fact that ICT requires huge amount of money for it acquisition and maintenance, however, these cost in the long run are manageable and reasonable when compared to the manual electoral process.

Massive Citizens Participation: With the prevailing trend in ICT growth and development, it is pertinent to point out that, e-governance has widened the framework of service delivery through ICT and by logical extension encouraged the use of ICT by citizens. Therefore, the use of ICT encourages the citizens to participate in governance. Since the process is expected to capture the data of the citizens and in turn enable them to vote, citizens will be willing to participate as against relative apathy being experienced currently in the country.

Transparency: The use of ICT in elections promotes transparency which enhances the legitimacy of the government. Since citizens are aware of the process involved and they know the resultant effect of their activities, it is not an overstatement that they will be willing to participate and trust the process.

Reduced Electoral Litigations: The application of ICT in the electoral process reduces the incidences of electoral litigations that often characterize the Nigerian electoral process.

Conclusion

The paper concludes that the introduction of biometric voters capturing machine is not a sufficient guard against multiple registration and other manipulations, there is need to introduce ICT into other electoral processes in Nigeria and this should be complemented by forensic investigation at each process because of its unique identifier. It is only the conduct/incorporation of forensic investigation into all the electoral process that can serve as guarantees against multiple registration, voting and counting of votes. This is because the biometrics registration of voters as witnessed in the country has been subjected to various manipulations.

Recommendations

There is need to construct forensic laboratory across the774 local government areas in Nigeria to carry out scientific investigations on the ballot papers and the result sheets to authenticate the genuiness of the results and sheets on which they were recorded before they are released.

In the same manner, we must carry out forensic investigation on the ballot papers used for the elections and the results sheets across the wards in the local government in the election of House of Assembly members.In the local government, Chairmen and Councillorship elections, House of Representatives, senate and gubernatorial elections, there is need to carry out forensic investigation into the ballot papers and election result sheets across local government before the announcement. In the election of the President, there is need for this exercise across the states before the release of the result.

It is preferable for all devices to be used in the electoral process are powered by solar to avoid power supply issues. Effective internet service will also aid the electoral process and beyond.

The paper also recommended that Nigerians need to exercise patience while these exercises are going on. It is a case of justice being sought at the expense of time.

References

Adamu, H. And Ogunsanwo, A. (1982): *Nigeria: The Making of the Presidential System, 1979 General Elections*

Akinsanya, A. A. And Idang G. J. (2002): *Nigerian Government and Politics (1979-1983).* Calabar: Wosen Publishers

Baryamureeba, V. and Tushabe, F. (2000): The Enhanced Digital Investigation Process Model. *Digital Forensics Research Workshop.*

Brian C. and Eugene H. S. (2003): "Getting Physical with the Digital Investigation Process". *International Journal of Digital Evidence, Fall 2003.*

Burt, E. and Taylor, John A. (2000). "Information and communication technologies: Reshaping Voluntary Organizations?" Nonprofit Management & Leadership, 11(2), 131-143

Diamond, L. (2002): Free Fair? "The Administration and Conduct of the 1983 Nigerian Elections" In Adeoye, A. Akinsanya, and Gordon J. Idang (eds) *Nigeria Government and Politics (1979-1983).* Calabar: Wosen Publishers

Garba, D. S. (2005): "Transition Without Change: The 2003 Elections and Political Stability in Nigeria". InGodwin Onu and AbubakarMomoh (eds) *Elections Democratic Consolidation in Nigeria, Lagos: A-Triad Associates.*

Jibrin, I. And Aturu, B. (200) "Rigging and Electoral Fraud in Nigeria: State of the Art" In Kroeker, K.L, (2010*). Engineering the web`s third decade. Association for Computing Machinery, 53(3), 16-18*

Kurfi, A. (1983): *The General Elections of 1959 and 1979.* Lagos: Macmillan

Kurfi, A. (1986):"The Fatimah Principle: Antidote to Rigging" *New Nigeria Newspapers*

Kurfi, A. (2005): *Nigerian General Elections 1959, 2003: My Roles and Reminiscences*. Abuja: Spectrum Books

Michael, K., JHP Eloff and MS Olivie (2006): "Framework for a Digital Forensic Investigation". Available at http://icsa.cs.up.ac.za/issa/2006/Proceedings/Full/101_Paper.pdf

National Institute for Policy and Strategic Studies (1983): *Roundtable Meeting on the 1983 General Elections,*Kuru.

Nwabueze, B. (2005): "Nature and Forms of Elections Rigging" http://www.nigerdeltacongress.com

Oni, M. A. (2005): "Predictions of 2003 Elections in the Southwest Nigeria: A Credibility Crisis for Traditionalist and Behaviouralist Arguments" In *International Review of Politics and Developments Vol 3 No. 2*

Oni, M.A. and Adewumi, E. F. (2009): "Globalization and Paradox of Electoral Process in Nigeria: The Study of 2009 Governorship Re-Run Elections in Ekiti State" In *PPCSS Journal Series Vol. 1 No 1, 2009.*

Oni, M. A. (2004): "Electoral Fraud and Legitimacy Crisis in Post Independence Nigeria" In *International Review of Politics and Development Vol. 2, No 2.*

Onu, G. And Momoh, A. (2005): *Elections and democratic Consolidation in Nigeria*. Lagos: A-Triad Associates.

Oyediran, O. (1983): *The 1970 General Elections*. Lagos: Macmillan Publishers.

Oyediran, O. And Arowolo, O. (1982): "In defence of the Nigerian electorate" In Oyeleye Oyediran (ed) *The 1979 General Elections*. Lagos: Macmillan Publishers.

Reith, M., Carr, C. and Gunsch, G (2002) An Examination of Digital Forensic Models, *International Journal of Digital Evidence. Fall 2002, Volume 1, Issue 3, 2002.*

Statistics Canada (2008). *Information and communications technologies (ICTs).* Accessed 15 April 2010 from http://www.statcan.gc.ca/pub/81-004-x/def/4068723-eng.htm

UNESCO (2002). *Information and Communication Technology in Education.* Accessed 15 April 2010 from http://unesdoc.unesco.org/images/0012/001295/129538e.pdf.

Yonck, R. (2010). The Age of the Interface. The Futurist, 44(3), 14-19.