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GIS APPLICATION IN GEOSPATIAL ASSESSMENT OF SELECTED PUBLIC PRIMARY SCHOOLS: A CASE STUDY OF SAINT PETER APETE AND SAINT PAUL AKUFO, IDO LOCAL GOVERNMENT AREA IBADAN, OYO STATE NIGERIA

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ABSTRACT

Geographic Information Systems (GIS) as an important tool can be use effectively to evaluate and analyze facilities to meet the future needs of schools. This study examines geospatial assessment of infrastructural facilities in two Public Primary Schools in Apete and Akufo, Ido Local Government Area, Ibadan, Oyo State, Nigeria. The method adopted data collection for this study involved the use of handheld GPS receiver in acquiring x, y coordinates of school boundary and other available features in and out of the study area. Questionnaire administered to a random sized population of sixty three (63) teachers and oral interviews from of the concerns schools on situation on infrastructural facilities in the school were also used. The results are presented in form of maps and map queries using ArcGIS 10.2 software, frequency tables and percentages. Moreover the relative necessity index was adopted in ranking the infrastructures in order of necessity attached to each infrastructure by the respondents. Generally, the result shows that infrastructural facilities in both schools were of necessity but were very poor in terms of their condition. Therefore, these have led to the poor performance in Public Primary Schools, and the Parents are not motivated to send their Children to the Public Primary Schools again in Apete and Akufo. Therefore, there is the need for constant assessment on the conditions of facilities in Public Primary Schools in Oyo State and the circumstances surrounding them. The geospatial analysis carried out for this study will go a long way in re-planning of the school.

KEYWORDS: Geospatial Assessment, Infrastructural facilities, Necessity.

INTRODUCTION

Spatial distribution is the arrangement of a phenomenon across the earth's surface and a graphical display of an arrangement is an important tool in geographical and environmental statistics. The provision of Infrastructural Facilities is one of the basic necessities of life for Man in any environment (its sufficiency both in quantity and quality allow maximum comfort, convenience, safety and healthy living). It promotes productivity in terms of developing social, economic, and physical structure of any area and also involves enhancing the welfare of such area. School is one of the areas where human beings exist and undergo various activities in term of learning, training and working. These three aforementioned activities in school can be categorized into two places with respect to the personalities involved in them. Learning and training can be classified under student or pupils; students undergo learning and training in school, while 'working' can be classified under the instructors or teachers because it is their duty to train the student. Christopher (2003) stated that, for learning, training and working to be effective and fruitful in the academic environment, the environment must be provided with relevant, functioning and adequate facilities needed. He then stressed, that the facilities needed in academic environment are building, classroom furniture's, water facilities, conveniences and library. Ken (2004), view the school facilities from the perspective of offices, furniture, recreational facilities, toilet facilities and materials such as textbooks, chalks, board, record books, writing materials and so on. According to Kuku (2003), the basic Infrastructural Facilities in Schools should consist of School buildings (offices and Classrooms), Library, with Books, Water, Electricity and Toilet Facilities, Laboratory, Workshop, Furniture's and Recreational Facilities. In summary, the Facilities needed in the School Environment are; Standard Classrooms building, Furniture, Recreational Facilities, Electricity, Water Facilities etc.

But in the recent survey by the World Bank (2004) on primary schools in Nigeria, it was revealed that the school environment was found to be far from conducive for learning, in terms of the pupil safety, security and health. Classrooms spaces were inadequate, meaning that many children are either instructed in the open air or share classrooms with up to four other classes. As well as being insufficient in numbers, classrooms are generally in a poor state of repair; schools lack offices, desks and other furniture and recreational facilities and have few or no toilet facilities. In addition there are extremely low remuneration, poor working conditions and satisfaction and

many more in the side of the teachers. Obateru (2003), in his own classification categorized infrastructural facilities into two namely; (1) Physical infrastructures, which comprise transportation facilities, public utilities of electricity, supply, water supply, gas supply, storm water drainage and telephone services.(2) Social infrastructures consisting community facilities and services. Examples of community facilities include schools, shopping areas, religious building, cultural facilities, and recreational areas amongst others. Conclusively, infrastructural facilities include government services such as schools, library and public safety and public works, building and utility services such as road construction and maintenance, traffic signalization, building permits and inspections, water, storm water, sanitary sewer and waste disposal.

The absence of the facilities in the school environment has great effects on the students and teachers. Overall school climate has been found to have a significant impact on the adjustment, academic competence and achievement of children in kindergarten through primary school (Esposito, 1999). Furthermore, the school climate contributes almost as much as the child's own history of adjustment to how well parents perceive their children to be currently doing in school. Kuku (2003) states that the absence of basic infrastructure facilities in most schools today have encouraged the negative aspect of fagging; she further challenge government to provide adequate facilities in schools in order to reduce the incidence of confisticating other student property. He stated further that unavailability of facilities in academic environment make it to be not conducive for learning and encourage frequent transfers of students from less facilitated schools to those with better facilities. There is a direct linkage between infrastructure and development. In other words development is directly proportional to the availability of infrastructures. Then impact of infrastructures on overall development a community or a nation cannot be over emphasized. George (2004) also finds out that in the aspect of School infrastructures; there are inadequacy, poor condition and poor maintenance of the facilities. Schools located in urban areas are well facilitated than the Schools in rural areas in Africa compare to the Western World. GIS is a computerized tool for capturing, storing, checking, integrating, manipulating, analyzing, and displaying data which are spatially referenced to the earth. GIS can be used in geospatial analysis of infrastructural facilities on the earth surface. Database created can be used for future infrastructural development. This study aimed at assessing Public Primary School Facilities at St Peter primary School Apete and St Paul primary school Akufo, Ido local government area, Ibadan. Infrastructural facilities such as conditions of the road networks linking with the selected schools, Location variability of the selected school, Classroom furniture, water supply facilities, Electricity, Library, recreational facilities, Sick-bay, Dining Hall and Toilets in Apete and Akufo, Ido Local Government Area in Ibadan. Oyo State Nigeria was also taking into consideration by creating the relational geospatial database for each school based on the facilities.

THE STUDY AREA
The study area is the Public Primary Schools in Ido Local Government Area Ibadan. Two public primary schools in Apete and Akufo Area of Ibadan, Oyo State, Nigeria. Apete and Akufo is located in Ido Local Government which was created from the former Akinyele Local Government in May, 1989. The total population of Ido local government according to the 2006 population census was 103,261 (National Population Commission, 2006). It lies between latitude 7°30' 44.49″ N and longitude 3°47′34.99″E.

Saint Peter Primary School   *Saint Paul Primary School*

Figure 1: Map of the study area

PHYSICAL SETTING
Climate
Apete and Akufo have the Tropical wet and dry climate as it falls in the transition zone between the rain forest and the savannah. The region experiences a fairly high uniform temperature, moderate to heavy seasonal rainfall. The mean annual Temperature is about 26.20˚C and the mean annual rainfall of 1200mm. The relative humidity is within the range 75–95%

Vegetation
Apete and Akufo lies in transition zone forest of Ibadan Geographical region and the Northern savannah region. As a matter of this, it is regarded to be derived savannah vegetation. The town is seen to be a low land forest area with agricultural activities being the major activities carried out on it.

Geology and Soil type
Rocks of the basement complex, which forms part of the African crystalline shield, underlie Ibadan. The basement complex is composed major of folded Gneiss, Schist and Quartzite of the Precambrian age into which have been emplaced Charnokeotic rocks show a high level of variation as regards grain size and mineral composition.

Rainfall
The regions around and within Ibadan has four seasons like most of the other area in the southern Nigeria. The long wet season starts from March to July; it is the season of heavy rainfall and high humidity. The short dry season is normally in August. This is followed by short wet season and last September to October. The last season is that of harmattan experienced at the end of November to mid March. The man annual rainfall is 1-24mm. The variation in rainfall quantities between different between stations I rather in significant both on an annual and monthly basis.

MATERIAL/METHODS
Equipment
The equipment used are categorize into hardware and software.
Hardware
a. Handheld GPS receiver
b. Field book and writing materials
c. Cutlass
d. 2.16GHz, Windows 8, 64-bit operating system, x64-based processor
e. Hewlett Packard Colour Laserjet 5550dn Printer
f. Questionnaire

Software Used
a. AutoCAD Land Development 2010
b. ArcGIS 10.2 (Data Analysis)

c. Microsoft Word
d. Notepad
e. Microsoft Excel (Data Editing)
f. Windows 8 Operating System

Methods of data collection
The methods adopted for this study was based on direct observation and measurement with the use of the Global Positioning System (GPS) in data acquisition. The x, y coordinates of boundary of each school as well as other existing features within the study area were acquired. Google earth imagery was used to locate the Actual Location of the selected Public Primary Schools in Apete and Akufo before field observation. Other method used were questionnaire which was administered on all the forty-eight (48) teachers at St Peter primary school and fifteen (15) teachers at St Paul primary school making a total of sixty-three (63) out of which all was retrieved and used for the study. Also, interview was carried out from the teachers of each school in order to acquire correct and valid information about their environment and also to know the status of the existing facilities within each school. Presentation and analysis of data was done using ArcGIS 10.2 for field data analysis, frequency tables and percentages for both interview and questionnaire. Also relative importance index was adopted in ranking the infrastructure in order of necessity attached to them by the respondents.

RESULTS AND DISCUSSION
Results
The results present here are both the descriptive and statistical table to present and explain the major findings of the study. The various data obtained from the Public Primary Schools at St Peter, Apete and St Paul, Akufo through the methodology described above were analyzed and interpreted. The analysis and interpretation follow the order similar to the objectives set. The survey carried out revealed the condition stage of selected Public Primary Schools in Apete and Akufo Ido Local Government of Oyo State Ibadan. The results of the observation were presented in form of map/plan and map queries using ArcGIS 10.2 (figure 2-3, query 1-6). The result shows the staff strength, number of pupils and classroom in each school. This relational geospatial database that was developed for the management of the primary school facilities in the study area is clearly shown in Tables 1-5. Analysis of data was done using frequency tables and percentages

Table 1: Age distribution of respondents

St. Peter Primary School Apete, Ibadan		
Age (Years)	**Frequency**	**Percentage**
22-36	26	(54.2%)
37-51	13	(27%)
52-64	9	(18.8%)
Total	**48**	**100**
St. Paul Primary School Akufo, Ibadan		
Age (Years)	**Frequency**	**Percentage**
22-36	7	(46.7%)
37-51	5	(33.3%)
52-64	3	(20%)
Total	**15**	**100**

Source: Authors field Survey, 2017

Table 1 shows that 54.2% respondents at St Peter are in the age bracket of 22 – 36 years and (46.7%) at St Paul, while (27%) at St Peter are within the age bracket of 37 – 51 years and (33.3%) at St Paul, (18.8%) at St Peter are within the age bracket of 52 – 64 years and (20%) at St Paul. Therefore, it can be deduced from the Table that majority of the respondents (81.2%) are still in their active age to be a teacher in the study area.

Table 2: Academic qualification of respondents

St. Peter Primary School Apete, Ibadan		
Period (Years)	**Frequency**	**Percentage**
NCE	29	(60.4%)
OND/HND	4	(8.3%)
B. Sc	12	(25%)
M. Sc	3	(6.3%)
Total	**48**	**100**
St. Paul Primary School Akufo, Ibadan		

Infrastructures	Frequency	Percentage
NCE	9	(60%)
OND/HND	1	(6.7%)
B. Sc	4	(26.6%)
M. Sc	1	(6.7%)
Total	**15**	**100**

Source: Authors field Survey, 2017

Table 2 reveals that 60.4% at St Peter respondents possess NCE and 60% at St Paul, 8.3% at St Peter respondent posses OND/HND degree and (6.7%) at St Paul while 25% respondents at St Peter possess B. Sc degree and (26.6%) at St Paul, and the remaining were those who are with and without M.sc (6.3%) at St Peter and (6.7%) at St Paul went on to further their education in order to obtain M. Sc degree. This analysis shows that there are more NCE holders that are in the school than other academic qualification. It could be deduced from this table that all the respondents possess academic qualifications, which will enhance their employability and hence improve their level of income.

Table 3: Period of employment

St. Peter Primary School Apete, Ibadan		
Period (Years)	**Frequency**	**Percentage**
1980-1990	19	(39.6%)
1990-2000	9	(18.8%)
2000-2010	15	(31.2%)
2010-2020	5	(10.4%)
Total	**48**	**100**
St. Paul Primary School Akufo, Ibadan		
Period (Years)	**Frequency**	**Percentage**
1980-1990	6	(40%)
1990-2000	3	(20%)
2000-2010	4	(26.7%)
2010-2020	2	(13.3%)
Total	**15**	**100**

Source: Authors field Survey, 2017

The analysis of the period of their employment of the respondents is as shown in Table 3 above. The Table reveals that (39.6%) in St Peter respondents have their employment period ranging from 1980–1990 and (40%) at St Paul, (18.8%) at St Peter have their employment ranging period of 1990-2000 and (20%) at St Paul, while (31.2%) at St Peter have their employment for a period of 2000-2010 and (26.7%) at St Paul. Also, (10.4%) at St Peter have theirs between 2010-2020 and (13.3%) at St Paul. This implies that a considerable number of the respondents have been with the school long enough to give accurate responses as to the facilities and their conditions that many years ago.

Opinion of respondents' on Infrastructures based on their necessity in percentage at St Peter Primary School Apete and St Paul Primary School Akufo.

Table 4: Opinion of respondents (Yes or No)

St. Peter Primary School Apete, Ibadan		
Infrastructures	Yes	No
Classroom building	34 (70.8%)	14 (29.2%)
Furniture	17 (35.4%)	31(64.6%)
Good water system	30 (62.5%)	18 (37.5%)
Medical centers	13 (27.1%)	35 (72.9%)
Electricity	9 (18.8%)	39 (81.2%)
Good roads	11 (22.9%)	37 (77.1%)
Waste disposal system	14 (29.2%)	34 (70.8%)
Library	6 (12.5%)	42 (87.5%)
Recreational centers	5 (10.4%)	43 (89.6%)
Toilet	13 (27.1%)	35 (72.9%)
Sport	11 (22.9%)	37 (77.1%)
St. Paul Primary School Akufo, Ibadan		

Infrastructures	Yes	No
Classroom building	10 (66.7%)	5 (33.3%)
Furniture	6 (40%)	9 (60%)
Good water system	11 (73.3%)	4 (26.7%)
Medical centers	2 (13.3%)	13 (86.7%)
Electricity	2 (13.3)	13 (86.7%)
Good roads	4 (26.7%)	11 (73.3%)
Waste disposal system	3 (20%)	12 (80%)
Library	1 (6.7%)	14 (93.3%)
Recreational centers	1 (6.7%)	14 (93.3%)
Toilet	4 (26.7%)	11 (73.3%)
Sport	2 (13.3%)	13 (86.7%)

Source: Authors field Survey, 2017
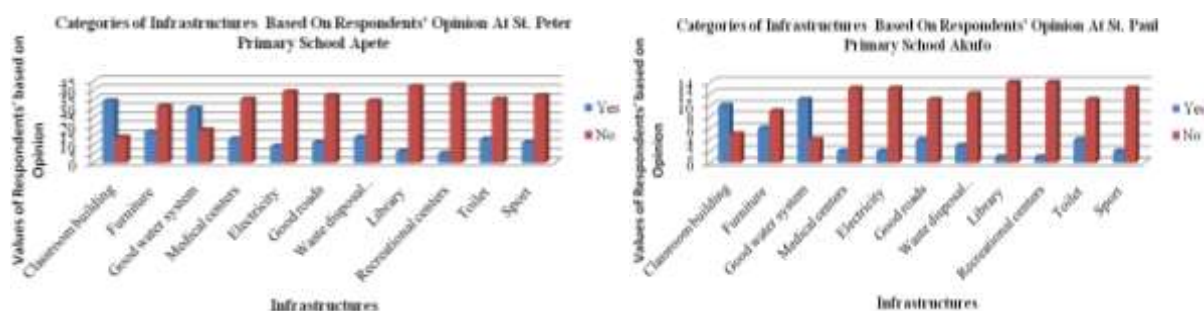
Chart 1: categories of respondents' opinion on infrastructure for the study area

The various infrastructures available in the study area were indicated in Table 4 above. The table reveals that 70.8% were of the opinion that classroom building is available at St Peter and (66.7%) at St Paul while (64.6%) posit that furniture were not sufficient at St Peter and (60%) at St Paul. Other facilities available in the study area were varied proportion and they include good water system (62.5%) at St Peter and (73.3%) at St Paul, medical centre (72.9%) at St Peter and (86.7%) at St Paul which shows low in medical facility, electricity (81.2%) at St Peter and (86.7) which shows poor electricity facility, good roads (77.1%) at St Peter and (73.3%) at St Paul which shows poor road facility and waste disposal system facilities (70.8%) at St Peter and (80%) at St Paul which shows poor in waste disposal system, library (87.5%) at St Peter and (93.3%) at St Paul which show poor library facilities, recreational centers (89.6) at St Peter and (93.3%) at St Paul which shows poor recreational facilities, toilet (72.9%) at St Peter and (73.3%) at St Paul which shows poor toilet facilities and sport (77.1%) at St Peter and (86.7%) at St Paul which shows poor sporting facilities. Chart 1 shows the respondents opinion based on each infrastructure. It could be concluded, from the Table that required infrastructure for good living environment were not available within the school.
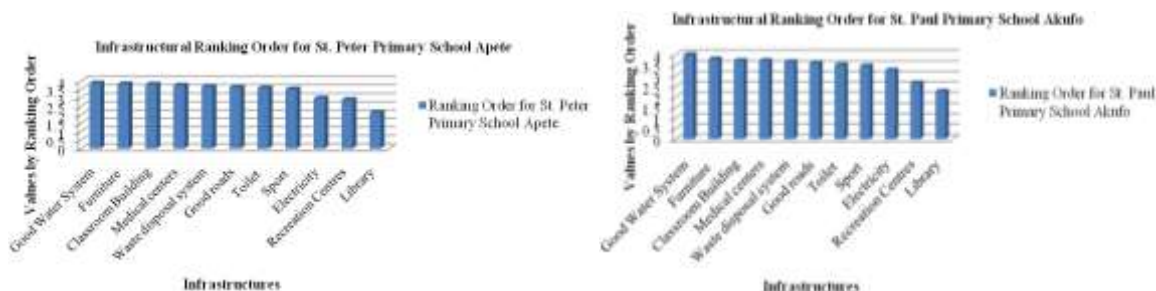
Table 5: Ranking of infrastructures available at St Peter Primary Sch. Apete and St Paul Primary Sch. Akufo

St. Peter Primary School Apete, Ibadan							
IF	Very necessary (4)	Necessary (3)	Not so necessary (2)	Not necessary (1)	Total	RO	Remarks
GWS	$42a_1n_1=4\times42=168$	$6a_1n_1=3\times6=18$	$0a_1n_1=2\times0=0$	$0a_1n_1=1\times0=0$	48 (186)	3.88	1st
F	$40a_1n_1=4\times40=160$	$8a_1n_1=3\times8=24$	$0a_1n_1=2\times0=0$	$0a_1n_1=1\times0=0$	48 (184)	3.83	2nd
CB	$39a_1n_1=4\times39=156$	$9a_1n_1=3\times9=27$	$0\ a_1n_1=2\times0=0$	$0a_1n_1=1\times0=0$	48 (183)	3.81	3rd
MCs	$36a_1n_1=4\times36=144$	$12a_1n_1=3\times12=36$	$0\ a_1n_1=2\times0=0$	$0a_1n_1=1\times02=0$	48 (180)	3.75	4th
WDS	$33a_1n_1=4\times33=132$	$15a_1n_1=3\times15=45$	$0\ a_1n_1=2\times0=0$	$0a_1n_1=1\times02=0$	48 (177)	3.69	5th
GRs	$31a_1n_1=4\times31=124$	$17a_1n_1=3\times17=54$	$0\ a_1n_1=2\times0=0$	$0a_1n_1=1\times0=0$	48 (175)	3.65	6th

IF	Very necessary (4)	Necessary (3)	Not so necessary (2)	Not necessary (1)	Total	RO	Remarks
T	$33a_1n_1=4\times33=132$	$11a_1n_1=3\times11=33$	$3\ a_1n_1=2\times3=6$	$1a_1n_1=1\times1=1$	48 (172)	3.58	7th
S	$28a_1n_1=4\times28=112$	$18a_1n_1=3\times18=54$	$1a_1n_1=2\times1=2$	$1a_1n_1=1\times1=1$	48 (169)	3.52	8th
E	$19a_1n_1=4\times19=76$	$15a_1n_1=3\times15=45$	$8a_1n_1=2\times8=16$	$6a_1n_1=1\times6=6$	48 (143)	2.98	9th
RCs	$19a_1n_1=4\times19=76$	$13a_1n_1=3\times13=39$	$9\ a_1n_1=2\times9=18$	$6a_1n_1=1\times6=6$	48 (139)	2.90	10th
L	$11a_1n_1=4\times11=44$	$4a_1n_1=3\times4=12$	$13a_1n_1=2\times13=26$	$20a_1n_1=1\times20=20$	48 (102)	2.13	11th
St. Paul Primary School Akufo, Ibadan							
IF	Very necessary (4)	Necessary (3)	Not so necessary (2)	Not necessary (1)	Total	RO	Remarks
GWS	$12a_1n_1=4\times12=48$	$3\ a_1n_1=3\times3=9$	$0\ a_1n_1=2\times0=0$	$0\ a_1n_1=1\times0=0$	15 (60)	4.0	1st
F	$12a_1n_1=4\times12=48$	$3a_1n_1=3\times3=9$	$0a_1n_1=2\times0=0$	$0a_1n_1=1\times0=0$	15 (57)	3.80	2nd
CB	$11a_1n_1=4\times11=44$	$4a_1n_1=3\times4=12$	$0a_1n_1=2\times0=0$	$0a_1n_1=1\times0=0$	15 (56)	3.73	3rd
MCs	$11a_1n_1=4\times11=44$	$4a_1n_1=3\times4=12$	$0a_1n_1=2\times0=0$	$0a_1n_1=1\times0=0$	15 (56)	3.73	4th
WDS	$10a_1n_1=4\times10=40$	$5a_1n_1=3\times5=15$	$0a_1n_1=2\times0=0$	$0a_1n_1=1\times0=0$	15 (55)	3.67	5th
GRs	$10a_1n_1=4\times10=40$	$4\ a_1n_1=3\times4=12$	$1a_1n_1=2\times1=2$	$0a_1n_1=1\times0=0$	15 (54)	3.60	6th
T	$9a_1n_1=4\times9=36$	$5a_1n_1=3\times5=15$	$1a_1n_1=2\times1=2$	$0a_1n_1=1\times0=0$	15 (53)	3.53	7th
S	$8a_1n_1=4\times8=32$	$6\ a_1n_1=3\times6=18$	$1a_1n_1=2\times1=2$	$0a_1n_1=1\times0=0$	15 (52)	3.47	8th
E	$8a_1n_1=4\times8=32$	$4a_1n_1=3\times4=12$	$2a_1n_1=2\times2=4$	$1a_1n_1=1\times1=1$	15 (49)	3.27	9th
RCs	$5\ a_1n_1=4\times5=20$	$2a_1n_1=3\times2=6$	$6a_1n_1=2\times6=12$	$2a_1n_1=1\times2=1$	15 (40)	2.67	10th
L	$4a_1n_1=4\times4=16$	$2a_1n_1=3\times2=6$	$3a_1n_1=2\times3=6$	$6a_1n_1=1\times6=6$	15 (34)	2.27	11th

Source: Authors field Survey, 2017

Note: IF = Infrastructural Facilities, GWS = Good Water System, F = Furniture, CB = Classroom Building, MC = Medical Centres, WDS = Waste Disposal System, GRs = Good Roads, T = Toilet, S = Sport, E = Electricity, RCs = Recreational Centres, L = Library, a_1 = infrastructural hierarchy, n_1= number of respondents, RO = Ranking order
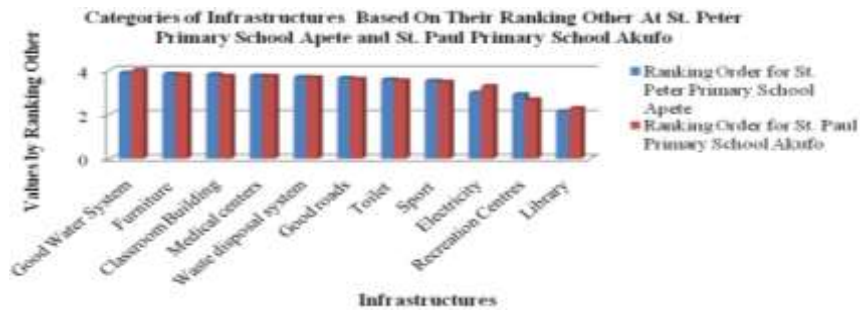

Infrastructural Ranking Order for St. Peter Primary School Apete

Infrastructural Ranking Order for St. Paul Primary School Akufo

Chart 2: categories by ranking and their differences for the study area

Other test was conducted on the infrastructure provided for both schools with the aim of determining the necessity attached to their availability. Table 5 shows that good water with RO = 3.88 at St Peter and 4.0 at St Paul was ranked first and was closely followed by furniture with (RO =3.83) at St Peter and 3.80 at St Paul which was ranked second while classroom building has RO of 3.81 at St Peter and 3.73 at St Paul and was ranked third. Medical was ranked fourth with RO 3.75 at St Peter and 3.73 at St Paul. Disposal systems was ranked fifth with RO = 3.69 at St Peter and 3.67 at St Paul. Good road was ranked sixth with RO 3.65 at St Peter and 3.60 at St Paul. Toilet was ranked seventh with RO 3.58 at St Paul and 3.53 at St Paul. Sport was ranked seventh with RO 3.52 at St Peter and 3.47 at St Paul. Electricity was ranked eight with RO 2.98 at St Peter and 3.27 at St Paul. Recreation centers were ranked nineth with RO 2.90 at St Peter and 2.67 at St Paul. And lastly, library was ranked with RO 2.13 at St Peter and 2.27 at St Paul. Chart 2 shows their categories in ranking other. In other words, good water system, furniture, classroom building, medical centre, waste disposal system and good roads are the most important of the infrastructure within the school under study.

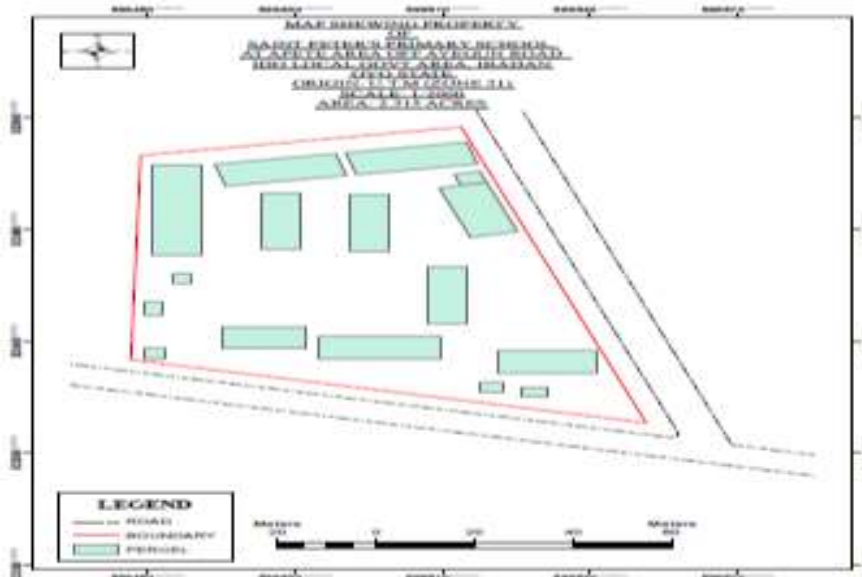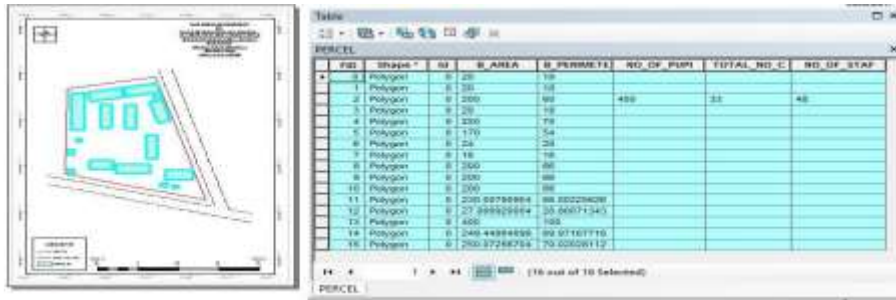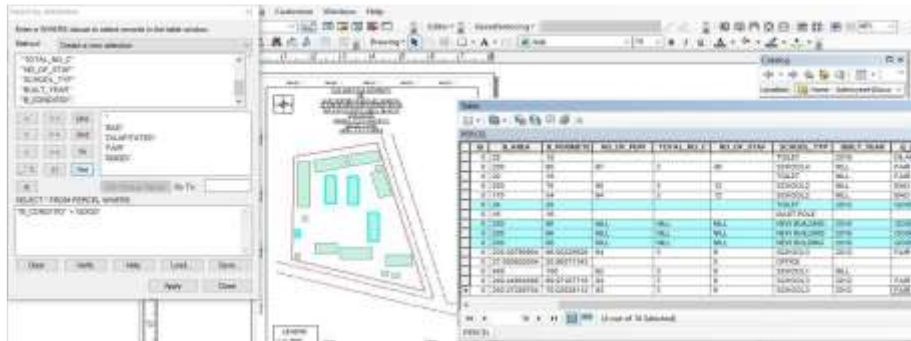*Table 6: Attribute Table of St Peter Apete*

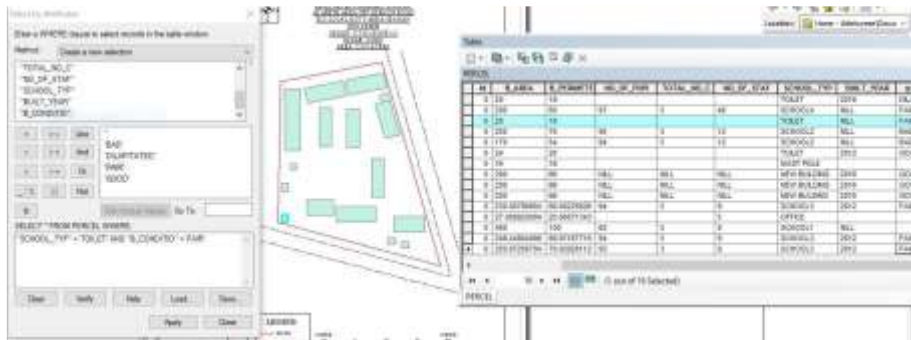*Figure 2: Composite map of Saint Peter Primary School*

Query 1: Query to show building within study area of St. Peter's Primary Sch. Apete

Query 2: Query to show good building within study area of St. Peter's Primary Sch. Apete
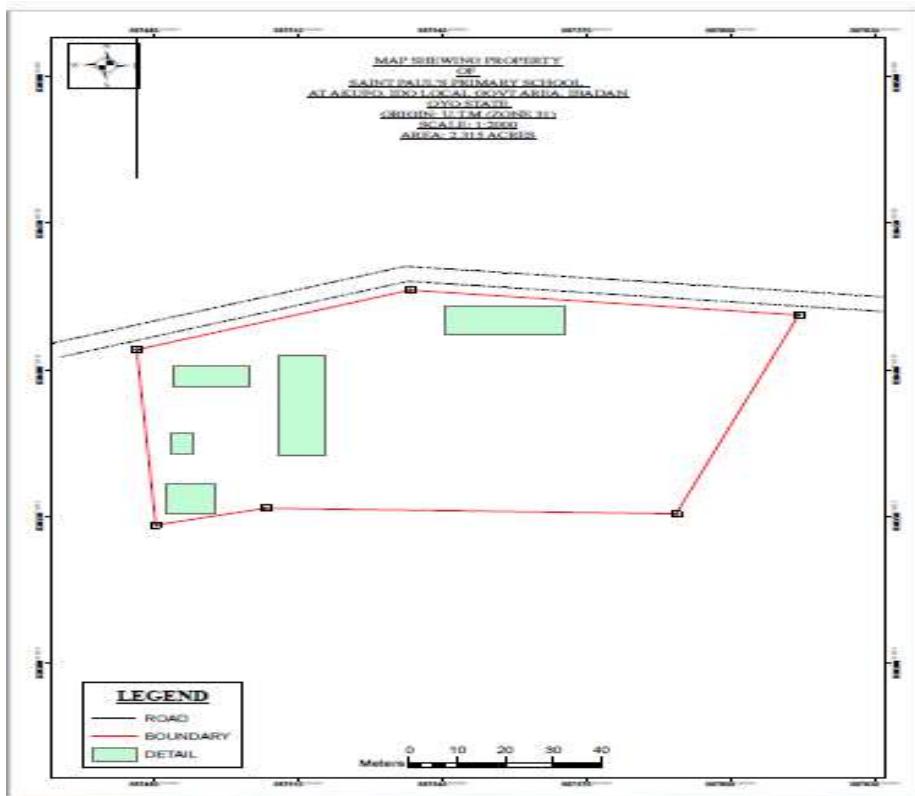

Query 3: Query to show bad building within study area of St. Peter's Primary Sch. Apete

Query 4: Query to show dilapidated building within study area of St. Peter's Primary Sch. Apete

Table 7: Attribute Table of St Paul Akufo

OBJECTID*	Shape*	Shape_Length	Shape_Area	NO_OF_CL	NO_OF_STAF	NO_OF_STUDE	B_TYPE	B_CONDITIO	B_USED
1	Polygon	40	100				TOILET	DILAPITATED	PUBLIC USED
2	Polygon	24	35	6			TOILET	UNUSED	PUBLIC USED
3	Polygon	46	112	6	15	200	CLASSROOM	UNCOMPLETE	STUDY ROOM
4	Polygon	88	340	6	15	200	SCHOOL1	FAIR	STUDY ROOM
5	Polygon	70	250	6	15	200	SCHOOL2	FAIR	STUDY ROOM

Figure 3: Composite map showing Saint Paul Primary School

Query 5: Query to show toilets building within study area of st. Paul's Primary Sch. Akufo

Query 6: Query to show dilapidated building within study area of St. Paul's Primary Sch. Akufo

DISCUSION OF RESULTS

From the result, it shows that both school has equal total area of 2.315 acres which implies that both school were given the same area of Land. Saint Peter has a total number of 450 pupils, 33 classroom which include the partitioned and non-partitioned and 48 staff while Saint Paul school Akufo has a total number of 200 pupils, 6 classroom and staff 15. The results of Data generated in this study revealed that; there is an inadequacy of Infrastructural facilities in many of the Public Primary Schools in Ido Local Government. This is due to the ineffectiveness in the area of supply of the Facilities for the Schools and this leads to poor condition of the physical environment of the Schools and un-conducive learning environment. The Facilities available in some of these Schools are in the state of disrepair, that is, they are in very poor condition, for example; the Water Facilities are not working any more, there is unhygienic condition of School environment due to disposal of Waste in any available space, and poor condition of Toilet. This is due to poor maintenance of these Facilities, which can result to outbreak of sickness and disease in the Schools. There is no good maintenance culture for the Schools in Akufo and this is due to political issues, this is because; instead of Government to repair, renovate or rehabilitate the deteriorated Facilities in the Schools, they tend to provide or construct new ones, examples of this is the issue of Classroom buildings, in which Government spend money on new buildings instead of rehabilitating the deteriorated ones. This leads to the waste of resources to be committed on other project for the School. There is very low level of Private partnership in the aspect of Facilities provision for the Schools, where the Non-Governmental Organizations (NGOs) are not supporting the Government in the aspect of Infrastructural Facilities development for the Schools and this is as a result of inadequate orientation of the importance of these Facilities to Educational Development.

CONCLUSION

This study presents two different public primary schools in Ido local government area of Oyo state precisely, St. Peter Primary School, Apete and St. Paul Primary School, Akufo. Adequate analyses were made through queries thereby enhancing decision that can be made by the government, parents/guardians. GIS technology was efficiently used to locate the number of available infrastructural facilities in the study area and analysis was carried out with GIS software ArcGIS 10.2. A GIS database was created to allow easy access, storage and retrieval of schools records on available, condition, functionality and effectiveness of the facilities which will help in future development. A thematic map showing the distribution of facilities in the selected schools in Apete and Akufo were produced. St Peter primary school has a total population of 450 pupils, 48 staff and 33 classrooms. Also, St Paul primary school has a total population of 200 pupils, 15 staff and 6 classrooms which requires an efficient planning mechanism for infrastructure to meet development growth of the schools. However, more detailed information is needed about future development, especially for public and primary schools in Oyo State in general to more accurately plan for education infrastructures.

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