ACCESSIBILITY STANDARD OF PRIMARY SCHOOL WITHIN KANKE LOCAL GOVERNMENT AREA OF PLATEAU STATE, NIGERIA

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ABSTRACT
The relevance of site planning in journey to and from school revolves around accessibility. Rural residential location is a function of accessibility and distance. Town and school planners try to ensure pupils travel distance do not affect their academic performance, hence it’s stipulated <2km a walking distance. Accessibility affect planned structure of whether clustered or dispersed in the siting of social services. There are 4 districts in Kanke LGA with public primary schools existing as Amper; 13, Ampang-east; 13, Garam; 12 and Kabwir 38 a total of 96 schools. There were no private schools during this research. A sample of 50% on each district were used for random school selection as Amper;7, Ampang-East;6, Garam;6 and Kabwir 19 to give a total of 48 sampled schools. A total of 2780 questionnaire were systematically randomly administered. Questionnaire had 2 subsections pupils travel: age, distance travel, effect of walking to and from school, travel hazard and transport modes and parents palliatives measures: reasons for low pupil assistance, etc. The 2 hypotheses used were Chi-square; school attendance is not a function of distance from home, had 26.68 using a double tailed test of df; 26.30 and 32.00 at 0.005 and 0.01 level of confident respectively. H_{i} is accepted; 69.68>32.00>26.30 as school attendance is a function of distance from pupil home. PCC test of distance reliability with 95% test of confidence; 0.05 revealed H_{i}: School attendance is affected by distance. Commendation is school planners should comply with stipulated accessibility standard, the establishment of school clinic.

Keywords: Accessibility, Site planning, Residential location and Travel Hazard

INTRODUCTION
Numerous site guidelines have been propounded but much attention is needed in the area in which educational institutions especially the primary schools could be sited (Song 2000). The relevance of site planning for proximity to school revolves around the principle of accessibility. There are two important notations in this principle: the concept of connectivity matrix, that is to be able to get to a place successfully and the time taken to reach a destination at the shortest possible time either quickly or cheaply refers as movement cost component. Lurz (2002) emphasised that if trip cost is related to distance as it is often done, there is a functional relationship between accessibility and distance. Accessibility, distance, fare and time are the major determinants of accessibility. Education plays an important role in the society. The United Nations Educational Scientific and Cultural Organisations (UNESCO) indicate that the development of education is the development of the economy. It educates the youth as lifelong learners, engaged citizens and trained workers in an intellectual activities. The location of schools is a vital decision a community must make. School boards and local government education planners use appropriate guidelines to schools (Barge, 2012). With good site decisions schools have become more than places to educate pupils, they serve as community focal points and neighbourhood anchors. Barge (2012) and Badau (2015) observed that People interact at the school site; it provides physical places for the community to gather for social events such as cultural, sporting, meetings, etc. in either the playground or classes. School location affects the social, economic and physical character of a particular town. Accessibility means “the amount of effort applied to reach a destination” or the number of activities which can be reached from a certain location” Geurs and Van Eck, (2001; 56). Moseley (2001) define accessibility as the extent to which the land-use transport system enables groups or individuals reach’ activities or destinations by means of a combination of transport models. In other words accessibility concerns both, the pattern of activities and the links between activities. The location is to be accessible if the effort taken to reach is at ease and acceptable to the target group. It incorporates not only the transport link between origin and destination but the ability for travellers and the characteristics of the destination back up by the objective of the trip.
Standards set up in the Master Plan for Abuja; MPA (1979) emphasised primary schools are to be located two kilometre distance from each other in the rural areas and distance between schools site and rural residential areas. This provides the basis limits for in spacing schools location in rural and semi urban centres. MPA (1979) reemphasized that school proximity enhance participation in the utilisation of school facilities. The neighbourhoods reciprocate devoting their attention to the maintenance and sustenance of the facilities. This strengthens the neighbourhood's sense of ownership and its willingness to maintain as well as support school programmes.

The Concept of Accessibility
Laevy (2002) asserted that the problem of inter regional allocation of facilities illustrates the role exercised in spatial planning of educational institutions. At the local level, planning is more of finding the best location for specific facilities in relation to population expectations. This relates to the ability of people to overcome the friction of distance in order to avail themselves for services at fixed points or, the ability of a mobile service to reach a targeted population has great impact on their well being (Nigeria, 2015). This same concept has not been applied in planning as a tool over the years, In the Netherlands, this concept has been considered where spatial accessibilities were measured through routes, distances, travel time and travel costs. It distinguished between composite measures, comparative measures and time-space approach. The measures are classified into observed travel/attenuation measures and objections to travel demand. Geurs and Van Eck (2001), Wakpa (2005) and Arong and Agbadu (2010) viewed accessibility in different perspectives as impacted on national land use, transport, social activities and economic indices. Focus was on service centre locations such as hospital, school, shopping malls and parking bays. These applied as:-

i. Existing facilities were assessed to estimate the catchment area threshold whether facilities were located closed or far from residential setup.

ii. The areas were examined for a single facility added to the set of existing facilities; an accessibility surface was constructed in choosing a suitable site.

iii. The decision maker made one or more proposals for a new location, either based on the existing situation with some relocations and a number of new facilities, or based on new locations.

These proposals were assessed by accessibility index in order to assert the relative quality of the different proposals. These were used in the planning of public service including primary schools. Hans Voss Institute; HVI, (2002) analyses of accessibility to primary schools in rural areas were considered on the basis of impact of schools location in both the short and long-run of San Francisco bay area and King county, Washington DC in the United State of America; USA. This integrates accessibility measures in every new town. Computers were used to analyse accessibility to public buildings and playgrounds (www.oregon.gov.LCD.TGM/docs/schoolsitinghandbook).

Components of Accessibility
Moseley (2001) stressed that the basic notion of accessibility embraces three components as

i. People, the residents of rural areas;

ii. The activities or services require;

iii. The transport or communications link between the two

Accessibility Relationship to Public Facility
A good public facility has relationship with accessibility. Dehua, (2001) explained that a compacted neighbourhood resulted for more people benefited from common facilities as noticed in urban centres and dispersed settlements to few people benefited. Therefore, locating facilities improve the quality of livelihood, motivated commuters to create fewer trips. This is seen in Figure 2.
Figure 2 shows a residential district (1) comprises several residential quarters (2), a residential quarter is made of several housing clusters (3) Layout and housing cluster were designed to accommodate between 1000 - 7000 people. Their opportunity pools in which resources are unevenly distributed and people used different degree of access gave the structure of the neighbourhood. Resources represent "income" to those who benefit. Nigeria (2015) realised how different degrees of access to spatial opportunities will affect the real income of different groups. The relationship between the location of the services (supply) and the location of the settlement use these services (demand) adhered to opportunity pool. School resources including quality and capacity of inevitable limited service enjoy. Leonardi, (2001) illustrated the need for accessibility standard to schools created the necessary attention in its spatial location pattern in twofold as:-

i. High commuters demand reduced transport cost.

ii. It reduces the cost of access and the number of facilities to be established.

Criteria to Site Primary Schools

According to MPA (1979), Onokeroheraye (1977), Fafunwa (1992), Danbatta (2005), Barge (2012) and Nigeria (2015) emphasised that primary schools be sited in an area based on the following guidelines:

i. The educational needs: - before selecting a school site, a futuristic plan for the total school leaver per year, the in-take per year for some years is determined. The teachers’ employment and the long-run growth of pupil volume. This gives the necessity of the project amongst alternative and its facilities in the society.

ii. School enrolment: - Total pupils both boys and girls in-take each year and the total capacity in-take for some years (5-10) determined the vitality of infrastructural planning by town planner, architects, educational planners. It also determines the designed that the learning spaces are sufficient to threshold usage; not congested, noisy or risk to children.

iii. Central location: - The location must be accessible to pupils within < 1km in cities and less than 2km in town/villages. Mapping and aerial photos may be used to determine the centre of the site, access roads, local community roads, pupils’ residence, industrial areas, existing schools, and undeveloped areas that are for potential areas school location. A trekking distance of between 400- 800 metres from the pupils’ residence to school should be observed,

iv. Safety: - the school site must be noise, odour, dust and pollution free. Business distractions, health hazards or dangerous places such as ponds refuse domed, a hoodlum, etc is considered.

v. Demography: - pupil ages and sex in the locality where the school is to be located be consideration vis-s-vis mortality, birthrate etc in terms of forecasting the future population. Population of the area: An area having a population of <1000 people and above is expected to have a primary school sited therein.

vi. Social demand: - the local people need education, they request for education and schools. The rate of teachers and school leavers in the community determine the post-primary school planning.

vii. Topography: - Land terrain and its capacity at present as well as in future must be ascertained; land value, its size, vegetative cover, water supply are relevant.

viii. Weather conditions: - the dry and wet seasons, rainfall volume, temperature, humidity, sunshine, and studied to plan for academic calendar. This determines the kinds of structures and facilities that will be set up, the kinds of building materials, etc. used.

ix. Site development: - consideration of the master plan to distance cover from residential areas, time travel,
and transport modes in cognizance to the town growth. It involves its relevance to holistic expansion to facilities such as sports area, staff quarters, future expansion, etc.

x. Environmental Conditions for example suspected hazardous industrial, municipal waste disposal site, commercial, industrial, military, government facility where toxic chemicals were used, stored or disposed. Refineries, mines, scrap yards, factories, dry cleaning facilities, sites where there have been chemical spills or other significant contamination and waste water site found to be within 1000 metres, that is, one kilometre of any of these potential sources of contamination, schools should not be sited in such area.

MATERIALS AND METHOD

This section discussed the study area, data collection, sampling and questionnaire administration.

Study Area
Kanke Local Government Area; LGA has a total land area of about 1.012 km² (Jiwul, 200). It lies between Latitude 9° 11' North and Longitude 8° 29' East of the Greenwich meridian. Kwall is the administrative headquarters and composed of 4 districts, namely: Ampang-East, Amper, Garam and kabwir. It is bounded by Bogoro and Tafawa Balewa LGA’s in Bauchi state at the North, KanamLGA to the East, Langtang North LGA to the South and Pankshin LGA to the West; See Figure 3

Fig. 3: Map of Plateau Showing Kanke Local Government Area
Source: Department of Geography and planning, University of Jos (2018)

The study area is approximately 73% rural areas with only 27% urban centres within the districts and LGA headquarter. Both setting have their schools manage within the public/government setting. Rural settings are either dispersed within the mountain ranges or within the plains. In contrast, the urban centres are either compact or linear with streets in some quarters and unplanned areas in some quarters with the chief (Ngolong) as the traditional head of elders council. The schools in urban centres have high volumes of large land area with facilities of sports, academic accommodation and utilisation for community festival arena (Nefur).

The districts are basic instrument for the dissemination of government policies and programmes. District headquarters are major towns with much physical development of both social amenities and some infrastructures such as schools, roads, telephones, electricity, primary healthcare, courts, markets(seasonal- weekly), etc. Each district comprises many villages settled in both the mountain ranges and the plain at the basement of the mountains. The area is characterised with valleys, rocks and rugged terrain, and most routes estimated (88%) are untarred. The people of the area are the Ngas Speaking ethnic group.

Kanke LGA has an estimated population of 96,294 people, made up of 46,635 males and 46,659 females at national annual growth rate of 2.8% (National Population commission; NPC, 2006). This is projected from 2006-2017 as Seen Table 1.
Table 1: Projected Population of Kanke LGA

<table>
<thead>
<tr>
<th>Year</th>
<th>2006</th>
<th>2009</th>
<th>2012</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population</td>
<td>65,418</td>
<td>107,542</td>
<td>116,832</td>
<td>134,129</td>
</tr>
<tr>
<td>Male</td>
<td>31,682</td>
<td>50,663</td>
<td>55,034</td>
<td>63,183</td>
</tr>
<tr>
<td>Female</td>
<td>33,736</td>
<td>56,879</td>
<td>61,798</td>
<td>70,946</td>
</tr>
</tbody>
</table>


Table 1 above shows projected of people population people in Kanke LGA from 2006 is the Census year while, 2009 2012 and 2017 are the projected years. This is considered at the yearly interval of 3 years and population increases from 2006 - 2015. There is increase in the population of the study area with female population increases more than male.

Methodology

A reconnaissance was conducted to enable the researcher be familiarised with the schools, determined the best time to get the pupils and to seek for any assistance from the Headmasters. A recce of 96 primary schools were conducted, and data on the number of pupils in each school. The population of the pupils was compiled according to the four districts in the local government; starting with the list of schools and their enrolment. The sample size is aimed at maximising the preparation and effective administration of the questionnaire. As a result, out of the 96 primary schools in the local government area, sample size of 48 was systematically randomly selected taken represented 50% in each school of the district. The number of primary schools selected from each of the four districts was also meant to represent 50% of the schools as shown in Table 2.

Table 2: Sample Size

<table>
<thead>
<tr>
<th>Districts</th>
<th>Number of schools</th>
<th>Percentage (%)</th>
<th>Sample size (50%)</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amper</td>
<td>33</td>
<td>34</td>
<td>17</td>
<td>35</td>
</tr>
<tr>
<td>Ampang – East</td>
<td>13</td>
<td>14</td>
<td>6</td>
<td>13</td>
</tr>
<tr>
<td>Garram</td>
<td>12</td>
<td>13</td>
<td>6</td>
<td>13</td>
</tr>
<tr>
<td>Kabwir</td>
<td>38</td>
<td>39</td>
<td>19</td>
<td>39</td>
</tr>
<tr>
<td>Total</td>
<td>96</td>
<td>100</td>
<td>48</td>
<td>100</td>
</tr>
</tbody>
</table>

Table 2 showed that out of a total of 96 schools in the study area, 48 were sampled (See Table 2). Propulsive random sampling technique was used to administer 2,904 questionnaire out of which, 2,780 was retrieved. The questionnaire is divided into 2 sections;

a) Addresses socioeconomic characteristics of respondents and
b) Takes care of accessibility/distance to and from school.

The questionnaires had a total of 36 structured questions. A total of 5 field assistants were recruited in each town and villages to help with questionnaire administration and to overcome the barriers of communication. Questionnaires were administrated to pupils as parents and teachers assisted in acquiring the data (home and school area). A total of 23 days was spent on the field as it was administered one district at a time. Data was subjected into SPSS coding of various variables and later interpreted in statistical inferences.

RESULTS AND DISCUSSION

The information needed to determine the accessibility standard of primary school in the study area is divided into 2 namely; pupil school session and parents assistances.

Pupil School Session

The pupil school session include: age range, distance travel, transport modes, distance travel, effect of walking to and from home.

The age of pupils were inquired during questionnaire administration in the selected sampled school in Kanke LGA. This is range in age within 5-16 years as seen in Table 3.
In Table 3 pupils ages fall within the range of 5-16 years. Of these age bracket, 9-12 age had the highest respondents of 64.06% while 13-16 age range had 767 respondents with a proportion of 27.59%. Those between the age ranges of 5-8 age had 232 respondents with a proportion of 8.35% being the least. It depicted that 9-16 years old (9-12 and 13-16 age ranges had 91.65% (64.06+27.59) that are strong and wise enough to engage in trekking within 0-2km to school. It also depicted that the older pupils catered for 5-8 age range when walking during school session. That has been the reason for no travel problems encountered by younger pupils in the study area. Distance travel by pupils to school was inquired during the data collection in this research. This is seen in Figure 4.

Figure 4 revealed that the largest proportion of movement by the pupils falls within the range of 401-600 metres which is 36% proportion, seconded by 0-200 metres and 201-400 metres travel distance having 30% and 22% respectively. Volume of movement to a particular destination is a function of distance. The shorter the distance, the more the volume of pupil or the least the volume of movement, the longer the distance covered. In other words, it is known as distance- biased movement, thus, it is the movement in which the intensity of movement is an inverse function of distance.

The effect of walking everyday to and from school was asked to ascertain their endurance performance, as in Figure 5.

Fig. 5: Effect of walking to and from School
From the Figure 5, 112 respondents with 4.03% proportion of those who walk to school complaint of tiredness, while 2593 respondents having a proportion of 93.27% did not complaint of fatigue, the remaining 75 respondents did not response with a proportion of 2.70%. Indeed tiredness affect academic performance of pupils (see table 4; Yes had 112 respondents with 4.03%) as noticed in the Figure 6.

Fig. 6: Travel hazard amongst pupils

In Figure 6, a total of 112 respondents of pupils affected by walking to/from school (see Table 4). In this regard complaint of headache had 53 respondents (47.4%), seconded by complaint of catarrh/cold and complaint of fever with 27 respondents (24.5%) and 23 respondents (20.4%) respectively.

Although very few pupils (see Figure 5; Yes) had travel hazard, there is daily travel hazard encountered by pupils. There was inquiry on the transport modes use by respondents to and from school during the questionnaire administration. The detail is in Table 4.

Table 4: Transport Modes

<table>
<thead>
<tr>
<th>Means of Transport</th>
<th>To school Freq</th>
<th>To school Percent</th>
<th>From school Freq</th>
<th>From school Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Walking</td>
<td>2,419</td>
<td>87.01</td>
<td>2,516</td>
<td>90.50</td>
</tr>
<tr>
<td>2. Commercial Motorcycle</td>
<td>65</td>
<td>2.34</td>
<td>35</td>
<td>1.26</td>
</tr>
<tr>
<td>3. Private Bicycle</td>
<td>100</td>
<td>3.60</td>
<td>100</td>
<td>3.60</td>
</tr>
<tr>
<td>4. Private Motorcycle</td>
<td>153</td>
<td>5.50</td>
<td>95</td>
<td>3.42</td>
</tr>
<tr>
<td>5. Family car</td>
<td>27</td>
<td>0.97</td>
<td>20</td>
<td>0.72</td>
</tr>
<tr>
<td>6. Commercial car/ bus</td>
<td>16</td>
<td>0.58</td>
<td>14</td>
<td>0.50</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>2,780</strong></td>
<td><strong>100</strong></td>
<td><strong>2,780</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

Table 4 revealed transport modes to and from school used by pupils. It’s conspicuous that both walking to and from school had the highest with 2419 respondents (87.01%) and 2516 respondents (90.50%) respectively. It showed the area is a rural setting where walking is safe and convenient to younger children. The major means used no matter the nature, distance and its environmental/physical features. Walking “to school” is seconded by private motorcycles with 65 respondents (5.50%) and Bicycle ridership with 100 respondents (3.60%) while going to school with 65 and 16 respondents of 2.34% and 0.58% respectively. Walking “from school” is seconded by private motorcycle with 153 respondents (5.50%) and bicycle ridership with 100 respondents (3.60%). Bicycle ridership is consistent in both to and from school trips. The least is family car with 20 respondents having a proportion of 0.72% and commercial car with 14 respondents with a proportion of 0.50%. It shows that parents assisted pupil “to school” to ensure promptness to time, reduce fatigue for daily academic onset and perhaps take advantage of their way to work to give a lift. In the daily academic offset, pupil had to adapt to walk (see walking to and from school with 2419 respondents: 87.01% and 2516 respondents: 90.50% respective difference). Apart from the bicycle mode being consistent, all other modes had lower.
patronage from school trips amongst pupil by bicycle as means to ease travelling during school session.

**Parental Assistance**

This comprises income structure estimated; Parent palliative measures and Reason for low travel assistance are discussed below. Table 5 revealed the estimated income range inquired by parents.

<table>
<thead>
<tr>
<th>S/No</th>
<th>Income range (₦) estimated</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>10,000-20,000</td>
<td>420</td>
<td>15.1</td>
</tr>
<tr>
<td>2</td>
<td>20,001-40,000</td>
<td>1,005</td>
<td>36.2</td>
</tr>
<tr>
<td>3</td>
<td>40,001-60,000</td>
<td>950</td>
<td>34.2</td>
</tr>
<tr>
<td>4</td>
<td>60,001-80,000</td>
<td>180</td>
<td>6.5</td>
</tr>
<tr>
<td>5</td>
<td>80,001 above</td>
<td>50</td>
<td>1.8</td>
</tr>
<tr>
<td>6</td>
<td>Un-estimated</td>
<td>175</td>
<td>6.2</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>2,780</td>
<td>100</td>
</tr>
</tbody>
</table>

The study revealed in Table 5 that out of the 2780 respondents, 36.2% of the pupils’ parents earned between N21,001-N40,000 per annum with 1005 respondents, while 34.2% earned N41,001-N60,000 per annum had 950 respondents, 15.1% earned N10,001- N20,000 per annum had 420 respondents and 6.5% earned N61,001-80,000 per annum had 180 respondents. A surprise unestimated yearly earned of 6.2% had 175 respondents. The latter are farmers that could not ascertain their annual estimated earnings. It shows < N60,000 per annum with a sum of 2,175 respondents (1005 + 950 + 420) with a proportion of 85.5% (36.2 + 34.2 + 15.1%). Parents strive to introduce measures meant to reduce pupil problems to school is seen in Table 6.

**Table 6: Parent Palliative Measures on Pupils Travel**

<table>
<thead>
<tr>
<th>S/No</th>
<th>Travel measures</th>
<th>Freq</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Family change resident</td>
<td>31</td>
<td>1.12</td>
</tr>
<tr>
<td>2</td>
<td>Only pupil change resident</td>
<td>37</td>
<td>1.33</td>
</tr>
<tr>
<td>3</td>
<td>Bicycle ridership</td>
<td>100</td>
<td>3.60</td>
</tr>
<tr>
<td>4</td>
<td>Travel assistance/lift</td>
<td>28</td>
<td>1.01</td>
</tr>
<tr>
<td>5</td>
<td>Other measures</td>
<td>07</td>
<td>0.25</td>
</tr>
<tr>
<td>6</td>
<td>No measures</td>
<td>2669</td>
<td>92.70</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>2780</td>
<td>100</td>
</tr>
</tbody>
</table>

Table 6 shows the measures taken by parents to reduce pupil travel hardship from the table “No measures” taken had 2667 respondents with 92.70% being the highest proportion. Measures such as “Only pupil change resident” and family change resident had 37 and 31 respondents with 1.33% and 1.12% respectively. The least were travel assistance/lift and other measures with 28 respondents (1.01%) and 7 respondents (0.25%) respectively. The table showed bicycle mode of 100 respondents with 3.60% proportion. “No measures” expressed the physical nature of the area is conducive for walking in the rugged terrain of mountain, valleys, footpaths and along the pedestrian walkways as safe to both the pupils and the parents who encourage their wards.

The nature of economic condition affects parent assistance during academic session as seen in Table 7.

**Table 7: Reasons for Low Pupil Travel Assistance**

<table>
<thead>
<tr>
<th>S/No</th>
<th>Low Travel Assistance</th>
<th>Freq</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Family size</td>
<td>163</td>
<td>05.86</td>
</tr>
<tr>
<td>2</td>
<td>House proximity</td>
<td>678</td>
<td>24.39</td>
</tr>
<tr>
<td>3</td>
<td>Heavy breakfast</td>
<td>396</td>
<td>14.24</td>
</tr>
<tr>
<td>4</td>
<td>Low income</td>
<td>1091</td>
<td>39.25</td>
</tr>
<tr>
<td>5</td>
<td>Inherited house</td>
<td>150</td>
<td>5.40</td>
</tr>
<tr>
<td>6</td>
<td>Others reasons</td>
<td>302</td>
<td>10.86</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>2780</td>
<td>100</td>
</tr>
</tbody>
</table>
Table 7 detailed the reasons for low travel assistance for pupils within the study area. Low income being the salient reason comprises of peasant farmers, traders, artisans; craftsmen of pottery, cobbler, technicians, mat weaver, etc of low economic strata had 1091 respondents (39.25%). House proximity to school or schools sited close to and within the villages/towns had 678 respondents (24.39%). The least measures were other reasons that consist of house location, school location, constructed the house before the school siting, house close to water sources; spring, stream, well areas, the only school in the area and others were lump together with 302 respondents (10.86%), family size had 163 respondents (5.86%) and inherited house/land had 150 respondents (5.40%). Hence, parent had two views of either by encouraging the pupil to persevere on walking to school or to take very confirmed limited travel assistance to commensurate socioeconomic and environmental factors.

**Accessibility Relationship with Distance**

Hypothesis addressed distance variations of the pupil's residence to school. These have two hypotheses as;

a. **Reliability test of Location and distance**

The technique of analysis used is Chi-square and Pearson Correlation Analysis; PCA showed the relationship between distance and other factors that will determine the attendance of pupils to school.

- $H_0$: There is no significance difference between house location and distance covered by pupils.
- $H_1$: There is significance difference between house location and distance covered by pupils.

The SPSS software was used in running the Chi-square test between the variables location and distance. The calculated chi-square is 69.68, using double tailed test degrees of freedom (df) is 26.30 and 32.00; at 0.05 and 0.01 levels of confidence respectively. $H_1$ is accepted; since the calculated chi-square value is greater than the table l value at both level of confidence; 69.68 > 32.00 > 26.30. So distance affected the location of school from pupils home. Home location is far from school based on (87.01% to and 90.50% from school) trekking mode as distance is travel does not considered the minimum distance of <2km from home as stipulated for the location of rural school. This means there is a good relationship with homes close to school and pupils high consistent attendance that improve academic performance in both the short-run and long-run. Daily attendance means daily learning and desire to learn, hence pupils must have daily punctuality to brace up.

The paper showed 6 travel modes prevalent amongst pupils during school session, with walking (87.01% to school and 09.50% from school) being the major means. Walking has become necessary to have compelled parents to introduce palliative measures and pupils being adaptable to walking (No palliative measure 92.70%); with no tiredness (93.27%) in age interval of 5-16years. For that this paper commended the need for Kanke LGA to revisit site of school with the affirmation that the stipulated 2km walking distance is complied; school site should be within the community/ neighbourhood. More so there is the need to have school clinic in a school. This will enable pupil to be accessible to treatment due to travel hazard, etc. It is therefore realised that pupil encountered travel challenge during school session in the study area and this affect parent and the pupil health. The LGA administration, geographers and, town and school planners ought to revisit the challenge. The essence is to ensure good planning with least or no challenge.

**CONCLUSION**

Accessibility has been a daily routine to and from schools as encountered by pupils. Distances are covered whether short (<100m) or long (>2km) revealed the task of travelling was based on (87.01% to and 90.50% from school) trekking mode as it occurred in both pleasant and unpleasant weather. This is the core concern for effectiveness, hardwork and overall academic success; punctuality to school by each pupil. To site a school all the preconditions were spelled—out for adequate planning to facilitate effectiveness. Wakpa (2005), Barge (2012) and Nigeria (2015) Distances from pupils residence is a tangible challenge and daily school assistance by parents to ensure pupil overcome late coming, weather and attain academic success is key. For this, the hypothesis posits consistent schools attendances is not a function of distance the pupil travel. Hence pupils brace-up to the challenges of travel distance by being punctual, consistence, dedicated, in their time set-out and time set-in as the adaptable variables. The component of accessibility and its relationship to public services elaborated a lot on their functionality. This is benefited by its location as its affected public social services. In this research the location of primary school have affected pupils to trekked (87%). Hence they are affected by either fatigue or fever etc due to the climate variables on their way to and from school. Although parents strive to alleviate the hazards, their income is
weak (20,000 - 60,001 Naira per annum) and is not based on monthly enumeration.

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