African Journal of Environment and Natural Science Research
ISSN: 2689-9434
Volume 5, Issue 2, 2022 (pp. 36-52)
www.abjournals.org

AN ASSESSMENT OF THE SPATIAL DISTRIBUTION OF INFRASTRUCTURAL FACILITIES IN THE NORTHERN SENATORIAL DISTRICT OF TARABA STATE, NIGERIA

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Cite this article:

Abdullahi I., Bwadi E.B., Andenum M. (2022), An Assessment of the Spatial Distribution of Infrastructural Facilities in the Northern Senatorial District of Taraba State, Nigeria. African Journal of Environment and Natural Science Research 5(2), 36-52. DOI: 10.52589/AJENSR-QF9QA6KS

Manuscript History

Received: 10 Oct 2022

Accepted: 18 Nov 2022

Published: 6 Dec 2022

ABSTRACT: *The distribution and location of infrastructural facilities are important indicators of government involvement and democratic accountability dividends throughout developing rural areas. This study assessed the spatial distribution of infrastructural facilities in the Northern Senatorial District of Taraba State. Utilising the Growth Pole theory and the exploratory research design, the study adopted the quantitative and qualitative methods comprising of questionnaire administration, interviews, and observations and the handheld GPS device to get coordinates for ArcGIS spatial analysis to carry out the study in three local government areas (Ardo Kola, Lau, and Zing LGAs) purposefully selected from the district. The Krejcie and Morgan determining sample size statistics were used to generate a study sample of 384 from a projected population of 415,100 in the three local government areas. The study found that even though the infrastructural facilities have yielded positive development in the areas, they are located based on government projected interests. It concludes that infrastructural facilities should be dispersed fairly to benefit the general public, particularly in areas in desperate need. It is also suggested that the government should support host communities' efforts to maintain public facilities.*

KEYWORDS: Facilities, Distribution, Infrastructural, Spatial.

Article DOI: 10.52589/AJENSR-QF9QA6KS
DOI URL: https://doi.org/10.52589/AJENSR-QF9QA6KS

INTRODUCTION

Nigeria, although having vast natural and material resources, suffers from development issues, particularly in rural areas. Infrastructural facilities in Nigeria's rural communities are neglected (Oruonye, 2022). The infrastructure required for a comfortable existence is concentrated in metropolitan areas. While metropolitan areas have access to amenities like health care, education, electricity, and piped water, rural areas, which contribute significantly to Nigeria's non-formal economy, have remained underdeveloped due to government indifference.

Various Nigerian administrations have implemented rural development initiatives in the past to change rural areas into more productive areas of the country, but more is still needed (Oruonye, 2013). Many of the existing infrastructural facilities are out of date and deteriorating due to a lack of upkeep. The poor state of infrastructure in rural parts of Taraba State has had a cascading effect on rural people's social and economic circumstances (Oruonye & Bashir, 2011). Rural-urban mobility and low productivity in food production are some of the consequences of poor infrastructure, resulting in food insecurity for both rural and urban populations.

The situation in Taraba State's rural areas is no different. Almost every section of the state has the essential resources to promote development. In this context, Mohammed and Oruonye (2021) stated that significant amounts of natural resources have remained untapped to boost industry and agricultural growth. The incessant disputes in Taraba State are a result of the failure to harness the resources' spillover consequences. Intriguingly, these clashes have erupted in rural areas across Taraba State, wreaking havoc on infrastructural facilities that are already in poor shape. This condition also explains the poverty that is so prevalent in Nigeria's rural areas.

The rural population has a low level of human capital development, and the government's efforts to harness natural and material resources in various sections of the state have remained central for development (Oruonye, 2022). Rural areas are a key component of food production, according to Danladi, Oruonye, Wilson-Osigwe, and Bala (2021). They explained in their study how food production in Zing is insignificant due to large disparities in population agricultural activity in maize production. They urged the government to assist farmers in the affected areas. Oruonye (2014) highlighted the level of growth in the area in his research on the geographical elements of Jalingo. Even though Jalingo, as the state capital city, has seen some infrastructural development, the majority of the city is peri-urban and rural. Enordi and Albert (2016) expressed worry about poor farmer productivity in Taraba State, citing poor soil fertility, lack of funds, land tenure issues, and poor road networks as obstacles that plague rural areas.

Despite differing scholarly perspectives on the difficulties confronting Nigeria's rural areas, particularly Taraba State, the evaluation of infrastructural amenities in Taraba State has received insufficient attention in academic and policy circles. The scarcity of research on infrastructural facilities in Taraba State, particularly in the Northern Senatorial Zone, makes this study all the more important. The vastness of the issues associated with infrastructural facilities is evident from preliminary findings. People who have to travel a long distance to obtain facilities that should be close to their homes are among these issues. As a result, this

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study is set to make an assessment of the spatial distribution of infrastructural facilities in Northern Taraba State.

Conceptualising Rural Areas and Rural Development

Rural Areas

The term "rural" denotes a location with an agricultural focus; the houses are farmhouses, barns, sheds, and other similar things. According to Olisa and Obiukwu (1992), the population is the most important factor that distinguishes rural from urban areas, particularly in developing countries. Rurality is divided into two categories: population-based factors and geography-based factors. Small population size, sparse population density, the prevalence of primary activities (particularly agriculture), distance from an urban centre, settlement pattern, and labour market factors all contribute to the perception of rurality. A tiny town in a poorly populated municipality is "rural," and a city in a heavily populated municipality is "urban," according to most people (Cromartie & Bucholts, 2012). The rural settlement, according to Ambe, Imoke and Oba (2018), is defined as an area with a population of fewer than 20,000 people. Primary activities such as farming, hunting, fishing, weaving, blacksmithing, and other informal vocations are carried out in rural villages.

The term "rurality" is a relative one that can be defined as follows: It refers to an area with a low absolute number of people and a low population density, as well as specific socioeconomic criteria. There isn't always an official definition of "rural." The ones that are regularly used differ greatly. In most circumstances, rural is handled as an afterthought, as it is not considered "urban" (USDA, 2015). Life expectancy rates in urban areas are higher than in rural areas, while rural areas often have fewer job options and higher unemployment rates than metropolitan areas in terms of working conditions. Farming, forestry, hunting, fishing, weaving, and blacksmithing are examples of physical occupations (Pong et al., 1999; Heath & Szpilfogel, 2002).

Rural Development

The terms "rural development" and "community development" will be interchanged to refer to the same thing. The concept of rural or community development has a fairly broad scope. Agriculture, health, education, rural infrastructure provision, social life, political and economic challenges, commerce and industry, and their integration into the national economy are all part of this multifaceted process. Because the notion has such a broad breadth, it can effectively achieve sound national development in all of its ramifications. Policy makers and development planners frequently associate rural development with agriculture. To address this misconception, a full understanding of the term by scholars in the field of rural development is required.

Because the term "rural development" has such a broad connotation, it is expected to speak about an integrated approach to its description. According to the Mijindadi (1978), integrated rural development is a composite or comprehensive rural development programme in which all relevant sectors, such as agriculture, education, housing, health, and employment, are envisioned as interlinking elements in a system with horizontal and vertical operational and spatial linkage. The concept of rural development, according to Aziz (1979), should be understood as a holistic concept that emphasises the complexity and interconnectedness of

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the various variables that influence the quality of life in rural regions. It is a multifaceted process that includes the interaction of economic, social, political, cultural, technological, and other contextual elements.

As a result, for the concept to be realised, these variables must be integrated with local government policies and plans aimed at enhancing the quality of life of people in rural areas. Furthermore, according to Mabogunje (1981), rural development is concerned with the self-sustaining improvement of rural areas and entails a broad-based reorganisation and mobilisation of the rural masses to improve their capacity to cope effectively with the daily tasks of their lives and the changes that result. According to Gana (1996), rural development is significant not just for its influence on rural locations and people, but also for its contribution to the nation's overall development. In Nigeria, where the vast majority of people and land are rural, and rural output is extremely poor, rural mobilisation is the quickest and most direct path to national growth. This would necessitate the adoption of appropriate technology to increase rural productivity and resource efficiency, as well as the development of an efficient rural-urban transportation network to ensure easy transportation of agricultural produce for mass food production and the supply of industrial raw materials.

The Growth Pole Theory: A Framework for Analysis

This study used the Growth Pole Theory. Francois Perroux first proposed the Growth Pole idea in 1949. It was first implemented in 1955 as part of French economic planning to revive the French economy with rapid development in a short period. Perroux was interested in the phenomenon of economic development and the process of structural transformation as a source of propulsion. The theory is based on an inductive economic model with spatial analysis (Perroux, 1950). According to the theory, the spatial distribution of economic activity does not fluctuate around a long-term equilibrium norm but instead tends to encourage the concentration of growth in one area at the expense of others (Misra & Sundaram, 1973).

Perroux (1950) stated that growth does not come everywhere and all at once. It appears in places or development poles, with varied intensities; it travels along diverse channels and with varying terminal impacts on the entire economy. According to Perroux's idea, a growth pole is an economic space that consists of centres (or poles or foci) from which centrifugal force emanates and centripetal force is attracted. Each attraction and repulsion centre has its field, which is positioned in the field of the other centre. The theory was primarily concerned with the phenomenon of economic progress as well as the structural transformation that followed it.

The fundamental policy conclusion of Parroux's theory is that the government should create counterpoles to those that have emerged in faster-growing regions as a result of market forces, to harness polarisation in the future to benefit less-developed regions. The rationale for this is that economic development or growth does not occur uniformly throughout a territory, but rather occurs around a curtain pole (cluster). As a result, growth poles, metropolitan centres, and growth axes were identified as the three primary types of polar concentrations (González, 2004; Vinuela-Jimenez, Rubiera-Morollon & Cueto, 2010).

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As a result, the growth pole evolves, as economic growth promotes various sorts of geographical concentrations (Petrakos & Psycharis, 2004). The theoretical construct of the "new economic geography" emphasises increasing returns to scale due to geographic concentration (Krugman, 1999), the effect of transportation and the role of hubs in the formation of dynamic urban centres (Fujita & Mori, 1996), industrial spatial organisation and concentration economies (Krugman & Venables, 1996), as well as the role of cities and urban networks in the global economic system and commercial reorganisation (Fujita & Mori, 1996). Despite the difficulty of adapting these approaches to national and regional levels of spatial development planning, they provide new evidence for the explanation and dynamics of spatial organisation, which should be considered in any growth plan (Clinch & O'Neill, 2009; Vinuela-Jimenez et al., 2010).

Although the theory emerged to explain a case-specific situation, which is regional development in France, it has been used to study regional development in other countries, including Nigeria (Mabugunje, 1971). Beyond regional development, the Parroux is plausible to understand the context of rural development in Taraba State. Fundamentally, the theory posits that no region develops equally in terms of spatial population, economic growth, and geographic elements. It is also in this context that the theory divides a region into metropolitan centres and peripheral areas to explain the different levels of concentrations of growth and development. The selected study areas (Ardo-Kola, Lau, and Zing Local Government Areas) in terms of growth and development are not the same, even though they are rural areas. Compared with the state capital city – Jalingo, it clearly shows a differential in the level of growth and development, particularly the state of infrastructural growth and development. Therefore, the plausibility of the theoretical construct of growth poles in understanding and assessing the infrastructural facilities of rural areas in Taraba state cannot be underestimated.

Materials and Methods

The Study Area

Taraba state is Nigeria's second-largest in terms of landmass, and it is located in the southern section of the country's northeast, along the eastern borderland with Cameroon. The state is roughly located between latitudes 6o25'N and 9o30'N, and longitudes 9o30'E and 11o45'. Nasarawa and Plateau states border it on the west, Bauchi and Gombe states on the north, and Adamawa states on the northeast (Figure 1). While Taraba State shares a border with Benue State in the southwest, it is also bordered on the south and southeast by the Republic of Cameroon (an international boundary). The state has a total land area of 60,291 km2. For the sake of convenience, the research region has been restricted to the Northern Senatorial Zone of Taraba State, which consists of six local government areas (Ardo-Kola, Jalingo, Karim-Lamido, Lau, Yorro, and Zing).

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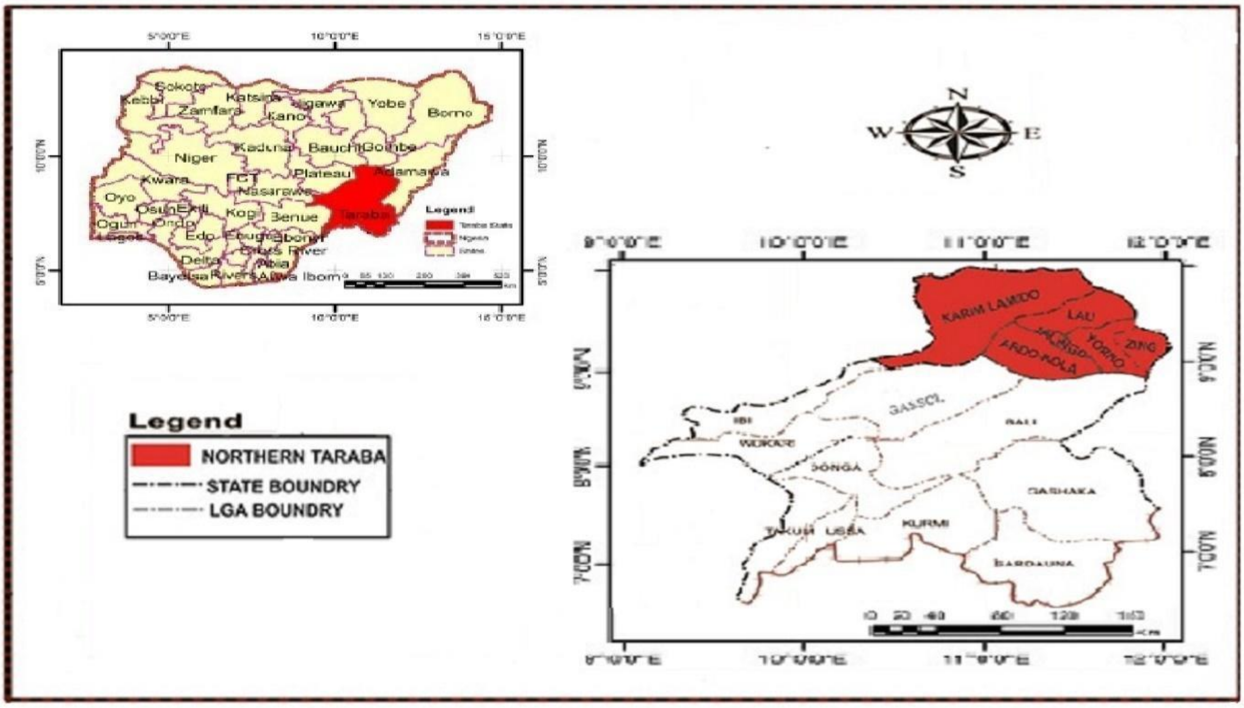

Figure 1: Map of Taraba State showing the study area. Source: Author, 2021

From the six local government areas that make up the Northern Senatorial Zone, three local government areas, which include Ardo-Kola, Lau, and Zing LGAs have been selected for the study. According to the 2006 National Population Commission (NPC) population census, the three local governments have a combined population of 310,659 people (NPC, 2006). However, according to the City Population site's 2016 population projections, the combined population of the study regions is 415,100. Table 1 shows the population of selected areas in Taraba State's Northern Senatorial Zones.

Table 1: Population of the selected areas in the Northern Senatorial Zones of Taraba State.

Name	Population Census, 2006-03-21	Population Projection, 2016-03-21
Taraba State	2,294,800	3,066,800
Ardo-Kola LGA	87,784	117,300
Lau LGA	95,190	127,200
Zing LGA	127,685	170,600
Total LGA Population	310,659	415,100

Source: NIGERIA: Administrative Division, States and Local Government Areas, https://www.citypopulation.de/php/nigeria-admin.php

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As rural areas, agriculture is the main source of income for the people residenced in the Northern Senatorial District of the state. Maize, guinea corn, millet, rice, cowpea, peanut, melon, yam, and cassava are among the crops grown in the areas. Animal husbandry is also a popular pastime among the locals. Cattle, sheep, and goats are some of the animals that people raise (Oruonye & Adebayo, 2015).

METHODOLOGY

This study adopted the exploratory-sequential approach in assessing the infrastructural facilities in the rural areas of selected local government areas in the Northern Senatorial Zone of Taraba State. The use of the research design is informed by the fact that it requires the use of qualitative findings merged with quantitative analysis (Creswell, Plano & Clark, 2011). Data collection was in phases from primary sources using questionnaires, observations and interviews. The first phase was a collection of qualitative data on the condition of the infrastructural facilities and the level of management of those facilities in the North-Senatorial Zones. The second phase involved administering the administered questionnaire after establishing a better understanding of the condition of the facilities and developing themes to elicit data and finally combining the data to expand on the preliminary qualitative exploratory findings. The qualitative exploratory findings drawn from interviews and observation provided a wealth of information regarding the lived experiences and perspectives of the participants on the state of the infrastructure in Ardo-Kola, Lau, and Zing LGAs.

The sampled population for this study using the Krejcie and Morgan sample determinant was 384, generated from 415, 100 populations of the LGAs put together. The sampled population for each LGA was determined by applying a simple percentage mathematical formula to convert the population of each LGA to the percentage of the total population of the study. Subsequently, the sample for each was arrived at by converting the percentage multiplied by the enumerated from 415, 100 populations of the LGAs put together. Table 2 presents the sample size of each LGA selected for this study in the Northern Senatorial Zone.

Table 2: The sample size of each LGA selected for this study in the Northern Senatorial Zone.

Name of LGA	Population of Study	Sample Size
Ardo-Kola LGA	117,300	108
Lau LGA	127,200	118
Zing LGA	170,600	158
Total LGA Population	415,100	384

Source: Authors, 2022.

The instruments used for the study area were questionnaire, interview, observation and the handheld GPS. The questionnaire was divided into two sections, A and B. Section "A" sought demographic data from respondents. The questions in section "B" sought to know the views of the respondents on selected infrastructural facilities of rural communities in Ardo-Kola,

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Lau, and Zing Local Government Areas. The data collected were analysed and quantified using simple mathematical and tabular presentations based on percentages to analyse the responses in the questionnaires to be distributed. The analysis was done for each questionnaire separately to generate the frequency of responses from the respondents. The study used the chi-square (χ2) for quantitative analysis to test the hypotheses at a 5% level of significance (Sule, Ijadunola, Onayade, Fatusi, Soetan & Connell, 2018). The chi-square statistics (χ2) is calculated using the formula below:

$$\text{Chi-square } (\chi 2) = \sum \frac{(OF - EF)^2}{EF}$$

Where χ2 = chi-square obtained

∑ = the sum of

OF = Observed value (frequency)

EF = Expected value (frequency)

The Chi-Square statistic was used to test the relationship between categorical variables and hypotheses. In this study, the relationship between infrastructural facilities and rural area development was tested using Chi-Square. The data for the spatial distribution of infrastructural facilities in the study, which are coordinates of the various facilities, were inputted into the ArcGIS environment, and the study area map was extrapolated to show the spatial location of the selected public facilities in the Ardo-Kola, Lau and Zing LGAs. The Nearest Neighbour Analysis was used to analyse the spread or distribution of infrastructural facilities in the LGAs.

The Socioeconomic Characteristics of the Respondents

The socioeconomic variables are presented in Table 3. It captures variables such as gender, age, marital status, educational level, religion, and occupational distribution of the respondents from the Northern Senatorial Zone of Taraba State. It is presented in a frequency table which also shows degree of variations in terms of percentage of representation of each subset of the respondent's characteristics.

Table 3: Demographic characteristics of respondents

Variables	Frequency	Percentage (%)
Gender		
Male	205	62.5
Female	123	37.5
Total	**328**	**100**
Age Bracket		
18 – 25	2	0.6
26 – 30	73	22.3
31 – 45	169	51.5

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46 and Above	64	25.6
Total	**328**	**100**
Marital Status		
Married	147	44.8
Single	49	14.9
Widowed	87	26.5
Separated/Divorced	45	13.7
Total	**328**	**100**
Educational Level		
Primary	124	37.8
Secondary	140	42.7
Tertiary	64	19.5
Total	**328**	**100**
Religion		
Christian	114	34.8
Muslim	109	33.2
Traditionalist	105	32
Total	**328**	**100**
Occupation		
Civil/public	72	22
Retired/pensioner	51	15.5
Trading/businessperson	75	22.9
Student	46	14
Unemployed	84	25.6
Total	**328**	**100.0**

Source: Field Survey, 2021.

RESULTS AND DISCUSSION

Spatial Distribution of Infrastructural Facilities in Northern Senatorial District of Taraba State

The study area map was interpolated to show the spatial location of the infrastructural facilities, as shown in Fig. 2. Infrastructural facilities in the study area are located within populated areas, most of which are built-up areas. The infrastructural facilities, this study, has taken into consideration include healthcare, electricity, and water supply (borehole-water and pipe-borne water sources) distributed across Ardo-Kola, Lau, and Zing LGAs.

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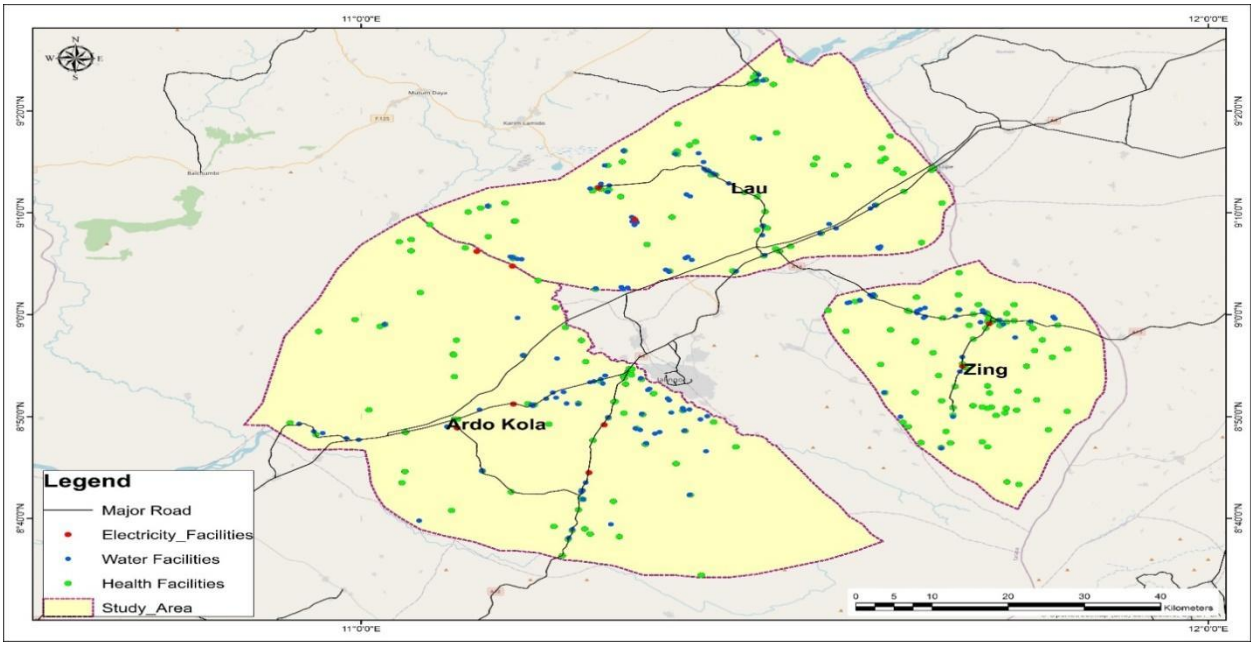

Figure 2: Spatial Distribution of Infrastructural Facilities in Northern Taraba State

The map shows that Zing has 58 healthcare facilities, 2 electricity facilities, and 23 water facilities. Lau has 47 health care facilities, 2 electricity facilities and 39 water facilities (see Table 4). The map shows that Ardo-Kola has 60 health facilities, 48 water facilities, and 4 electricity facilities.

Table 4: Distribution of Selected Infrastructural Facilities in Northern Senatorial Zone of Taraba State

Infrastructure	Frequency	Percentage (%)
Health Care	165	58.3
Electricity	8	2.8
Water		
Borehole	58	20.5
Well	49	17.3
Tap	3	1.1
Total	283	100

Source: Authors, 2022.

The study found that there are 283 infrastructural facilities in the selected study area. Of these, 165, representing 58.3%, are health care facilities. Eight infrastructural facilities, representing 2.8% of the total, are electricity facilities. One hundred and ten infrastructural facilities, representing 38.9%, are water facilities. Gleaning from the result, the major infrastructural facilities in the study area are health care facilities and water facilities. This

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implies that these health care and water facilities will serve the residents of these areas. Though the functionality of these facilities may be low, in their location they seem to be adequate in catering to the needs of the immediate communities where they are located.

Analysis of Nearest Neighbours

The results presented in Figures 3, 4 and 5 show that all the infrastructural facilities in the study area are clustered with critical values <-2.58 and p-values <0.05 with less than 1% likelihood of random chance in the distribution pattern. This finding reflects the result of Lucas (2016) in the study of spatial distribution of rural infrastructural facilities in Makarfi Local Government Area of Kaduna State, where it was found that there was spatial unevenness in the distribution of rural infrastructural facilities in the study area. Similarly, the result of this study also reflects the finding of Bulus and Adefila (2014), where it was reported that there was spatial variation in the rural infrastructural facilities in the Kajuru area of Kaduna State.

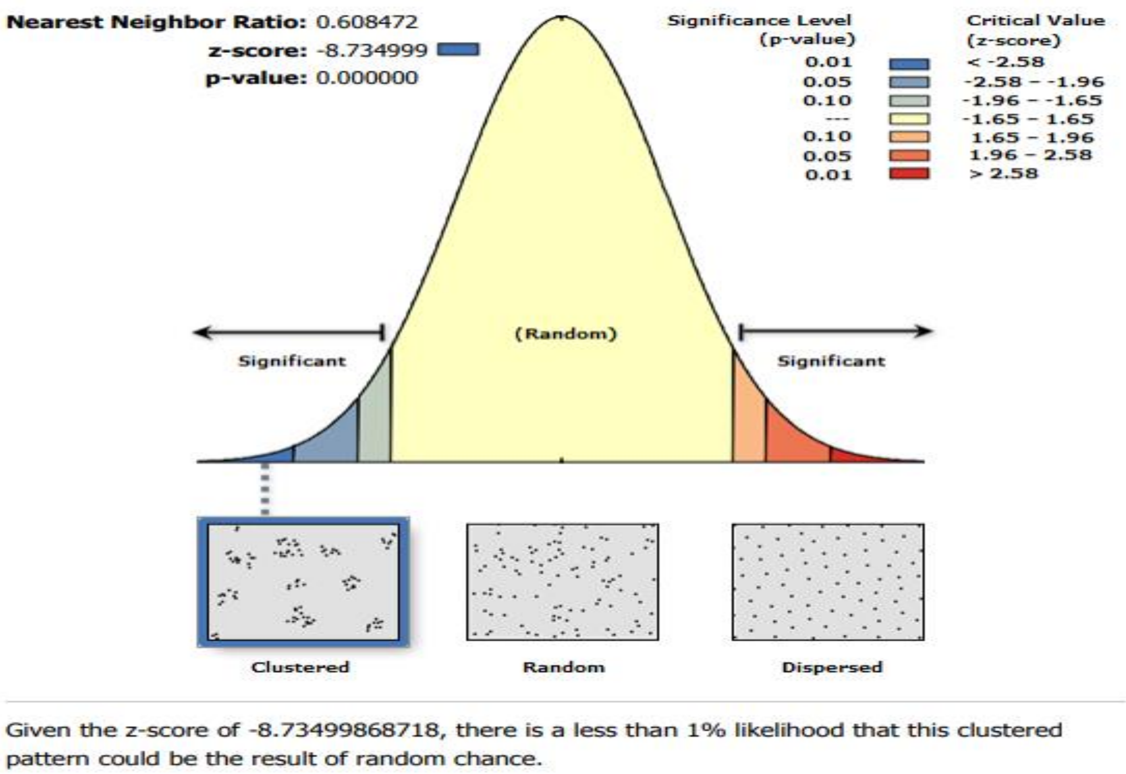

Figure 3: Distribution of Infrastructural Facilities in Ardo-Kola

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Table 4: Average Nearest Neighbour Summary and Dataset Information of Infrastructure Facilities in Ardo-Kola

Observed Mean Distance	1407.1063 Metres
Expected Mean Distance	2312.5232
Nearest Neighbour Ratio	0.608472
Z – Score	– 8.734999
P – score	0.000000
Input Feature Class	ARDO-KOLA FACILITIES
Distance Method	Euclidean
Study Area	2909183307.565995
Selected Set	False

The result, as shown in Figure 3 and Table 4, indicates that the infrastructural facilities in the Ardo-Kola Local Government Area are clustered in distribution. The result shows that the nearest neighbour ratio is 0.608472 (observed mean distance divided by the expected mean distance), with a critical value of <-2.58 and a test of significance: P-value of 0.000000 as shown in Figure 3. The result of the breakdown shows that the spatial pattern of distribution of infrastructural facilities in Ardo-Kola L.G.A. was clustered (see Table 4), and there is less than 1% likelihood that this clustered pattern could be the result of random chance.

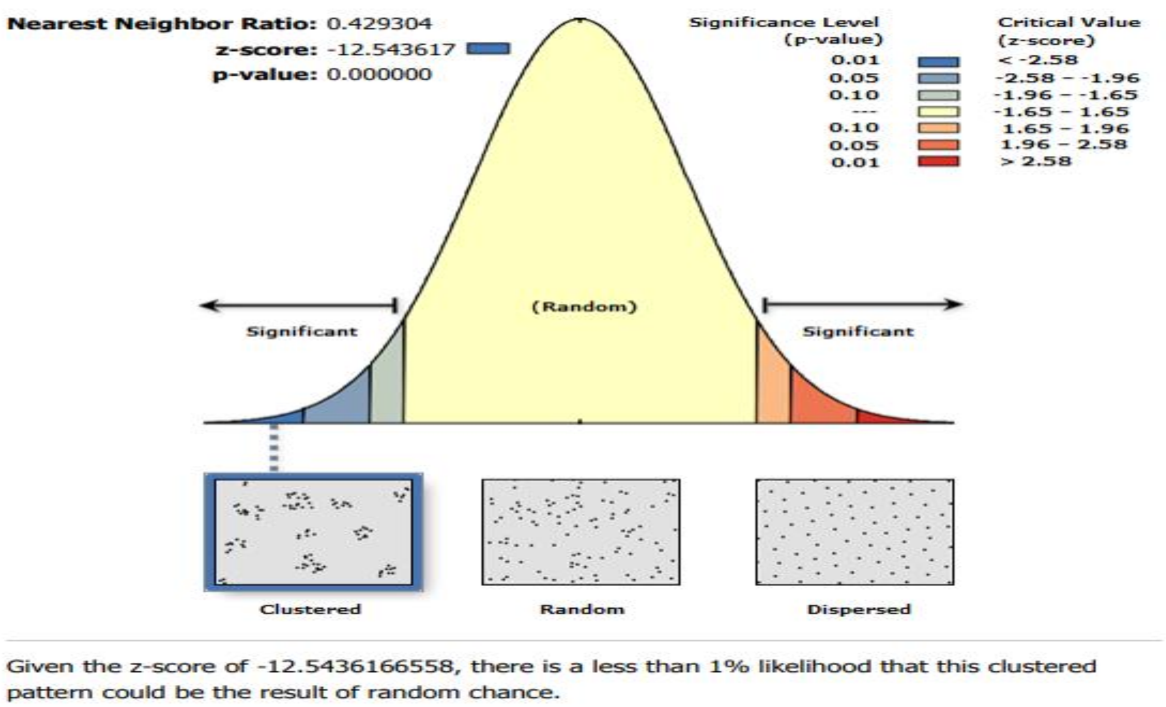

Figure 4: Distribution of Infrastructural Facilities in Lau.

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Table 5: Average Nearest Neighbour Summary and Dataset Information of Infrastructure Facilities in Lau

Observed Mean Distance	887.7307 Meters
Expected Mean Distance	2067.8376
Nearest Neighbour Ratio	0.429304
Z – Score	– 12.543617
P – score	0.000000
Input Feature Class	LAU FACILITIES
Distance Method	Euclidean
Study Area	2257702769.347370
Selected Set	False

The result, as shown in fig. 4 and Table 5, reveals that the infrastructural facilities in Lau LGA have a clustered distribution. The result shows that the clustering has a nearest neighbour ratio of 0.429304 (observed mean distance divided by the expected mean distance), with a critical value of <-2.58 and a test of significance shows a P-value of 0.000000 as shown in Figure 4. The breakdown of the result indicates that the spatial pattern of distribution of infrastructural facilities in Lau L.G.A. was random (see Table 5), and there is less than 1% likelihood that this clustered distribution pattern could be the result of random chance.

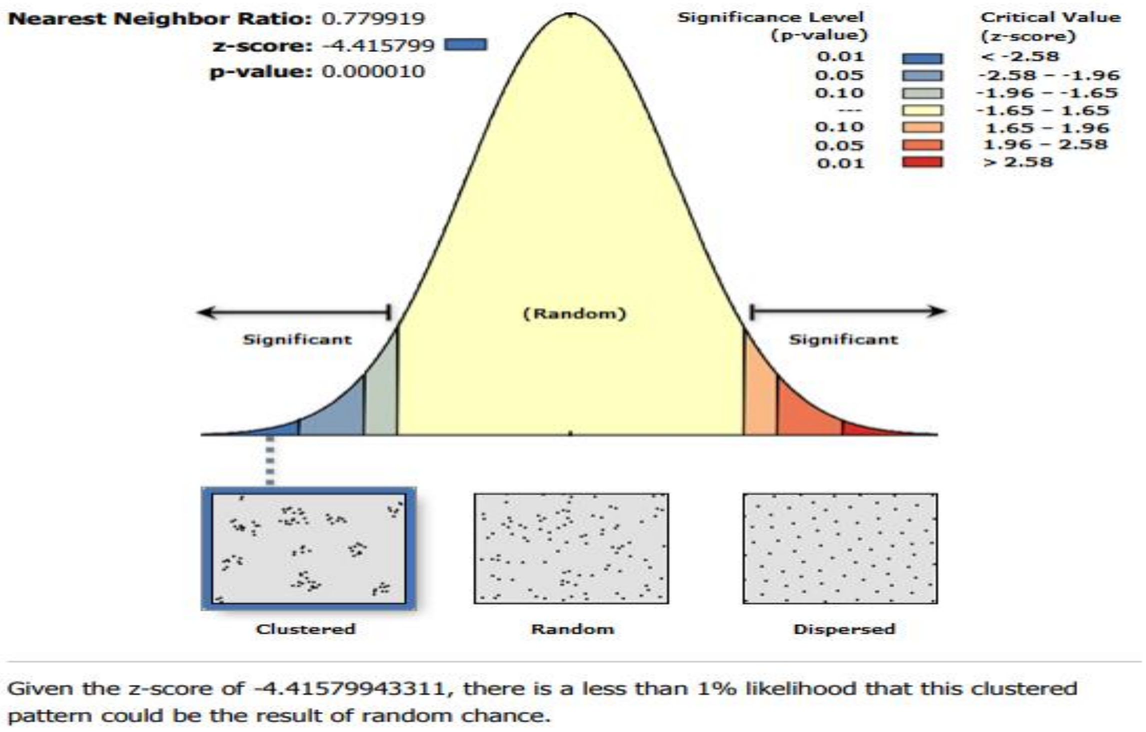

Figure 5: Nearest Neighbour analysis of Infrastructural Facilities Zing

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African Journal of Environment and Natural Science Research
ISSN: 2689-9434
Volume 5, Issue 2, 2022 (pp. 36-52)
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Table 6: Average Nearest Neighbour Summary and Dataset Information of Infrastructure Facilities in Zing

Observed Mean Distance	1185.8038 Metres
Expected Mean Distance	1520.4188 Metres
Nearest Neighbour Ratio	0.779919
Z – Score	– 4.415799
P – score	0.000010
Input Feature Class	Zing FACILITIES
Distance Method	Euclidean
Study Area	283752969.277664
Selected Set	False

The result, as shown in Figure 5 and Table 6, indicates that the infrastructural facilities in Zing LGA are clustered in distribution. The result shows that the nearest neighbour ratio is 0.779919 (observed mean distance divided by the expected mean distance), with a critical value of <-2.58 and a test of significance: p-value of 0.000010 as shown in Figure 5. The result of the breakdown shows that the spatial pattern of the distribution of infrastructural facilities in Zing L.G.A. was random (see Table 6). The result shows that there is less than 1% likelihood that this clustered pattern could be the result of random chance.

Test of Hypothesis

H_o: There is no significant difference between infrastructural facilities and rural areas development.

Table 7: Chi-square test result

	Value	df	Asymptotic significance (2-sided)
Pearson Chi-Square	19.901[a]	6	.003
Likelihood Ratio	19.913	6	.003
Linear-by-Linear Association	1.514	1	.219
No of Valid Cases	328		

0 cells (0.0%) have an expected count of less than 5. The minimum expected count is 9.51.

The result presented in Table 7 shows the chi-square test result for the hypothesis. The result shows that there is a significant association between infrastructural facilities and rural development with a linear association value of 1.514 and a p-value of 0.219 (P>0.05). However, the Pearson chi-square shows that there was no significant difference between public infrastructural facilities and rural development. This implies that public infrastructural

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facilities in rural areas bring about the development of those areas. Therefore, the null hypothesis, which states that there is no significant difference between infrastructural facilities and rural area development, is accepted

CONCLUSION

The presence of public infrastructure in any community indicates the presence of the government and its intent to serve such communities. Therefore, the ensuing development and population increase occasioned by the influx of businesses bring about even more development. There are 283 infrastructural facilities, which include 165 health facilities, 110 water facilities and 8 electricity facilities distributed across the three local government areas, including Ardo-Kola, Lau and Zing. Healthcare facilities are located based on government interest, electricity facilities are located based on population; and water facilities are located based on demand and security. These infrastructural facilities are attracted by politicians and businessmen and are sited for economic and cultural reasons. Most of the facilities are not accessible, with electricity being more concentrated in townships than in villages and hamlets. However, these facilities are not satisfactory.

As it is with public facilities, some of the facilities are old, while some are not usable. The facilities are also inadequate in the communities. Electricity in the communities is connected to the national grid. Water, as expected of rural communities, is sourced from wells and boreholes within a trekking distance of 30 minutes to 2 hours. The host communities maintain these facilities, and the maintenance is carried out only when necessary. These facilities enhanced crop yield, brought development to the communities, and health facilities have enhanced good hygiene among residents. The facilities meet the immediate needs of the communities.

Based on the results, analysis, and discussion of the findings, the following are recommended:

- Infrastructural facilities should be distributed evenly to serve the common good of the general populace, especially in built-up areas and areas where the people are in dire need of such facilities.
- Health, water, and electricity facilities should be located based on the needs of the immediate environment as opposed to government and political interests. This will endear the inhabitants of these communities to the government and will also raise their living standards and income.

Article DOI: 10.52589/AJENSR-QF9QA6KS
DOI URL: https://doi.org/10.52589/AJENSR-QF9QA6KS

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