

Distributional Inequality in Social Infrastructural Provision in Etim Ekpo, Akwa Ibom State, Nigeria

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ABSTRACT

There is a growing level of imbalance in the distribution of social infrastructure among communities especially in the developing countries, which has considerably impeded the socio-economic development of these countries. This study investigated the pattern of distribution of social infrastructure stock in Etim Ekpo, Akwa Ibom State, Nigeria. Data for the study were obtained from the Akwa Ibom State Statistical Yearbook complemented by direct visit to the sampled settlements in order to ascertain the available infrastructure and update same with the information obtained through secondary sources. Through a systematic random sampling, 30 communities were selected from all the 84 communities that made up the study area while the Z-score variate was employed in determining the distributional inequality in social infrastructure provision in the sampled communities. The results of the standardized and composite indicator scores of social infrastructure provision in the study area reveals that majority (20) of the rural communities are disadvantaged in terms of social infrastructure delivery as large-scale inadequacy and distributional inequality in social infrastructure provision abounds in the study area. The study recommends the urgent need for deliberate efforts geared at increase budgetary allocations for the provision of infrastructure facilities and a well supervised expenditure on the provision of these facilities in the rural communities to be made by the government as these facilities have been found to influence productivity of the rural dwellers and also affect their sustainability. Added to this, is the need for the mapping of the developmental patterns at the state level of the study area, as it would provide veritable tool for policy makers attempting to balance the distribution of social infrastructure in order to enhance the spread of development in all facets of the state.

Key Words: Infrastructure Provision, Inequality, Distributional Pattern and Rural Communities

INTRODUCTION

Inadequate social services provision is one of the significant limiting dynamics that impedes the integration of rural areas and further weakens the access to various services asides aggravating inequalities among different areas with attendants' under-development of peripheral areas. In spites of the importance attached to the rural areas, they are not attractive to live in due to the absent or inadequacy of social services, which reduces the quality of human life. Growth and development in any nation whether in urban or rural setting, are consequent on the availability of the social facilities that provide the essential utilities and services necessary for improved standard of living. Accessibility to infrastructure cannot be over emphasized and it has been a form of right in both developed and less developed countries (Akpan and Atser, 2010). Hasssan



and Nor (2017) noted that accessibility to social infrastructure by the poor is paramount in poverty elimination or reduction. This perspective underscores the liveliness of social infrastructure as an essential element in the development process of communities. However, the demand for social infrastructure is high and factors that affect its adequacy include insufficient resource base and competing political agenda (Oyedele, 2012). Oyedele (2012) maintained that infrastructure is the yardstick for determining democratic performance and the basis of good governance. Hence, government is accountable for providing the basic infrastructure for her populace. He assailed the military era for widening the infrastructural gap and deficit in Nigeria. Recent studies (United Nations, 2015; Salisu, 2016; Frolova et.al, 2016; Davern et.al, 2017; Abraha, 2019; and Dejen et al., 2019) have shown that social infrastructure plays significant role in a countries' growth and development as the interface of social and economic infrastructure facilitates growth process. Social infrastructure is indeed very intricate in nature because it incorporates diverse institutions united by similar goal of developing the city and fulfilling the vital needs of the society (Frolova et al., 2016). The dearth of infrastructure in Africa and Nigeria in particular, as noted by the United Nations (2015) is caused by social infrastructure negligence due to extreme attention on economic infrastructure which results in enormous rate of exclusion. Bello et al. (2014) observed that urban areas in Nigeria would experience overcrowding due to the centralized forces of attractions (infrastructure) except if remote areas are provided with such infrastructure. The significance of social infrastructure as a pull factor and the potential cause of overpopulation in Nigerian urban space were brought to the public space.

In many parts of rural Nigeria, social services which form the central catalyst for population agglomeration and growth, and the basic footing on which development activities gravitates are poorly developed. The inadequate provision of essential services such as electricity, pipe-borne water, healthcare services and more easily available modes of transport and communication in rural areas has militated against prospects for better living standards and employment generation as well as other forms of economic activities in the Nigerian rural communities. The tremendous importance the issue of rural infrastructure has assumed in recent times is indicative of the failure of past efforts (Oguzor, 2011) by Nigerian government. Attempts at solving the rural problems through various government policies like Operation Feed the Nation (OFN), the National Accelerated Food Production Programme (NAFPP) and the Directorate for Food, Roads and Rural Infrastructure (DFRRI) had been the concern of successive government administrations over the years without any notable fruitful results.

Etim Ekpo Local Government Area is one of the Oldest Local Government Areas in Akwa Ibom State, Nigeria, having served as a colonial administrative center and a trade nerve-center in the colonial days. Having been given a Local Government status thirty years ago, it is currently witnessing some forms of development due largely to its accessibility and closeness to Aba, a leading commercial nerve center in Abia State, South-Eastern Nigeria. It is expected that the expansion would in the nearest future spillover from the Local Government Headquarters to the surrounding rural communities or settlements. In this connection, it is therefore, pertinent to determine the spatial distribution of social amenities in the study area, as their availability normally attracts population and development.

Social amenities play a significant role in the socio-economic development of any area. As a result, many studies have been carried out to ascertain the contributions of basic amenities to socio-economic development, especially in the developed countries. While it is generally accepted that the rural areas are geographical entities that suffer a disadvantage in terms of the location and allocation of basic amenities in the developing countries, a few studies have been directed towards the spatial distribution of these facilities in the rural areas. Moreover, it is easily noticeable that inequalities exist in the distribution of social amenities, but empirical evidence is scarce especially in a developing economy like Nigeria as to the extent of these disparities. Consequently, spatial inequality in the distribution of social infrastructure has present significant economic and political challenges for the government of Nigeria. While methodical evidence on the extent of spatial inequality in social infrastructure provision in developing countries is relatively scarce,



a growing body of work has documented the existence of spatial disparity in infrastructure provision in many forms in various countries in Asia, Europe and Latin America. Contrarily, few studies have been conducted in Nigeria on the distributional inequality in social infrastructural provision at the local government level. This study is designed to fill this knowledge gap. Specifically, the study aims at assessing the distributional inequality in social infrastructure provision in Etim Ekpo Local Government Area, so as to provide empirical data on the existing social infrastructure stock which could be used to evolve policy towards improvement.

Spatial analysis has been a tool for spatial planning and management (Akpan and Atser, 2010; Frolova et al, 2016; Davern et al., 2017). Since, location of social infrastructure is fixed and as such users need to travel to that location to satisfy their need, the spatial distribution and also accessibility of these facilities can be examined. In this regard, this study will examine the spatial pattern of social infrastructure distribution in Etim Ekpo LGA and determining the level of spatial inequality in the distribution of these infrastructures in the study area.

MATERIALS AND METHODS

Location of Study Area

Etim Ekpo Local Government Area is located between latitude 4^055^1 N of the Equator, and longitude $7^035^1_E$ and 7^040^1 East of Prime Meridian. It is situated in the Northeastern part of the southern Nigeria. Etim Ekpo Local Government Area occupies a total land area of 305.5 square kilometers and is located about 50 kilometers from Uyo, the capital of Akwa Ibom State. The area is bounded on the south by Ukanafun Local Government Area, on the North by Essien Udim Local Government Area, on the West by Abia State and Ika Local Government Area, and on the East by Abak Local Government Area.



Fig 1: Akwa Ibom State Showing Etim Ekpo LGA

The geo-political entity known as Etim Ekpo Local Government Area has undergone series of political metamorphoses. During the divisional administration system of Government in the defunct Eastern Region, the area was known as Northern Annang council. It later assumed the status of a touring area in the era of the development administration of erstwhile Southeastern State. Etim Ekpo enjoyed a brief period of political autonomy as a local government Area when the then Cross River State under the then leadership of Dr. Clement Isong created additional local government areas in 1981. But with the abolition of all the local administrative structures of the second Republic civilian government by the military Government of Major General Muhammadu Buhari in December 1983, Etm Ekpo became part of to Abak Local Government Area from where it was carved out.

On September 23, 1991, the General Babangida administration created Etim Ekpo Local Government Area with Headquarters at Utu Etim Ekpo. The Local Government Area is made up of five (5) clans, comprising: Obong (26 Villages), Utu (15 Villages), Kono (18 Villages), Uruk (18 Villages), Utit Annang (7 Villages). Thus, Etim Ekpo LGA has a total of 84 villages. The people of Etim Ekpo Local Government Area are Annang speaking with homogenous culture and tradition. According to the 2006 National population census outcome, Etim Ekpo Local Government Area had a total population of 105,418 people of which males were 55, 771 and females 49,6477 (NPC, 2006). This population has increase to proposed figure of 142,429 persons in 2015. This growth in population affects the provision of social amenities in the study area.

The main occupation of the people is farming. Food crops such as cassava, maize, yam, sweet yam, vegetables, melon and pepper are produces in commercial quantity. The principal cash crops are palm produce and coconut. Apart from farming, the people are also engaged in blacksmithing, iron mongering, trading, local craft, manufacturing, weaving, wood carving, mat making, industrial/agricultural tools fabrication and local gin brewing.

Data Sources

Data for the study were obtained from the Akwa Ibom State Statistical Yearbook, Etim Ekpo Local Government Area Headquarter and the National Population Commission. Field survey of the sampled communities was undertaken in order to ascertain the available infrastructure and update same with the information obtained through the secondary sources where the need arises.

The social infrastructure variables used in the study are outlined in Table 1:

 Table 1: Social Infrastructure Variables

S/N	Variable	Unit of Measurements
1	Number of nursery/Primary Schools	Numeric/ Standardized score
2	Number of Secondary of Schools	Numeric/ Standardized score
3	Number of Primary Health centers	Numeric/ Standardized score
4	Number of Comprehensive Health centers	Numeric/ Standardized Score
5	Number of General Hospitals	Numeric/ Standardized Score
6	Number of Markets	Numeric/ Standardized Score
7	Number of Motor Parks	Numeric/ Standardized Score
8	Number of Boreholes	Numeric/ Standardized Score
9	Number of Telecommunication Masts	Numeric/ Standardized Score
10	Number of Playgrounds	Numeric/ Standardized Score

Sampling and Sample Size of Selected Villages

The map of the study area containing the number of existing settlements that make up Etim Ekpo LGA was obtained from the GIS department at the Local Government Area Headquarters. From the list of all the 84 villages on the map, a total of thirty (30) villages were systematically selected for the study.

Method of Data Analysis

The Z-variate was used in determining inequality in social infrastructural provision in the study area. The vital attribute of z-score is that it gives standardized scores which are more appropriate with minimal bias (Oyebanji, 1986 cited in Parry, Ganaire, Mengroo and Bhat, 2012). The Z-score variate have widely been used to determine the pattern of distribution of a phenomenon (Aderamo and Aina, 2011) and it quantifies the deviation of individual observations, expressed in a comparable form (Raman, Kaur and Kumar, 2014). The mathematical formula for calculating z-Variate is given as:

$$Zi = \underline{X_i - \overline{X}}_{Sx}$$

Where, Zi = Standardized value of the observation (i)

- X = the value of x for the ith observation
- $\overline{\mathbf{X}}$ = the mean of all the value of X
- Sx = the Standard deviation of the X

RESULTS AND DISCUSSIONS

Table	$\gamma \cdot$	Distribution	of Social	Infrastructure	in	Etim	Ekno
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S/N	VILLAGES	N/PS	SS	PHC	MTY	DISP.	CHC	GH	PA	GSM	CB	MP	MKT	PG	BH	TOTAL
1	Atai Nto Obo	2	1	1	0	0	0	0	0	0	0	0	0	0	10	14
2	Ikot Akpan	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2
3	Abak Town	1	1	0	0	0	0	0	0	0	0	0	2	0	6	10
4	Utu Nsekhe	1	0	2	0	0	0	0	0	1	0	0	1	1	12	18
5	Uruk Ata Ikot Akpan	0	0	0	0	0	0	0	0	0	0	0	1	0	6	7
6	Nkwot Ikono	1	1	0	0	0	0	0	0	0	0	0	1	0	24	27
7	Uruk Ata Ikot Akpan	1	0	0	0	0	1	1	0	0	0	0	0	0	7	10
8	Abak Obong	1	0	0	0	0	0	0	0	0	0	0	1	0	2	4
9	Ikpe Annang	2	0	1	0	0	0	0	0	0	0	0	2	0	16	21
10	Otoro Obong	0	0	0	0	0	0	0	0	0	0	0	1	0	6	7
11	Ikot Awak	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
12	Ikot Inung	1	0	0	0	0	0	0	0	1	0	0	0	0	4	6
13	Ikot Obioma	0	1	0	0	0	0	0	0	0	0	0	1	0	5	7
14	Utit Idm Mkporukpo	1	0	0	0	0	0	0	0	0	0	0	1	0	5	7
15	Nsa Obong	1	0	0	0	0	0	0	0	0	0	0	2	0	10	13

16	Nto Edet	1	0	0	0	0	0	0	0	0	0	0	1	1	10	13
17	Utu Ikot Imoute	1	0	0	0	0	0	0	0	0	0	1	0	0	7	9
18	Utu Ikot Eboro	1	0	0	0	0	0	0	0	0	0	0	1	0	4	6
19	Ikot Uma Ebak	1	0	0	0	0	0	0	0	0	0	0	0	0	10	11
20	Ikot Nkim	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3
21	Ibio Edem Urua	1	0	0	0	0	0	0	0	1	0	0	0	0	12	14
22	Ikot Oduongo	1	0	0	0	0	0	0	0	0	0	0	1	1	4	7
23	Ikot Ese	1	1	0	0	0	0	0	0	0	0	0	1	1	13	17
24	Ikpe Atai	1	0	0	0	0	0	0	0	1	0	0	1	0	10	13
25	Ikot Edet	2	1	2	0	1	0	0	0	0	0	0	0	1	15	22
26	Nto Unang	1	0	0	0	0	0	0	0	1	0	1	1	1	15	20
27	Nung Oku Ikot	0	0	0	0	0	0	0	0	0	0	0	1	1	6	8
28	Ikot Inyang	1	0	0	0	0	1	0	0	1	0	0	1	0	13	17
29	Obot Itit Idim	1	1	0	0	0	0	0	0	0	0	0	0	1	3	6
30	Obong Ikot Akpan	1	0	0	0	0	0	0	0	0	0	0	1	0	5	7
	Total	26	7	6	0	1	2	1	0	6	0	2	22	8	247	328

Source: Fieldwork (2022)

Key:

N/PS= Nursery/Primary School, SS= Secondary School, PHC= Primary Health Center, MTY= Maternity Centre, DISP.= Dispensary, CHC= Comprehensive Health Centre, GH= General Hospital, PA= Postal Agency, GSM= Global System for Mobile Communication, CB= Community Bank or Commercial Bank, MP= Motor Park, MKT= Market, PG= Play Ground, BH= Borehole.

Table 2 shows mark distributional inequality in available social infrastructure provision as observed across Etim Ekpo Local Government Area. For instance, only one settlement (Nkwot Ikono) is advantaged, as it accounts for the largest concentration of all the social infrastructures under investigation while seven (7) settlements (Ikot Edet, Ikpe Annang, Nto Unang, Utu Nsekhe, Ikot Inyang and Ikot Ese, Ibio Edem Urua) are moderately advantaged as these settlements have the presence of fifteen (15) of the social infrastructures under investigation, with only two (2) settlements (Ikpe Ata and Esa Obong) having 13 of the investigated infrastructures. In terms of social infrastructure stocks, two (2) settlements (Ikot Nkim and Abak Obong) have four social infrastructure stocks respectively with only Ikot Awak having the least number of social amenities (only the presence of only one borehole in the area).

Table 2 further revealed that seven (7) (Uruk Ata Ikot, Akpan Storo Obong, Ikot Akpan, Ikot Awak, Ikot Obioina, Ikot Nkim and Nung Oku Ikot) settlements in the study area are without Nursery/Primary school. Out of the thirty villages, only seven (7) villages (Ikot Obioma, Ikot Ese, Atai Nto Obo, Abat Town, Nkot Ikono, Ikot Edet and Obong Utit Idim) have secondary schools. On the whole, six villages (6) (Ikot Akpan, Uruk Ata Ikot Akpan, Otoro obong, Ikot Nkim, Ikot Awak and Nung Oku Ikot) are without any educational facility.

In terms of health institutions, Ikot Edet has two primary health centres and a dispensary, Uruk Ata Ikot Isemin has a General Hospital and a comprehensive Health centre while Itu Nsekhe has two Primary Health centres. Other settlements with health institutions are Ikot Inyang, with a comprehensive health centre, Ikpe Annang and Atai Nto Obo have one primary health centre respectively. Twenty four (24) other settlements

in the study area have no health institution(s).

It is evident in Table 2 that the distribution of other social amenities – GSM facility, motor parks, markets, settlement's play grounds and boreholes – varies in the Local Government Area. For example, the availability of motor parks was recorded in only two settlements (2) (Utu Ikot Imonte and Not Umang) while twenty eight (28) settlements do not have motor parks. While there is the presence of GSM facilities in only six settlements (Utu Nsekhe, Ikot Inung, Ibio Edem Urua, Ikpe Ata, Nto Umang and Ikot Inyang), 24 settlements in the study area do not have any GSM facility. There were no commercial bank and postal Agency in all the settlements sampled for this study.

The non-availability of motor parks, GSM communication network facilities, play grounds, maternity center, dispensary, postal agency, Community or Commercial Bank, primary health and secondary schools in majority (25) of the sampled settlements have obvious implications in the development process of these communities with attendant effects on the wellbeing of the rural households and the attainments of the Sustainable Development Goals (SDGs). This is corroborates the assertion by Shroyer, Schilling and Poethig, (2019) that individuals tend to commune in places with sound social infrastructure. It is from sustained conversation and/or interaction especially in forums of shared values that strong relationships are formed. In other words, when people meet in public spaces and interact frequently, a community is built. The role of social infrastructure could be seen as an avenue or facility that strengthens social ties within the neighborhood. This indicates that social infrastructure is a tool for fostering social cohesion and wellbeing of residents.

S/N	VILLAGES	Z- N/PS	Z-SS	Z- PHC	Z- DISP	Z- CHC	Z- GH	Z- GSM	Z- MP	Z- MKT	Z- PG	Z- BA	Composite Indicator
1	Atai Nto Obo	1.98	1.78	1.45	-0.18	-0.26	-0.18	-0.49	-0.26	-1.15	-0.95	0.34	2.44
2	Ikot Akpan	-1.52	-0.54	-0.36	-0.18	-0.26	-0.18	-0.49	-0.26	-1.15	-0.95	-1.19	-6.72
3	Abat Town	0.22	1.78	-0.36	-0.18	-0.26	-0.18	-0.49	-0.26	1.97	1.63	-0.43	1.22
4	Utu Nsehe	0.22	-0.54	3.27	-0.18	-0.26	-0.18	1.95	-0.26	0.42	-0.95	0.72	6.79
5	Uruk Ata Ikot	-1.52	-0.54	-0.36	-0.18	-0.26	-0.18	-0.49	-0.26	0.42	-0.95	-0.43	-4.39
6	Nkwot Ikono	0.22	1.78	-0.36	-0.18	-0.26	-0.18	-0.49	-0.26	0.42	-0.95	3.02	3.12
7	Uruk Ata Ikot Isemin	0.22	-0.54	-0.36	-0.18	3.67	4.31	-0.49	-0.26	-1.15	-0.95	-0.24	4.39
8	Abak Obong	0.22	-0.54	-0.36	-0.18	-0.26	-0.18	-0.49	-0.26	0.42	-0.95	-1.19	-3.41
9	Ikpe Annang	1.98	-0.54	1.45	-0.18	-0.26	-0.18	-0.49	-0.26	1.97	-0.95	1.49	4.39
10	Otoro obong	-1.53	-0.54	-0.36	-0.18	-0.26	-0.18	-0.49	-0.26	0.42	-0.95	-0.43	-4.4
11	Ikot Awak	-1.53	-0.54	-0.36	-0.18	-0.26	-0.18	-0.49	-0.26	-1.15	-0.95	1.38	-6.92
12	Ikot Inung	0.22	-0.54	-0.36	-0.18	-0.26	-0.18	1.95	-0.26	-1.15	-0.95	-0.81	-2.16
13	Ikot Obioma	-1.53	1.78	-0.36	-0.18	-0.26	-0.18	-0.49	-0.26	0.42	-0.95	-0.62	-2.27
14	Utit Idim Mkporikpo	0.22	-0.54	-0.36	-0.18	-0.26	-0.18	-0.49	-0.26	0.42	-0.95	-0.62	-2.84
15	Esa Obong	0.22	-0.54	-0.36	-0.18	-0.26	-0.18	-0.49	-0.26	1.97	1.63	0.34	-0.33
16	Nto Edet	0.22	-0.54	-0.36	-0.18	-0.26	-0.18	-0.49	-0.26	0.42	-0.95	0.34	0.34
17	Utu Ikot Imonte	0.22	-0.54	-0.36	-0.18	-0.26	-0.18	-0.49	3.67	-1.15	-0.95	-0.24	-0.1

Table 3: Standardized Scores of social infrastructure provision and composite indicator in Etim Ekpo LGA

18	Utu Ikot Eboro	0.22	-0.54	-0.36	-0.18	-0.26	-0.18	-0.49	-0.26	0.42	-0.95	-0.81	-3.03
19	Ikot Umoebat	0.22	-0.54	-0.36	-0.18	-0.26	-0.18	-0.49	-0.26	-1.15	-0.95	0.34	-3.45
20	Ikot Nkim	-1.53	-0.54	-0.36	-0.18	-0.26	-0.18	-0.49	-0.26	0.42	-0.95	-1	-6.54
21	Ibio Edem Urua	0.22	-0.54	-0.36	-0.18	-0.26	-0.18	1.95	-0.26	-1.15	1.63	0.91	-0.44
22	Ikot Oduongo	0.22	-0.54	-0.36	-0.18	-0.26	-0.18	-0.49	-0.26	-1.15	1.63	-0.81	-0.81
23	Ikot Ese	0.22	1.78	-0.36	-0.18	-0.26	-0.18	-0.49	-0.26	-1.15	1.63	0.91	3.23
24	Ikpe Atai	0.22	-0.54	-0.36	-0.18	-0.26	-0.18	1.95	-0.26	0.42	-0.95	0.34	0.56
25	Ikot Edet	1.98	1.78	3.27	4.31	-0.26	-0.18	-0.49	-0.26	-1.15	1.63	1.29	11.92
26	Nto Anang	0.22	-0.54	-0.36	-0.18	-0.26	-0.18	1.95	3.67	0.42	1.63	1.29	7.66
27	Nung Oku Ikot	-1.53	-0.54	-0.36	-0.18	-0.26	-0.18	-0.49	-0.26	0.42	1.63	-0.43	-2.18
28	Ikot Inyang	0.22	-0.54	-0.36	-0.18	3.67	-0.18	1.95	-0.26	0.42	-0.59	0.91	5.06
29	Obong Utit Udim	0.22	1.78	-0.36	-0.18	-0.26	-0.18	-0.45	-0.26	-1.15	1.63	-1	-0.25
30	Obong Ikot Akpan	0.22	-0.54	-0.36	-0.18	-0.26	-0.18	-0.49	-0.26	0.42	-0.95	-0.62	-2.84

Source: Authors' Data Analysis (2022)

The Z-score variates have been used to analyse the degree of distributional inequality in social infrastructure provision in the study area (Table 3). The standardized scores of existing infrastructure in the sampled communities have been divided into various groups to determine the relative concentration of amenities across the settlements. The standardized scores of each amenity have been added to get the composite indicator to reflect the overall degree of variation in the provision of the selected amenities.

Fig 2: Spatial Distribution of Social Services Stock in Etim Ekpo LGA

Table 3 reveals that only three (3) settlements (Utu Nsekhe, Ikot Edet, and Nto Unang) have very high concentration of all the selected social amenities considered in this study while another three settlements (Uruk Ata Ikot Isemin, Ikpe Annang and Ikot Inyang) have high concentration of the social infrastructure stock, three (3) other settlements – Atai Nto Obo, Nkwot Ikono and Ikot Ese – have moderate concentration of social infrastructure stock. Three (3) settlements (Abat Town, Ikpe Atai and Nto Edet) have low concentration of social infrastructure provision.

It can be adduced from the standardized and composite Indicator scores of social infrastructure provision in Etim Ekpo LGA that majority (18) of the sampled settlements (Ikot Akpan, Uruk Ata Ikot Akpan, Abak Obong, Otoro Obong, Ikot Awak, Ikot Inung, Ikot Obioma, Utit Idim Mkporikpo, Esa Obong, Utu Ikot Imoute, Utu Ikot Eboro, Ikot Umoebat, Ikot Nkim, Ibio Edem Urua, Ikot Oduongo, Nung Oku Ikot, Obong Utit Idim and Obong Ikot Akpan) have very low (very disadvantaged) concentration of social infrastructure. It is very evident from the result of the standardized scores derived from Z-score variate that large scale distributional inequality exists in the provision of social infrastructure in the study area.

CONCLUSION

This study has examined the levels of social infrastructure provision and patterns of distribution in Etim Ekpo LGA, Akwa Ibom State, Nigeria. It is revealed from the results of the standardized and composite scores of the Z-scores variate that many communities in the study area are very vulnerable to poverty due to infrastructural adequacy. The existence of large scale inequalities in the stock of social infrastructure provision among the rural communities in the study area was also identified. Poor access to basic social facilities that are essential for welfare of the people negates the attainments of the widely publicized Sustainable Development Goals (SDGs). Beside, inequitable access to life supportive facilities as evidenced in the sampled communities is also at variance with the national philosophy of social justice and equity and ideals of freedom and opportunity as clearly articulated in Nigeria's constitution. This concern is justified in view of the multiplier effects of social infrastructure provision on development process of any society.

RECOMMENDATIONS

Inequality in access to basic social infrastructure in rural communities has serious consequences for rural development and regional integration. There is therefore need for deliberate efforts to be geared at increase budgetary allocations for the provision of infrastructure facilities and a well supervised expenditure on the provision of these facilities in the rural communities to be made by the government as these facilities have been found to influence productivity of the rural dwellers and also affect their sustainability. Added to this is the need for the mapping of the developmental patterns at the state level of the study area, as it would provide veritable tool for policy makers attempting to balance the distribution of social infrastructure in order to enhance the spread of development in all facets of the state.

REFERENCES

- 1. Abraha, T. A. (2019). Analyzing Spatial and Non-Spatial Factors that Influence Educational Quality of Primary Schools in Emerging Regions of Ethiopia: Evidence from Geospatial Analysis and Administrative Time Series Data. *Journal of Geography and Regional Planning*, 12(1), 10-19
- 2. Adekunle, A. and Aina (2011), "Spatial Inequalities in Accessibility to Social Amenities in Developing Countries: A Case from Nigeria. *Australian Journal of Basic and Applied Sciences*, 5(6): 316-322.
- 3. Akpan P. A. & Atser J. (2010). Implications of Spatial Pattern of Social Infrastructure Stock in the Development of Rural Areas of Akwa Ibom State. *FUTY Journal of the Environment*, 5(1), 29-42
- 4. Bello, M. N., Abbas, I. I., & Akpu, B. (2014). Analysis of Land Use-Land Cover Changes in Zuru and

its Environment of Kebbi State, Nigeria Using Remote Sensing and Geographic Information System Technology. *Journal of Geography and Earth Sciences*, 2(1), 113-126

- Davern, M., Gunn, G., Whitzman, C., Higgs, C., Giles-Corti, B., Simons, K., Villanueva, K., Mavoa, S., Roberts, R. & Badland, H. (2017). Using Spatial Measures to Test a Conceptual Model of Social Infrastructure That Supports Health and Wellbeing. *Cities and Health*, 1(2), 194-209,
- 6. Dejen, A., Soni S. & Semaw, F. (2019). Spatial Accessibility Analysis of Healthcare Service Centers in Gamo Gofa Zone, Ethiopia through Geospatial Technique. *Remote Sensing Applications: Society and Environment*, 1(13), 466–473
- Frolova, E.V., Mikhail V. V., Andrey V. K., Olga V. R. & Kabanova E.E. (2016). Development of Social Infrastructure in the Management Practices of Local Authorities: Trends and Factors. International Journal of Environmental and Science Education, 11(15), 7421-7430
- 8. Hassan, O, G. & Nor, A. A. (2017). Lack of Infrastructure: The Impact on Economic Development as a Case of Benadir Region and Hir-Shabelle, Somalia. Developing Country Studies, 7(1), 49-55
- Oguzor, N. S. (2011). A Spatial Analysis of Infrastructure and Social Services in Rural Nigeria. Implications for Public policy. *Geotropico*, NS-5 (1), article 2 pp. 25-38 A Peer Reviewed Journal Accessed online @http://www.tropico.org on 16th March, 2022.
- 10. Oyebanji, J. O. (1986). Indicators of Level of Living in Nigeria. <u>In:</u> Proceedings of the 27th Annual Conference of the Nigerian Geographical Association, pp. 19-27.
- 11. Oyedele, O.A (2012). The Challenges of Infrastructure Development in Democratic Governance. TSO1C- Construction Economics and Management, 1, 6119.
- 12. Parry, J. A., Ganaie, S. A. Nengroo, Z. A. and Bhat, M. S. (2012). Spatial Analysis of Provision of Urban Amenities and the Deficiencies: A case Study of Srinager City, Jammu and Kashmir, India. *Research on Humanities and Social Sciences*. 2(6):192-219.
- Salisu, A. K. (2016). Socio-Economic Infrastructure and National Development: An Analytical Assessment from Nigerian Perspective. IOSR Journal of Humanities and Social Science, 21(10), 36-42.
- 14. Shroyer, A., Schilling, J., & Poethig, E. (2019). Catalyzing Neighborhood Revitalization by Strengthening Civic Infrastructure. Washington, DC: Urban Institute.
- 15. UN (2015). Population Distribution, Urbanization, Internal Migration and Development: An International Perspective. pp 1-378.