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Original Article

POVERTY AND SOCIO-ECONOMIC DEVELOPMENT IN NSUKKA LOCAL GOVERNMENT AREA, ENUGU STATE , SOUTHEASTERN NIGERIA

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ABSTRACT

The study examined the incidence of poverty and socio-economic development in Nsukka Local Government Area (LGA) in Enugu State of Nigeria. . The data for the study were obtained from primary and secondary sources. The primary sources were field observations, questionnaire survey and personal interviews. Thus, the data generated during the course of the study were analyzed using statistical techniques of Poverty Headcount Index (PHI), Availability Index and Spearman's Correlation Analysis. The results of the Poverty Headcount Index shows that the level of poverty in Nsukka LGA is 69.2%, representing a poverty headcount index of 0.692, while the results of the composite Availability Index reveals that the level of socio-economic development is low, with a composite availability Index of 580. On the other hand, the result of the Spearman's Rank Correlation analysis shows that the correlation coefficient between poverty and socio-economic development is -0.95 which is very high, negative and significant at 5% probability level. Therefore, based on the results of the findings of the study, we suggest that the development of human capital, and the provision and sustenance of infrastructural facilities and social amenities such as road network, electricity and water supply, will go a long way in combating poverty and fostering socio-economic development in the area.

Keywords: Poverty, Development, Relationship, Nsukka.

INTRODUCTION

Poverty is a multidimensional, socio-economic and cultural situation that transcends economic description and analysis [1, 2] . There is no universally accepted definition of poverty and what constitutes poverty therefore, varies from location to location [3] . However, for the purpose of this study, poverty can be defined as a multidimensional phenomenon that is characterized by lack of purchasing power, exposure to risk, malnutrition, high mortality rate, low life expectancy, insufficient access to social and economic services and few opportunities for income generation [4]. On the other hand, socio-economic development entails a monitored, manipulated, or encouraged process that brings about changes in locations where people live, work and share things in common as relating to or giving consideration to both social and economic factors [5] Socio-economic development tends to favour certain geographical areas than others. Some areas attract more population and socio-economic activities than others. Therefore, while some areas grow rapidly, some grow slowly and others decline. In other words, the challenge that poverty poses for sustainable socio-economic development is particularly worrisome given efforts thrown at it over the years without commensurate return in terms of better life for the people [6].

In Nigeria, poverty and the decline in socio-economic development are chronic and pervasive [6]. That Nigeria, with its abundant wealth and resources, is currently sitting 20th among the world's poorest countries, is to say the least disgusting. It is very annoying that in spite of the huge sums of money that have been pumped into the budgets of most of the government's poverty alleviation and empowerment programmes such as the Directorate of Food, Roads and Rural Infrastructure (DFRRI); National Directorate of Employment (NDP); National Housing Fund (NHF), National Poverty Eradication Programme (NAPEP); and National Economic Empowerment Development Strategy (NEEDS), poverty is still ravaging the lives of millions of Nigerians, with a sharp decline in socio-economic development. Literally, it may be affirmed that poverty and development are two sides of a coin; one presupposes and challenges the other. Lack of infrastructure, deep seated corruption practices, various forms of conflict, bad governance and poor health facilities cannot promote a healthy population committed to work for progress and development. Poverty is wide spread in Nigeria and without development citizens may not be able to compete with others because of lack of necessary capital, the technical-know-how and expertise. This is because development deals with the alleviation of poverty and poverty is inter-related to other problems of underdevelopment in any given environment. (Oxford Policy Management, 2004) [7]

According to UNESCO Global Monitoring Report [8], about 92% of the Nigerian population survives on less than US$ 2 daily, while about 71% survive on less than US$ 1 daily. For many Nigerians, the quality of life and general well-being have declined rather than improved since independence, 54 years ago. The near collapse of infrastructural facilities and public utility had made life very difficult in the country. Water supplies and electricity services under government auspices are seldom available, crippling all forms of business activities and developmental projects.

For poverty to be effectively tackled, and socio-economic development accelerated in Nsukka LGA and other parts of Nigeria, issues such as the concept, nature, orientation, indicators, factors, and environmental circumstances or spatial dimensions of poverty and socio-economic development have to be properly understood. This is because the determinants and characteristic of poverty and socio-economic development are very complex and they vary considerably from one geographical area to another. Thus, policy makers and implementers require concrete spatial information, result-oriented analytical tools, stable atmosphere and the right attitude to take appropriate and decisive actions on the menace of poverty for sustainable socio-economic development. Thus, the aim of the study is to examine the incidence of poverty and socio-economic development and their level of relationship in Nsukka Local Government Area of Enugu State, Southeastern Nigeria. To strengthen and guide our investigations, the following specific objectives have been put forward:

To examine the level of poverty in Nsukka LGA.

To examine the availability of socio-economic development facilities in Nsukka LGA.

To examine the relationship between poverty and socio-economic development facilities in Nsukka LGA.

To suggest effective and result-oriented measures of combating poverty and fostering socio-economic development in Nsukka LGA

Statement of Hypothesis

There is no significant relationship between poverty and socio-economic development in Nsukka Local Government Area of Enugu State, Southeastern Nigeria.

Materials and Methods

Nsukka LGA is located approximately within latitudes 6°51°N and 7°00°N of the Equator and longitudes 7°23°E and 7°45°E of the Greenwich Meridian. It covers a total land area of approximately 407.50km^2 [9], with an elevation of 1,810ft (552m).It is made up of twenty-one autonomous communities, namely; Alor-Uno, Anuka, Eden, Edem-Ani, Ede-Oballa, Eha-Alumona, Ibagwa-Ani, Lejja, Ibagwa-Agu, Umabor, Eha-Ndiagu, Okpaligbo, Nsukka, Owerre-Obimo, Obukpa, Okpuje, Okutu, Ikwara-Ibimo, Akwari , Agu-Obete and Opi The climate of Nsukka LGA falls under the Tropical Wet and Dry climate (AW) of Koppen's climatic classification [10]. The average daily minimum and maximum temperature of the area are about 23.3°C and 27°C, respectively, while its average monthly maximum temperature is about 31.5°C [11]. Rainfall in Nsukka is very high and intense. The average monthly rainfall ranges from 250mm in April to 380mm in October, with a mean annual total of 1500mm [11]. It is underlain mainly by two geologic formations- the false bedded sand stone(Ajalli sandstone) and Lower Coal Measure (Nsukka Formation). Generally, Nsukka LGA is on a plateau, with heights which vary between 365 - 420 metres above mean sea level with isolated and outstanding peaks reaching over 545 metres. It is characterized by sparse surface drainage, with marshy streams and springs lines issuing from fetched aquifers on the slopes of the hills. Nsukka LGA lies in a transitional zone of the savanna vegetation of the north and the rainforest belt of the south and this gives the area the look of "Derived Savanna". The soils of Nsukka LGA are classified into two major groups, namely; ferrallitic soils (deep porous red soils derived from sandy deposits, and the red and brown soils derived from sandstones and shales), and hydromorphic soils. According to the national population census of 2006, Nsukka LGA has a total population of 309,633 persons, 149,241 males and 160,392 females [12]. There are several socio-economic activities engaged by the inhabitants of Nsukka LGA, but agriculture happens to be the most dominant.

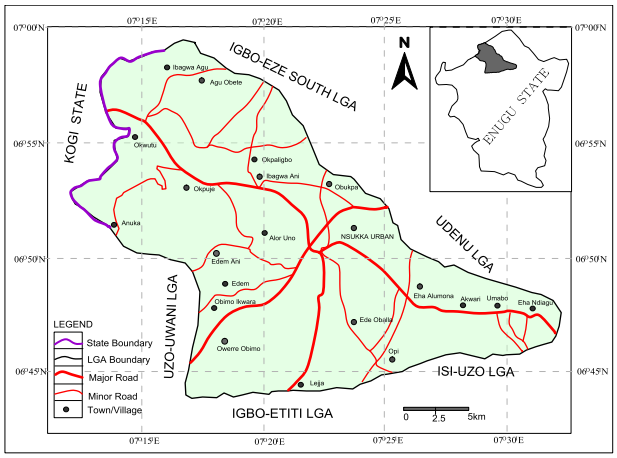

Fig. 1 : Map of Nsukka Local Government Area Showing the Major Communities [13]

Research Methodology

Data used for this study were obtained from both primary and secondary sources. The primary data for the study were obtained using field observation, questionnaire survey and personal interviews. Ten out of the 21 autonomous communities that make up Nsukka LGA were randomly selected and studied for this work. They are Nsukka Town, Eha-Alumona, Obukpa, Ede-Oballa, Ibagwa-Ani, Okpuje, Agu-Obete, Obimo, Edem-Ani and Opi (Fig. 2) . Stratified random sampling technique was used to select twenty-five households in each of the 10 sample communities and administered with a structured questionnaire, giving a total of 250 households used in the study. . Questionnaires, observations and personal interviews captured information on the availability of socio-economic development infrastructure such as educational facilities, health care delivery facilities, market facilities, road network, water supply, and the monthly income of households. On the other hand, the secondary sources included textbooks, journals, unpublished projects and thesis, maps and government publications.

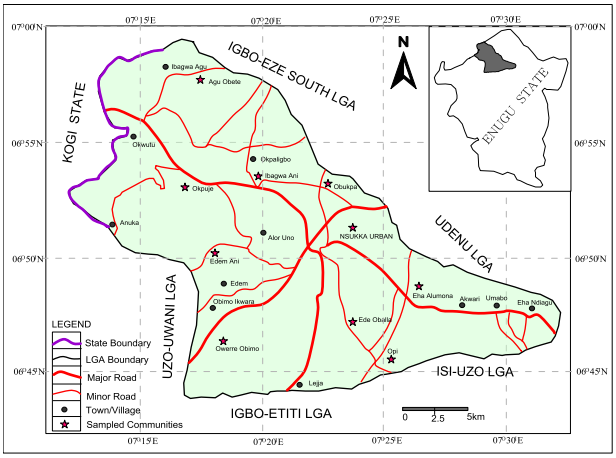

Fig.2 : Map of Nsukka Local Government Area Showing the Sampled Communities [13]

Descriptive and statistical techniques were employed to analyze the data collected for this study. In measuring the level of poverty in Nsukka LGA, we made use of the Poverty Headcount Index (PHI). First of all, we adopted the poverty line of US$ 1.25 per day (for the extremely poor) and US$ 2 per day (for the moderately poor) [14]. We then converted these poverty line specifications, using the current exchange rate of N150 to US$1 and multiplied by 30 to get the poverty line per month. Thus, US$1.25 = N187.50 X 30= N5, 625.00 per month (for the extremely poor), and US$ 2= N300 X 30 = N9, 000.00 per month (for the moderately poor). Accordingly, households that earn a monthly income of ≤ N5, 625.00 are considered to be extremely poor, while households that earn a monthly income of N5, 626.00 – N9, 000.00 are considered to be moderately poor. Based on the above specifications and derivations, the Poverty Headcount Index (PHI) was used in measuring the proportion of households that is counted poor and it is given as:

$$PHI\ (Po) = NP/N \quad \ldots\ldots (1)$$

where PHI (Po) = Poverty Headcount Index, NP = Number of poor people (or households) and N = Total population (or sample).

In assessing and measuring the level of socio-economic development, we made use of the "Availability Index" of socio-economic development facilities. The availability index is a quantitative functional index based on type and number (occurrences) of socio-economic facilities available in any given geographical area and the weighing of these facilities according to the difference in the order of magnitude or function. Thus, we used 10 points to attached to first order functions, 5 to second order functions, 3 to third order functions and 1 to fourth functions [15] . Thus, the derived formula for the Availability Index (AI) is given as:

A1 = First Order Facilities (NF **x** WV) **+** Second Order Facilities (NF **x** WV) **+**Third Order Facilities (NF **x** WV) **+** Fourth Order Facilities (NF **x** WV)..... (2)

Where A1 = Availability Index, NF= Number of facilities in each category, WV= The weighted value attached to different types of categories of facilities, according to the order of function.

On the other hand, the Spearman's Rank Correlation Analysis was used to analyzing the relation between poverty and socio-economic development in Nsukka LGA. Thus, the formula for Spearman's Rank Correlation Analysis is given as:

$$r_s = 1 - 6\Sigma d^2 / n(n^2-1) \quad \ldots\ldots(3)$$

Where r_s = Correlation Coefficient

n = Number of variables

Σd^2 = Summation of the differences of variables

To test the significance of the coefficient at 95% confidence level, we employ a version of the student's test, which is given as;

$$t = r \sqrt{\frac{n-2}{1-r^2}}$$

Where r = the correlation coefficient

Results and Discussions

The discussion of the results of the study is divided into three parts. Part one discusses the incidence of poverty in Nsukka LGA based on the Poverty Headcount Index(PHI), part two discusses the level of socio-economic development in Nsukka LGA based on the Availability Index of socio-economic development facilities, while part three discusses the relationship between poverty and socio-economic development in Nsukka LGA based on the composite availability index of socio-economic development and Poverty Headcount Index.

Income levels of Households

The income of a household is a function of the number of persons working in the household and sometimes the level of educational attainment [16]. Analysis of poverty based on income level has continued to be essential to poverty measurement and this can be attributed to fact that it is very quantitative, and so, can be compared over time and between groups, and be subject to the rigour of statistical test

Thus, table 1 shows the distribution of the monthly income of the 250 sampled households in Nsukka LGA. It varies from a lower income group of N0 – ₦2, 812.50 per month per capita income to as high as ₦22, 501.00 and above per capita income. Accordingly, households in the per capita income group of ₦5, 625.00 constitute the highest percentage of total distribution of households, with 41.2%, representing 103 households. At the other extreme, households in the per capita income group of ₦22.501.00 and above constitute the lowest percentage of the total distribution of households, with 3.6%, representing 9 households.

In all, table 1 show that the proportion of households in each income group decreases as the income group gets higher. This therefore means that, there are more households earning lesser income than those earning greater and better income in Nsukka LGA.

Table 1: Distribution of the Monthly Incomes of the Households.

Per Capita Monthly Income Group (₦)	Frequency of Households	% of Total frequency
0 – 2,812.50	30	12.0
2,812.51 – 5,625.00	102	40.8
5,626.00 – 8,437.50	36	14.4
8,437.51- 11,250.00	23	9.2
11,251.00 – 14,062.50	15	6.0
14,062.51 – 16,872.00	13	5.2
16,873.00 – 19,687.50	12	4.8
19,687.51 – 22,500.00	10	4.0
22,501.00 and Above	9	3.6
Total	**250**	**100**

(Source: Fieldwork, 2013).

Poverty Headcount Index (PHI)

By far, the most widely used measure of poverty is the Poverty Headcount Index (PHI). I t is a measure of the proportion of the population that is counted as poor divided by the total population or sample. Thus, the Poverty Headcount Index (PHI) was used in the study to determine the actual level of poverty in Nsukka LGA, based on the 250 sampled households.

Thus, table 2 shows that Okpuje has the highest incidence of poverty in Nsukka LGA, with 23 households, representing a headcount index of 0.092. It is closely followed by Obimo and Agu-Obete, with 21 and 20 households, representing a headcount index of 0.084 and 0.080 respectively. At the other extreme, table 2 reveals that Nsukka Town has the lowest incidence of poverty in the study area, with 10 households, representing headcount index of 0.040. Nsukka Town is followed in this order by Obukpa and Opi, with 14 and 15 households representing a headcount index of 0.056 and 0.060, respectively. In all, table 2 reveals that the incidence of poverty in Nsukka LGA is high, with 173 households, representing a total headcount index of 0.692. Thus, the level of poverty in Nsukka LGA is 69.2%.

Table 2: The Poverty Headcount Index of Nsukka LGA.

Community	Frequency of poor households (Income N0 – N9,000 per month)	Poverty headcount \index	% of Total Poverty Headcount Index
Nsukka Town	10	0.040	4.0
Eha – Alumona	16	0.064	6.4
Obukpa	14	0.056	5.6
Ede – Oballa	17	0.068	6.8
Ibegwa-Ani	19	0.076	7.6
Okpuje	23	0.092	9.2
Agu-Obete	20	0.080	8.0
Obimo	21	0.084	8.4
Edem –Ani	18	0.072	7.2
Opi	15	0.060	6.0
Total	**173**	**0.692**	**69.2**

(Source: Fieldwork 2013)

Availability Index of Educational Facilities

Table 3 shows the calculated "Availability Index" of educational development facilities in Nsukka LGA. It reveals that, there is a high variation in the distribution of primary schools, secondary schools and tertiary institutions in Nsukka LGA, especially between Nsukka Town and the remaining nine communities. Nsukka town has the highest availability index value of 98, meaning that it has the highest concentration of educational development institutions in the study area. Nsukka town is distantly followed by Opi, Ede-obala and Obukpa, with availability indexes of 27, 24 and 22 respectively. Conversely, table 3 reveals that Okpuje has the lowest availability index of 8, meaning that it has the lowest concentration of educational development facilities in the study area. It is followed in this order by Obimo and Agu-Obete, with availability indexes of 11 and 14, respectively. This means that Obimo and Agu-Obete have the second lowest and third lowest concentration of educational development facilities in Nsukka LGA.

Availabilty Index of Health Facilities

Table 4 below shows the calculated "Availability Index" of health care delivery facilities in Nsukka LGA. Accordingly, Nsukka town has highest availability index with the total weighted value of 46, meaning that it has the highest concentration of health care delivery facilities, with Bishop Shanahan Hospital taking the lead. Nsukka town is distantly followed by Opi, with an availability index of 17. Opi is closely followed by Eha-Alumona and Obukpa, with availability index values of 16 and 15, respectively. This means that they have the third and fourth highest concentration of health care delivery facilities in study area, respectively. At the other extreme, table 4 shows that Okpuje has the lowest availability index value of 4, meaning that it has the least concentration of health care delivery

facilities in Nsukka LGA. Okpuje is closely followed in this order by Obimo, with an availability index value of 5, meaning that it has the second lowest concentration of health care delivery facilities in the study area. Next to Obimo are Edem-ani and Agu-Obete, with availability index values of 9 and 10, respectively. This therefore means that Edem-Ani and Agu-Obete have the third and fourth lowest concentration of health care delivery facilities in Nsukka LGA, respectively.

Table 3: Calculated Availability Index of Education Development Facilities in Nsukka L. G. A

	Tertiary Institutions		Secondary School		Primary Schools		Availability Index
Community	NF	WV	NF	WV	NF	WV	Total Weighted Value
Nsukka Town	3	10	7	5	11	3	98
Eha-Alumona	0	0	2	5	4	3	22
Obukpa	0	0	1	5	4	3	17
Ede-Oballa	0	0	3	5	4	3	24
Ibagwa-Ani	0	0	2	5	3	3	19
Okpuje	0	0	1	5	1	3	8
Agu-Obete	0	0	1	5	3	3	14
Obimo	0	0	1	5	2	3	11
Edem Ani	0	0	2	5	2	3	16
Opi	0	0	3	5	4	3	27

NF = Number of the type of educational institutions , NV = Weighted value. (Source: Fieldwork, 2013)

Table 4: Calculated Availability Index of Health Care Delivery Facilities in Nsukka LGA

Community	Teaching and Specialist Hospitals		General, State, and Private Hospitals		Clinics and Cottage Hospitals		Primary Health centers and Maternity Homes		Availability Index
	NF	WV	NF	WV	NF	WV	NF	WV	Total Weighted Value
Nsukka Town	1	10	5	5	3	3	2	1	46
Eha-Alumona	0	0	2	5	1	3	3	1	16
Obukpa	0	0	2	5	1	3	2	1	15
Ede-Oballa	0	0	1	5	2	3	1	1	12
Ibagwa-Ani	0	0	2	5	1	3	1	1	14
Okpuje	0	0	0	0	1	3	1	1	4
Agu-Obete	0	0	1	5	1	3	2	1	10
Obimo	0	0	0	0	1	3	2	1	5
Edem Ani	0	0	1	5	1	3	1	1	9
Opi	0	0	2	5	2	3	1	1	17

NF = Number of health care delivery facilities , NV = Weighted value (Source:Fieldwork,2013)

Market Facilities

Table 5 shows the calculated "Availability index" of market facilities in Nsukka LGA. Accordingly, Nsukka town has the highest concentration of market facilities with an availability index of 25. Nsukka town is distantly followed by Obukpa, Ibagwa-Ani, Opi, Eha-Alumona, Ede-Oballa, Okpuje, and Agu-Obete, with which availability indexes of 8, 8, 8, 6, 6, 6, and 6, respectively. Obimo and Edem-Ani came at the rear, with availabilities indexes of 3 and 3, respectively. Based on the result of the availability index in table 5, there is a general low concentration of markets in Nsukka L G A, especially with regards to main market. Nsukka town happens to be the only community with main markets, the Ogige market, situated at the heart of Nsukka town and the Ikpa Market, located along Orba-road, Nsukka.

Road Network

Table 6 shows the calculated "Availability Index" of road network in Nsukka LGA. It reveals that Nsukka Town has the highest number of roads in the study area with an availability index of 166. It is followed by Obukpa and Opi, with availability indexes of 103 and 101, respectively. At the other extreme, Edm-Ani has the lowest number of roads in the study area, with an availability index of 70. Edem Ani is closely followed in this order Obimo and Okpuje, with availability indexes of 74 and 77, respectively.

Water Supply Facilities

Table 7 shows the calculated "Availability Indexes" of water supply facilities in Nsukka L G A. The results of this analysis clearly show that, there is a wide gap or variation in the distribution of water supply, especially between Nsukka town and the rest of the other nine communities studied. Thus, Nsukka town has the highest concentration of water supply facilities, with an availability index of 245. It is distantly followed by Opi and Obukpa, with availability indexes of 100 and 85,respectively.

Table 5: Calculated Availability Index of Market Facilities in Nsukka LGA

Community	Main Market		Mini Market		Periodic Market		Availability Index
	NF	WV	NF	WV	NF	WV	Total weighted value
Nsukka Town	2	10	1	5	0	0	25
Eha-Alumona	0	0	0	0	2	3	6
Obukpa	0	0	1	5	1	3	8
Ede-Oballa	0	0	0	0	2	3	6
Ibagwa-Ani	0	0	1	5	1	3	8
Okpuje	0	0	0	0	2	3	6
Agu-Obete	0	0	0	0	2	3	6
Obimo	0	0	0	0	1	3	3
Edem Ani	0	0	0	0	1	3	3
Opi	0	0	1	5	1	3	8

N F= Number of Market Facilities , WV= Weighted Value. (Source: Fieldwork, 2013)

At other extreme, table 7 reveals that Okpuje has the lowest concentration of water supply in the study area, with an availability index of 15. it is followed in this order by Obimo, Agu-Obete and Edem-Ani with the availability indexes of 20,30 and 35 respectively. This therefore means that, Okpuje, Obimo, Agu-Obete and Edem-Ani are the worst hit communities when it comes to the problem of insufficient water supply facilities in Nsukka L G A and this has adversely affected socio-economic development in these communities.

Table 6: Calculated Availability Index of Road Network in Nsukka LGA

	Trunk A Road		Trunk B Road		Trunk C Road		Availability Index
Community	NF	WV	NF	WV	NF	WV	Total Weighted Value
Nsukka Town	5	10	13	5	17	3	166
Eha-Alumona	1	10	2	2	18	3	89
Obukpa	2	10	7	5	16	3	103
Ede-Oballa	1	10	5	5	19	3	92
Ibagwa-Ani	1	10	4	5	17	3	81
Okpuje	1	10	2	5	19	3	77
Nguru	1	10	3	5	22	3	91
Obimo	1	10	2	5	18	3	74
Edem Ani	0	0	2	5	20	3	70
Opi	2	10	6	5	17	3	101

N F=Number of roads, WV=Weighted value (Source: Fieldwork, 2013)

Composite Level of Socio-Economic Development

Having obtained the availability indexes of the five major elements used in assessing the level of socio-economic development, we carried out a composite availability indexes of the five major elements to determine the composite level of socio-economic development in Nsukka LGA. Thus, table 8 shows a calculated "Composite Availability Index", of socio-economic development facilities in Nsukka LGA

Table 7: Calculated Availability Index Of Water Supply Facilities in Nsukka LGA

	Boreholes		Water Reservoirs		Availability Index
Community	NF	WV	NF	WV	Total Weighted Value
Nsukka Town	12	10	25	5	245
Eha-Alumona	1	10	10	5	60
Obukpa	2	10	13	5	85
Ede-Oballa	1	10	9	5	55
Ibagwa-Ani	1	10	8	5	50
Okpuje	0	10	3	5	15
Agu-Obete	1	10	4	5	30
Obimo	0	10	4	5	20
Edem Ani	1	10	5	5	35
Opi	3	10	14	5	100

N F= Number of Water Supply Facilities, WV= Weighted value (Source: Fieldwork, 2013)

As seen in the table 8, Nsukka Town has the highest number of socio-economic development facilities (107), with a composite availability index of 580, representing 27.33% of total composite index.. Nsukka town is followed by, Opi and Obukpa, which have a total of 56 and 52 facilities, with composite availability indexes of 253 and 228, representing 11.92% and 10.74% of total composite availability index, respectively. This means that Opi and Obukpa have the second and third highest level of socio-economic development in Nsukka LGA, respectively.

At the other extreme, Okpuje has the lowest number of socio-economic development facilities (31), with a composite availability index of 110, representing 5.18% of total composite availability index. It is closely followed by Obimo and Edem-Ani, which have a total of 32 and 36, facilities, with composite availability indexes of 113 and 133, representing 5.33% and 6.27% of total composite availability index, respectively.

Generally, table 8 clearly reveals that there is a sharp variation in the distribution of socio-economic development facilities and consequently, the level of socio-economic development between Nsukka Town and the rest of the nine communities.

The Analysis of Relationship Between Poverty Socio-Economic Development and Testing of Hypothesis.

In establishing relationship between poverty and socio-economic development in Nsukka LGA, the Spearman's Rank Correlation analysis was employed based on the number of poor households which is the determinant of the poverty headcount index and the actual level of poverty in Nsukka LGA, and the sum total number of socio-economic development facilities, which is the determinant of the availability index(Table 9). The Correlation Coefficient(rs) of -0.95 was obtained (See Appendix 1).. This indicates a very high and negative linear relationship between poverty and socio-economic development in Nsukka Local Government Area. The Correlation Coefficient (rs) is significant at 5% probability level (See Appendix 1), and so, the null hypothesis, which states that there is no significant relationship between poverty and socio-economic development is rejected. Thus, since $rs^2 = 90$, we conclude that 90% of the variation in decline in socio-economic development in the study area is accounted for by the linear relationship with the poverty level in the area and that the increasing levels of poverty have given rise to a continuous decline in socio-economic development in Nsukka L.G.A.

Table 8:Caculated Composite Availability Index of Socio-Economic Development in Nsukka LGA

Community	Education Development facilities		Market facilities	Road Network	Water supply facilities	Water supply facilities					Overall Total NF	Composite Availability Index	% of Total Composite Availability Index
	Total NF	Availability Index	Total NF	Availability Index	Total NF	Availability Index	Total NF	Availability Index	Total NF	Availability Index			
Nsukka Town	21	98	11	46	3	25	35	166	37	245	107	580	27.33
Eha-Alumona	6	22	6	16	2	6	24	89	11	60	49	193	9.1
Obukpa	5	17	5	15	2	8	25	103	15	85	52	228	10.74
Ede-Oballa	6	24	4	12	2	6	22	92	10	55	47	189	8.91
Ibagwa-Ani	5	19	4	14	2	8	22	81	9	50	42	172	8.11
Okpuje	2	8	2	4	2	6	22	77	3	15	31	110	5.18
Agu-Obete	4	14	4	10	2	6	26	91	5	30	41	151	7.12
Obimo	3	11	3	5	1	3	21	74	4	20	32	113	5.33
Edem Ani	4	16	3	9	1	3	22	70	6	35	36	133	6.27
Opi	7	27	5	17	2	8	25	101	17	100	56	253	11.92
Sum of Total	-	-	-	-	-	-	-	-	-	-	493	2122	100

NF=Number of facilities of socio-economic element (Source: Fieldwork, 2013)

Conclusion and recommendations

With reference to the objectives stated, the study revealed 69.2% of poverty level and low level of socio-economic development in terms of infrastructural provisions, such as educational institutions, hospitals, daily markets, access roads, electricity and water supply in Nsukka LGA. .A significant relationship was established between poverty and socio-economic development in the study area. The consequence of these findings is that the rising level of poverty contributes immensely to the decline in socio- economic development and in the other hand, the low level of socio-economic development has played a significant role in the high level incidence of poverty in the area. The solution to the dilemmatic situation in Nsukka LGA is to confront the reality of poverty and the challenges of development simultaneously.

Against this backdrop, the study suggests that an improvement in the standard of living and overall well-being of the poor will go a long way in fostering and sustaining socio-economic development in Nsukka LGA. Likewise, the improvement and sustenance of socio-economic development will also go a long way in improving the standard of living and overall well-being of the poor in Nsukka LGA, and other parts of Nigeria. Thus, to effectively combat poverty and achieve sustainable socio-economic development in Nsukka and other parts of Nigeria, we recommend that the proper identification of the poor in the area should be done and investment in human capital development should be carried out through the establishment of skill acquisition centres in different communities to enhance their chances of securing employment in cottage industries or be self employed. Government at all levels should help the poor to set up businesses of their own by giving them grants. Governments in partnership with private sector should establish small-scale industries such as cassava processing, palm oil refining and livestock industries where the poor should be trained and employed. Farmers should be identified and credit facilities given to them for effective and sustainable agricultural production to reduce hunger being experienced in the area .Aggressive rural infrastructural facilities provision through massive reconstruction and rehabilitation of rural roads, markets, water supply and rural electrification should be carried out to increase household accessibility to public facilities and services in the area. The curricula at both primary and secondary schools should be restructured to incorporate functional entrepreneurship education in the area.

Table 9: Rank Correlation Analysis Of The Relationship Between Poverty And Socio- Economic Development in Nsukka LGA

Community	Poor Households (X)	Overall Total Number of Facilities (Y)	Rank X	Rank Y	D	d^2
Nsukka Town	10	107	20	1	9	**81**
Eha-Alumona	16	49	7	4	3	**9**
Obukpa	14	52	9	3	6	**36**
Ede – Oballa	17	47	6	5	1	**1**
Ibagwa- Ani	19	42	4	6	-2	**4**
Okpuje	23	31	1	10	-9	**81**
Agu-Obete	20∑	41	3	7	-4	**16**
Obimo	21	32	2	9	-7	**49**
Edem –Ani	18	36	5	8	-3	**9s**
Opi	15	56	8	2	6	**36**
						$\sum d^2=322$

Note: The formular for spearman's rank correlation analysis is given as;

$r_s = 1 - 6\sum d / n(n^2-1)$

Where r_s =sCorrelation co-efficient

n =Number of variables

$\sum d^2$= summation of the differences of the variables

Therefore, $r_s = 1 - 6\sum d / n(n^2-1)$

$= 1- /10(10^2 -1)$

$= 1 – 1932 / 10(100-1)$

$= 1- 1932 / 10(99)$

$= 1- 1932 / 990$

$= 1-1.95$

$r_s = -0.95$

With r_s = -0.95, the correlation coefficient is very high and negative. This therefore means that, there is a very high degree of relationship between poverty and socio-economic development in Nsukka LGA and it is on the negative side. In other words, the increasing levels of poverty have given rise to a continuous decline in socio-economic development in Nsukka L.G.A.

Testing of hypothesis

The hypothesis which is stated in the null hypothesis form states that: There is no significant relationship between poverty and socio-economic development in Nsukka Local Government Area of Enugu state.

To test the significance of the coefficient at 95% confidence level, we employ a version of the student's test, which is given as;

$$t = r \sqrt{\frac{n-2}{1-r^2}}$$

Where r = the correlation coefficient

Let Ho be: "There is no significant relationship between poverty and socio-economic development in Nsukka L.G.A''.

$$t = r \sqrt{\frac{n-2}{1-r^2}}$$

$$= - \frac{0.95\sqrt{10-2}}{\sqrt{1-(1-0.95)^2}}$$

$$= - \frac{0.95\sqrt{8}}{\sqrt{1-0.90}}$$

$$= - - \frac{0.95(2.83}{\sqrt{0.10}}$$

$$= \frac{2.69}{0.32}$$

$t = - 8.41$

Thus, using the degree of freedom of n-2 =10-2=8, our critical test value at 95% level of confidence is 1.86

Since our calculated student's 't' value of 8.41 is greater than our critical test value of 1.86, the null hypothesis, which states that there is no relationship between poverty and socio-economic development in Nsukka LGA is rejected. So the correlation coefficient is significant. In other words, there is a significant relationship between poverty and socio-economic development in Nsukka LGA.

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