

**Journal of Agriculture, Environmental
Resources and Management**

ISSN2245-1800(paper) ISSN 2245-2943(online)

6(1)1-800; JAN.2024; pp120-131

**THE NEXUS BETWEEN RESIDENTIAL ENVIRONMENTAL QUALITY AND
RESIDENTS' SATISFACTION IN UYO URBAN, AKWA IBOM STATE, NIGERIA**Beulah I. Ofem and ²Michael C. Oguike

Department of Urban and Regional Planning, University of Uyo, Uyo

²Department of Architecture, University of Uyo, Uyo

E-mail: beulahofem uniuyo.edu.ng

Abstract

The study aimed at examining residential environmental quality and residents' satisfaction in Uyo urban. Survey research design was adopted to gather data. Systematic sampling technique was used to select 10 out of 75 existing neighbourhood in the study area. Questionnaire was used to gather data for analysis. A 5-point Likert scale was used to measure the independent (X) and dependent variables (Y). The regression statistical model was applied to analyse the data. The study revealed that residents of Uyo urban are not satisfied with the Perceived Residential Environment Qualities (PREQs) as all were scored low. On the basis of the findings it is recommended that there is need for government, Urban planning authorities and related agencies to improve on all the listed perceived PREQs such as ensuring the adequate provisions of security facilities to protect both lives and properties of the residents. Also, to ensure timely waste evacuation, to constantly keep the residential environment clean and ensuring adequate availability of commercial services, and educational services.

Keywords: Residential, Environmental, Quality, Residents, Satisfaction

Introduction: A set of features and characteristics of the environment, generic or local as they affect human beings and other organisms is referred to as environmental quality. Components of environmental quality includes the natural environment such as vegetation, the built environment which includes air, water purity or pollution, noise and its potential effects on physical and mental health (European Environment Agency, 2012). Environmental quality can be referred to the specification and feature of the environment which affects human and other organisms generally and locally. Environmental quality is an assessment of the environment in connection with one or more aspects requirements or for any human need or desire (Adriaanse, 2007). A residential environment is defined as a setting in which systems of human activities take place. Residential environmental quality, according to Kesalkheh and Dadasphoor (2012) is related to concepts such as quality of life, livability, living quality, living environment, quality of a place, residential perception and satisfaction; and the

evaluation of the residential and living environment. These form a subsystem of the environment where individuals live (Bae, Kim and Lee, 2019). It comprises components such as nature, open space, infrastructures, built environment, facilities of physical environment and natural reserves. A quality residential environment comprises a good quality of life and the protection of economic, social and cultural activities. Today, improvement in residential environmental quality is one of the core concerns of urban policy and planning (Moser, 2009). One of the issues regarding residential environmental quality is to regard the interaction and perception of the person to the surrounded environment. How they perceive an environment and their level of satisfaction. The quality of a residential environment focuses on physical amenities, resources, aesthetics, safety, stimulation, peacefulness heterogeneity and homogeneity of the population together with interaction or withdrawal (Kesalkheh and Dadashpoo, 2012). Residential environmental quality is desirable in Africa's fast growing population. In Western

**THE NEXUS BETWEEN RESIDENTIAL ENVIRONMENTAL QUALITY AND RESIDENTS' SATISFACTION
IN UYO URBAN, AKWA IBOM STATE, NIGERIA**

countries poor housing conditions was the major problem experienced in communities where search for good jobs attracted immigrants (Dewilde and Lancee, 2013). Both community satisfaction and housing satisfaction have been employed as measures of quality of life and quality of individual life (Sirgy, 2002; Lewicka, 2011). Unlike large cities that often have greater resources, small cities and communities have limited resources to cope with pressures of population influx on their housing infrastructure and municipal services. Big cities can readily absorb large numbers of immigrants due to their economies of scale and greater variety of available housing as well as larger social and cultural networks (Potter, Cntarero, Yan, Larrck and Ramirez-Salazar, 2004).

Abimbola and Adebayo (2015), posited that rapid rate of urbanization in Nigeria cities have resulted from natural population growth and urban-rural migration are considered the two major factors responsible for urbanization. It was also posited that not everyone was satisfied with the result of such development, due to the fact that cities have resulted in polycentric, fragment, urban growth tendencies, associated with uncontrolled development and squatter settlements, deteriorating infrastructure and short falls in delivering services. These are the characteristics of postmodernism and urbanization which highlights the importance of physical setting and the residential environment to the well - being of human and quality of life (Abimbola and Adebayo, 2015). In line with these characteristics of post modernism and urbanization, Nigeria urbanization is mainly the result of population growth without proportionate socio - economic benefits and that of the urban environment. This has created urban health crises such as squalor and shanty settlements, sanitation, solid waste management, double burden of diseases and inefficient congested and risky transport system in the residential environment of urban centres in the country (Aliyu and Amadu, 2017). The problems and challenges that rapid urban growth brings include general human and environmental poverty, and declining quality of life. Housing and associated facilitates (such as water, electricity, waste disposal) are grossly inadequate. Millions of residents live under substandard environmental conditions called slums, plagued by squalor and grossly inadequate social amenities, such as, shortage of schools, poor health facilities and lack of opportunities for recreation among others (Biagi, Ladu and

Meleddu, 2011). Uyo being the capital city of Akwa Ibom state has experienced change in size and shape over the years. The growth of Uyo urban population is as a result of the legal and administrative criteria for establishment of urban centres in Nigeria (Ofem, 2012). Stevenson and Wolfers (2013) posited that there were many consequences for the nature of population growth in an urban area such as urban expansion, urban sprawl, high cost of infrastructural development, increased emissions from transport vehicles that can cause air pollution which reduces air quality in the residential environment and affects human and environmental health in Uyo urban (Aliyu and Ahmadu, 2017).

Research Problem: Increasing human activities on the environment affects residential environmental quality through impacts on all components of the residential environment such as vegetation, water and air through pollution. As an ever growing human population reaches farther into remote areas in search of space to build cities, housing developments. It further threatens the balance between natural resources and people and causes a serious economic and social problems in urban areas. Residential environmental quality which relates to the perception and satisfaction of people living in a residential environment is vital to the quality of life of residents. The urbanized residential environment is increasingly becoming the main habitat for people worldwide and the assessment of the urban neighbourhoods has become an important issue both for residents and policy makers. The present population growth in Uyo urban which could probably be due to its strategic situation as a capital city and approximate centrality with a piece-meal planning could be a challenge in achieving residential environmental quality desirable. However, population growth and residential environmental quality in Uyo urban have not been empirically established. Against this backdrop the aim of this study is to examine the nexus between residential environmental quality and residential satisfaction of Uyo urban.

The Study Area: Uyo urban is located between latitudes 4°32' and 5°38' north of the equator and longitudes 7°25' and 8°25' east of the Greenwich meridian as shown in Figure 1. The area is located on an elevation of about 60.96 metres (2090 ft) above sea level (Njungbwen and Njungbwen, 2012). Uyo is easily accessible from other parts of the state. Due to renewed government interest on roads, travel time has considerably reduced (Udo, 2016; Akpan-Ebe *et*

THE NEXUS BETWEEN RESIDENTIAL ENVIRONMENTAL QUALITY AND RESIDENTS' SATISFACTION IN UYO URBAN, AKWA IBOM STATE, NIGERIA

al., 2016). These have affected the study area as a result of perceived massive influx of people into the urban area, resulting in more people

when compared to the available infrastructures and social amenities in the residential environment.

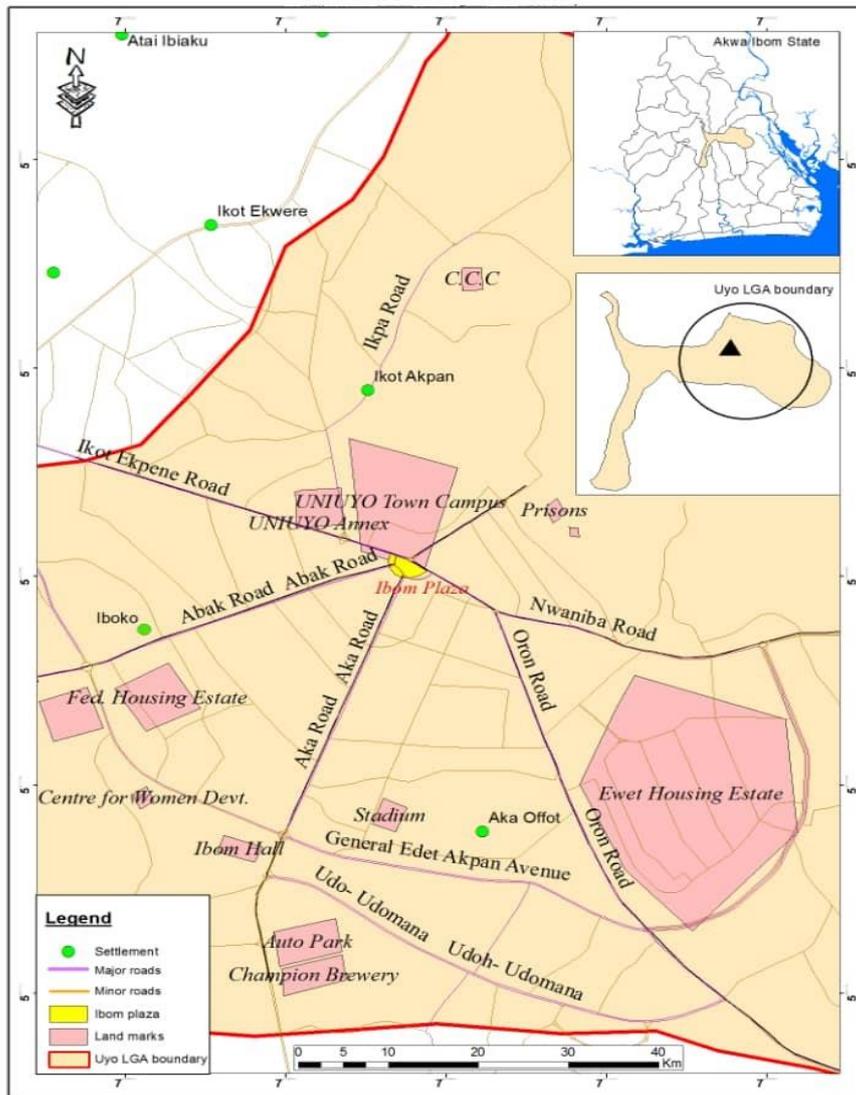


Figure 1: Map of Uyo Urban

Source: GIS Laboratory, Department of Geography and Natural Resources Management (2021)

Research Method: The research design adopted for this study was the survey technique, to examine residential environmental quality and residents' satisfaction in Uyo urban. A 5-point Likert scale was used to measure the independent (X) and dependent variables (Y) (Potter *et al.*, 2004). The design was most appropriate since it gave room for unbiased assessment of activities in the study area. The regression statistical model

was applied to analyse the data. The sampling unit of the study area of Uyo urban were houses, where respondents particularly, heads of the households were issued the questionnaire. Ten (10) neighbourhoods were sampled for this study. The population of the study consisted of all the 75 neighbourhoods in the study area. According to Udofia (2011), ten percent (10%) of the total population is ideal for use. However,

THE NEXUS BETWEEN RESIDENTIAL ENVIRONMENTAL QUALITY AND RESIDENTS' SATISFACTION IN UYO URBAN, AKWA IBOM STATE, NIGERIA

to obtain a wider coverage of Uyo urban, thirteen percent (13%) or 10 of the total neighbourhoods were systematically sampled by the arrangement of the neighbourhoods in an alphabetical order.

The first neighbourhood on the list was selected, after which a skipping range of 8 was used to select 10 neighbourhoods from the 75 neighbourhoods.

Table 1: Neighbourhoods in Uyo urban

SN	Neighbourhoods	1991 Population	2021 Projected Population
1	Afaha Atai	2,482	6,545
2	Afaha Etok	1,484	3,913
3	Afaha Idoro	939	2,476
4	Afaha Ikot Obio	1,036	2,731
5	Afaha Offot	1,989	5,244
6	Afaha Oku	4,127	10,882
7	Afaha Udo Eyop	1,860	4,904
8	Anua Obio	813	2,143
9	Anua Offot	6,521	17,195
10	Effiat Offot	4,179	11,020
11	Ekpri Nsukara	1,143	3,014
12	Eniong Offot	4,901	12,923
13	Iba Oku	375	988
14	Ibiaku Offot	1,383	3,646
15	Ifa Atai	2,104	5,548
16	Ifa Ikot Abia Ntuen	322	849
17	Ifa Ikot Akpabio	616	1,624
18	Ifa Ikot Akpan	531	1,400
19	Ifa Ikot Akpan Mbia	1,226	3,232
20	Ifa Ikot Idang	1,172	3,090
21	Ifa Ikot Obong	322	849
22	Ifa Ikot Okpong	1,704	4,493
23	Ifa Inyang Idung	1,519	4,005
24	Ikot Abasi Idem	440	1,160
25	Ikot Akpa Etok	1,853	4,886
26	Ikot Akpan Oku	2,386	6,291
27	Ikot Ebido	995	2,623
28	Ikot Essien	1,459	3,847
29	Ikot Eyiene	436	1,149
30	Ikot Ide Akpakpan	667	1,758
31	Ikot Ide Etukudo	821	2,164
32	Ikot Iko	1,092	2,879
33	Ikot Mbon	1,291	3,404
34	Ikot Mpkeyak	2,294	6,049
35	Ikot Nsung	2,050	5,405
36	Ikot Obio Offong	2,562	6,755
37	Ikot Odung	937	2,470
38	Ikot Oku	2,122	5,595
39	Ikot Oku Ikono	1,667	4,395
40	Ikot Oku Ubo	1,261	3,325
41	Ikot Okubo	2,213	5,835
42	Ikot Okure	1,751	4,617
43	Ikot Udo Ekpo	695	1,832
44	Ikot Udo Uso	196	516
45	Ikot Udoro Oku	2,698	7,114

46	Ikot Udowot	559	1,474
47	Itiam Etoi	3,227	8,509
48	Mbak akpan Ekpenyong	707	1,864
49	Mbak Ikot Abasi	1,883	4,965
50	Mbak Ikot Ebo	2,185	5,761
51	Mbak Ikot Udo	995	2,623
52	Mbak Itam	2,310	6,091
53	Mbiabong Anyanya	1,718	4,530
54	Mbiabong Ikot Akpan	647	1,706
55	Mbiaobong Ikot Andem	1,232	3,248
56	Mbierebe Obio	2,375	6,262
57	Mbikpong Atai	1,176	3,101
58	Ndue Etong Oku	889	2,344
59	Nsukara	2,566	6,766
60	Nung Akpan	797	2,101
61	Nung Asang	748	1,972
62	Nung Ette	2,763	7,286
63	Nung Obio	1,130	2,979
64	Nung Ukana Ikot Efe	1,710	4,509
65	Nung Ukana Ikot Obio	1,567	4,132
66	Nung Ukim	992	2,615
67	Nung Uyo	933	2,460
68	Obio Etoi	1,445	3,810
69	Obio Offot	2,006	5,289
70	Obot Obom	663	1,748
71	Oku Ikot Idaha	207	545
72	Owot Uta	1,315	3,625
73	Use Ikot Ebio	640	1,687
74	Use Offot	3,674	9,688
75	Uyo	110,054	290,212
Total		227,747	600,685

Source: NPC

The sample size of the study was determined using Taro Yamane formula, (1967).

$$n = N/1 + N (e)^2 \text{ -----Equation (1)}$$

Where n = present population, N = finite population and e = significant level of 0.05

Inputting this into the formula

$$N = 8224/1 + 8224 (0.05)^2 = 8224/21.56 = 381$$

Table 2: Ten Neighbourhoods and their Projected Population, Household and Sample Size

SN	Neighbourhood	1991Popula tion	2020Project ed Population	Number of Households	Samplesize
1	Afaha Atai	2,482	6,545	414	19

2	Anua Offot	6,521	17,195	2866	133
3	Ifa Ikot Akpabio	616	1,624	271	13
4	Ikot Akpa Etok	1,853	4,886	814	38
5	Ikot Mbon	1,291	3,404	567	26
6	Ikot Okubo	2,213	5,835	973	45
7	Mbak Ikot Abasi	1,883	4,965	828	38
8	Mbikpong Atai	1,176	3,101	517	24
9	Nung Ukana Ikot Obio	1,567	4,132	687	32
10	Use Ikot Ebio	640	1,687	281	13
Total		20,242	53,374	8224	381

Source: Researcher's compilation (2021)

Table 3: Independent Variables (PREQIs)

SN	Indices	Definition	Unit of Measurements
X ₁	Architectural and urban planning space	Refers to the space between houses in the neighbourhood	Metre square (m ²)
X ₂	Road Accessibility	Refers to the road network connections linking the neighbourhood to other parts of the city.	Number of road networks
X ₃	Security	Refers to how safe the neighbourhood is from criminal activities.	Number
X ₄	Education	Refers to schools in the neighbourhood.	Number
X ₅	Transport Service	Refers to proximity of residents to the public transport pick up point.	Distance in Metre
X ₆	Waste Management	Refers to the dumpsite volume and frequency of evacuation of waste by waste management agency.	Frequency
X ₇	Commercial Service	Refers to availability of stores to serve the neighbourhood.	Number
X ₈	Recreational Service	Refers to availability of areas for outdoor activities like sport, sit- out etc.	Number
X ₉	Neighbourhood Upkeep	Refers to the cleanliness and maintenance culture in the neighbourhood.	Number
X ₁₀	Neighbourhood Serenity	Refers to the degree of noise and calmness in the neighbourhood.	Frequency of cases

Source: Adapted from Mao, Fornara, Manca, Bonnes, and Bonaiuto. (2015), Bonaiuto *et al.* (2015)

Table 4: Dependent Variables

SN	Indices	Definition	Unit of Measurements
Y ₁	Residential Satisfaction	Refers to the level of satisfaction derived by residents living in the neighborhood	Likert scale

Source: Adapted from Mao *et al.* (2015)

The regression models are specified below.

$$RES_QUA = \alpha_0 + \alpha_1RD_ACC_1 + \alpha_2SEC_2 + \alpha_3EDU_FAC_3 + \alpha_4REC_SERV_4 + \alpha_5COMM_SER_5 + \alpha_6TRAN_SERV_6 + \alpha_7NEB_SERE_7 + \alpha_8WST_MGT_8 + \alpha_9NEB_UPK_9 + \mu_2$$

Equation (2)

$$RES_SAT = \gamma_0 + \gamma_1URB_PLN_1 + \gamma_2RD_ACC_2 + \gamma_3SEC_3 + \gamma_4EDU_FAC_4 + \gamma_5REC_SERV_5 + \gamma_6COMM_SER_6 + \gamma_7TRAN_SERV_7 + \gamma_8NEB_SERE_8 + \gamma_9WST_MGT_9 + \gamma_{10}NEB_UPK_{10} + \mu_3$$

Equation (3)

Where α_0 and γ_0 , are constants in equations 2 and 3 respectively. $\alpha_1, \alpha_2, \dots, \alpha_9$ (equation 2) and $\gamma_1, \gamma_2, \dots, \gamma_{10}$ (equation 3) are coefficients of estimate; URB_PLN- urban planning, RD_AC- road accessibility, SEC- security, EDU_FAC- educational facilities, REC_SERV- recreational service, COMM_SER- commercial service, TRAN_SERV- transport service, NEB_SERE- neighbourhood serenity, WST_MGT- waste management, NEB_UPK- neighbourhood upkeep, μ_2, μ_3 are error terms in equations 2 and 3 respectively, RES_QUA- residential quality, RES_SAT- residential satisfaction. Furthermore, residential satisfaction (RES_SAT): residential satisfaction and residential environmental quality in the study area (equation 3). The variables on the right hand side of the equality sign represent the Perceived Residential Environmental Quality Indicators (PREQIs), the independent variables. Residential satisfaction and residential environmental quality is determined by retrieving data from questionnaire, with the aid of a 5-point Likert scale, the data on residential

satisfaction is obtained and the mean value is calculated and analysed using regression model from a Stata statistical tool. Conclusion is drawn from the result of the analysis.

Data Presentation, Analysis and Discussion of Results: Of the 381 copies of the questionnaire distributed, 298 (78.2%) were completed correctly and returned. Data on demography and socioeconomic profiles of respondents are firstly presented as background for the analysis.

Demographic/ Socio-economic Profiles of the Respondents in Uyo Urban: The personal characteristics of the respondents were collected as a background to the study. This was done to have an approximate profile of the heads of household that responded in this study. The survey data in Table 4 represents the marital status, age, income level, occupational status, educational status, and duration of residence of the respondents.

Table 4: Distribution of Respondents According to their Personal characteristics

Characteristic	Frequency	Percentage
Age		
18-40	53	17.44
41-44	58	19.46
45-60	171	57.38

THE NEXUS BETWEEN RESIDENTIAL ENVIRONMENTAL QUALITY AND RESIDENTS' SATISFACTION IN UYO URBAN, AKWA IBOM STATE, NIGERIA

61-above	17	5.70
	298	99.98%
Marital Status		
Single	69	23.15
Married	170	57.04
Divorce	34	11.40
Widowed	25	3.28
	298	99.97%
Educational Status		
First School Leaving certificate	125	41.94
Tertiary	168	56.37
No Formal Education	5	1.67
	298	99.98%
Occupation		
Civil Servant	168	56.37
Farming	47	15.77
Trading/Business	83	27.85
	298	99.98%
Income (Naira)		
Below #18,000	84	28.18
#18,000-#60,000	188	63.08
#61000-above	26	8.72
	298	99.98%
Duration of Residence (years)		
1-10	150	50.33
11-20	121	40.60
21-above	27	9.06
Total	298	99.99%

Source: Field data (2021)

Discussion of Results: The result in Table 6, reveal that none of the predictors (PREQIs) of residential satisfaction (RES_SAT) was significant. This suggests that the perception of environmental residential quality on residential satisfaction by residents of neighbourhoods in Uyo urban is low. Therefore, no evidence was found that residents in the neighbourhoods were satisfied with the residential environmental qualities. These results agree with Adriaanse (2007) study that residents of different neighborhoods were not satisfied with their neighborhoods in terms of quality of their residential environment. The results are also in line with the assertion of Bonaiuto *et al.*

(2003); and Hui and Yu (2009) that the level of satisfaction an individual or family can experience depends on the prevailing housing condition.

6.2 Conclusion Residents of Uyo urban are not quite satisfied with the quality of residential environment. Population growth negatively affected the perceived residential environmental quality in Uyo urban.

6.5 Recommendations

On the basis of the findings of the study, the following recommendations are made:

THE NEXUS BETWEEN RESIDENTIAL ENVIRONMENTAL QUALITY AND RESIDENTS' SATISFACTION IN UYO URBAN, AKWA IBOM STATE, NIGERIA

There is need for government, Urban planning authorities and related agencies to improve on all the listed perceived residential environmental qualities (PREQs) such as ensuring the adequate provisions of security facilities to protect both lives and properties of the residents. Also, to ensure timely waste evacuation, to constantly keep the residential environment clean and ensuring adequate availability of commercial services, and educational services. This will serve as incentives for the residents to derive satisfaction for improved welfare.

REFERENCES

- Abimbola, O. and Adebayo, P. (2015). The Effects of Urbanization and Neighbourhood Deterioration on Urban Dweller's Quality of Life in Lagos Megacity, *International Journal of Research in Humanities and Social Studies*, 2(12): 90 - 98.
- Adriaanse, C. (2007). Measuring Residential Satisfaction: A Residential Environmental Satisfaction Scale (RESS). *Journal of Housing and Built Environment*, 22: 287 - 304
- Akpan-Ebe, I., Udotong, I. and Ekpenyong, R. (2016). Ecological Consequences of Urbanization of Uyo Capital City, Akwa Ibom State, Nigeria. *Journal of Agriculture and Ecology Research International*, 7(3): 1 - 12.
- Aliyu, A., and Amadu, L. (2017). Urbanization, Cities and Health: The Challenges to Nigeria - A Review. *Annals of African Medicine*, 16(4): 149 -158.
- Bae, W., Kim, U., and Lee, J. (2019). Evaluation of the Criteria for Designating Maintenance Districts in Low-Rise Residential Areas: Urban Renewal Projects in Seoul. *Sustainability*, 11(21): 58 - 76.
- Biagi, B., Ladu, M. G., and Meleddu, M. (2018). Urban Quality of Life and Capabilities: An Experimental Study. *Ecological Economics*, 50: 137 - 152.
- Bonaiuto, M., Fornara, F., Ariccio, S., Cancellieri, U. G., and Rahimi, L. (2015). Perceived Residential Environment Quality Indicators (PREQIs) Relevance for UN-HABITAT City Prosperity Index (CPI). *Habitat International*, 45: 53-63.
- Choi, Y. N. (2016). The Study on Factors Determining Life Satisfaction in Jeollabukdo: Focusing on Individual and Regional Factors. *Korean Association for Local Government and Administration Studies Research*, 30(3): 291- 312.
- Dewilde C. and Lancee, B. (2013). "Income Inequality and Access to Housing in Europe." *European Sociological Review*, 30(4): 512 - 524.
- European Environment Agency (2012). A-Z Glossary on Environmental Quality. List of Environmental Terms used by EEA Newsletter. Published by EEA.
- Gbekaji, J. O. and Rilwani, L. M. (2009). Residents' Socio-economic Characteristics and Residential Mobility in Urban Space: The Example of Warri Metropolis, Delta State, Nigeria. *Journal of Human Ecology*, 27, 45-52. www.scirp.org
- GIS Laboratory (2021). Department of Geography and Natural Resources Management, University of Uyo, Akwa Ibom State.
- Hanak, T., Marovic, I. and Aigel, P. (2015). Perception of Residential Environment in Cities: A Comparative Study. *Procedia Engineering*, 117: 495 - 501.

- Kesalkheh, S. and Dadashpoor, H. (2012). Assessment of Residential Environment Quality of Traditional and New Neighbourhoods in Rapidly Grown City Tehran. New and Traditional Residential Environment, ISOCARP Congress.
- Lee, B. H., and Son, W. B. (2017). Designing a Longitudinal Survey for Measuring the Quality of Life: A Case Study. *GRI Review*, 19(3): 1 - 3.
- Lewicka, M. (2011). Place Attachment: How Far Have We Come in the Last 40 Years? *Journal of Environmental Psychology*, 31(3): 207 - 230
- Mao, Y., Fornara, F., Manca, S., Bonnes, M., & Bonaiuto, M. (2015). Perceived Residential Environmental Quality Indicators and Neighbourhood Attachment: A Confirmation Study on a Chinese Sample in Chongqing. *Psychology Journal*, 4(3): 123 -137.
- Moon, H. N., Chai, C. G., and Song, N. K. (2018). Analysis of the Effect of Perceived Neighbourhood Physical Environment on Mental Health. *Seoul Studies*, 19(2): 87 - 103.
- Moser, G. (2009). Quality of Life and Sustainability: Towards Person - Environment Congruity. *Journal of Environmental Psychology*, 29: 351 - 357.
- National Population Commission (1991). Population Density of Uyo. Information Bulletin, NPC, Uyo.
- Njungbwen, E., and Njungbwen, A. (2012). Urban Expansion and Loss of Agricultural Land in Uyo Urban Area: Implication for Agricultural Business. *Ethiopian Journal of Environmental Studies and Management*, 4(4)
- Obiowo, C. (2017). An Assessment of Residential Area Preference in Uyo Urban: Unpublished Research Project. University of Uyo, Akwa Ibom State. 38p.
- Ofem, B. I (2017). A Review of the Criteria for Defining Urban Settlements in Nigeria. *Journal of Human Ecology*. Vol. 37, 2012 – Issue 3. www.scirp.org
- Ogu, V. (2002). Urban Residential Satisfaction and the Planning Implication in a Developing World Context: The Example of Benin City, Nigeria. *International Planning Studies*, 7(1): 37 - 53.
- Potter, J., Cantarero, R., Yan, X., Larrick, S., and Ramirez-Salazar, B. (2004). A Case Study of the Impact of Population Influx on a Small Community in Nebraska. *Great Plains Research*, 14: 219 - 30. The Center for Great Plain Studies.
- Sanni, L. and Akinyemi, F. (2009). Determinants of Household's Residential Districts' Preference within Metropolitan City of Ibadan, Nigeria. *Journal of Human Ecology*, 25(2): 137 - 141.
- Sirgy, J. (2002). The Psychology of Quality Life. Boston, MA: Kluwer Academic Publishers.
- Stevenson, B., and Wolfers, J. (2013). Subjective Well-Being and Income: Is there any Evidence of Satiation? *American Economic Review*, 103(3): 598 - 604. www.researchgate.net
- Udo, U. (2016): Socio-economic Effects of Flooding in Uyo Urban, Akwa Ibom State. Unpublished Research Project University of Uyo, Akwa Ibom State. 41p.

Udofia, E. (2011). *Applied Statistics with Multivariate Methods*. Immaculate Publications Limited, Enugu, Nigeria. 171p.

Wokekoro, E., (2015). Residential Satisfaction with Residential Quality in Informal Settlements in Port Harcourt Municipality. *European Journal of Research in Social Sciences*, 3(3): 1 - 2.