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Spatial Pattern of Intra- Urban Poverty of Ikere- Ekiti, Southwestern Nigeria.

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Abstract:- This study used Geographical Information Systems to evaluate the spatial pattern of intra-urban poverty of Ikere-Ekiti. About 100 poverty variables were subjected to Factorial Analysis statistics and the results of the first five factors: Income, Housing characteristics (14.65%); Commerce and Communication (8.98%); Educational facilities (5.72%); Roads and Drainages (4.99%) and Water facilities (4.08%) were mapped. It was discovered that there was a spatial variation in the intra-urban poverty of the town. Ugele and Arokun wards were found to be the poorest compared to other wards. Emphasis of any poverty reduction projects should be focused on measures that would increase the provision and accessibility of the poor to necessary social and physical infrastructure that could improve the life of the urban poor.

Keywords:- *Communalities. Factor Analysis, Infrastructural facilities, Poverty and Vulnerable*.

I. INTRODUCTION

Poverty is arguably the single largest moral problem in the world today. The following statistics give a rough indication of the size and severity of the problem. Nearly a billion people are undernourished (FAO, 2010). On average, 22,000 children die from poverty-related causes every day (You *et al*., 2010). The number of people who live without access to improved sanitation facilities is 2.6 billion, and over 800 million live without access to improved drinking water (UNICEF, 2010). Rates of violence against women are persistently and unacceptably high- in most countries, the likelihood of a woman being a victim of physical or sexual violence during lifetime is between 30 % and 60% (WHO, 2005). The above painted scenario shows that poverty is an ill wind that blow no good to anybody.

According to the National Bureau of Statistics (NBS), (2011), 60.9% of the Nigeria population or approximately 100 million people live in abject poverty, that is, living on less than $1 or N320 a day. On the other hand, the percentage of Nigerians living in abject poverty has increased from 54% in 2004 to 61% in 2010. In Ekiti State, about 74.8% of the population had access to water while only 46.9% had access to clean and safe water; almost 79.4% of the households used firewood as a source of fuel for cooking, while only 20.6% used kerosene (EKSCDA, 2010). All these and many more data portrayed Ekiti State as highly vulnerable to poverty.

The urban growth is attributed to both natural population and rural - urban migration. Urbanization contributes to sustained economic growth which is critical to poverty reduction. The economies of scale and agglomeration in cities attract investors and entrepreneurs which is good for overall economic growth. Cities also provide opportunities for many, particularly the poor who are attracted by greater job prospects, the availability of services, and for some, an escape from constraining social and cultural traditions in rural villages. Yet, city life can also present conditions of overcrowded living, congestion, unemployment, lack of social and community networks, and crippling social problems such as crime and violence.

It was estimated that one-third of the people living in developing countries who live in cities live in squatter settlements (World Bank, 2012). Most inhabitants in World's cities experience urban poverty. Urban poverty is a multi-dimensional phenomenon. The urban poor live with many deprivations. Their daily challenges may include: limited access to employment opportunities and income, inadequate and insecure housing and services, violent and unhealthy environments, little or no social protection mechanisms and limited access to adequate health and education opportunities.

Although, there are many literatures on poverty, most of them have not been able to answer the 'where' question. That is, where are the urban poor located. It is only through the apparatus of Geographical Information System (GIS) that the locations of the poor can be shown. Equally, the era of the predominance of socio-economic indicators serving as the main source for measuring poverty is ending. A newer, integrated vision of poverty, where both spatial and non spatial components are weighed and measured is emerging through the use of GIS. This paper fosters further an explanation of the subject- through measurement of econometric,

anthropometric and spatial dimensions for the purpose of planning for levels of poverty in Ikere-Ekiti, a rapidly urbanizing town in South-western Nigeria.

II. STUDY AREA

Ikere- Ekiti is located on latitude 7^0 25' N of Equator and Longitude 5^0 19' East of Greenwich Meridian. The town spreads over an area of about 25km^2 with a population figure of 76,715 (INEC, 2000) and rose up astronomically to 174,815 in 2010 (NPC, 2011) obviously due to sprouting of higher institutions, commercial activities, rural-urban migration and natural increase. The town lies within the equatorial climate belt characterized by alternating tropical wet and dry seasons and classified as Koppen's Aw climatic type (Ojo, 1980; Adebayo, 1993). Humidity is high with mean annual rainfall of about 1500mm. Natural vegetation is tropical rainforest but now has been modified by a secondary vegetation known as derived savannah mosaic. These are mixtures of patched forest and grasses. Land use includes farmlands interspersed with fallows and settlements.

The study area is characterized with the basement complex rock type of old-suite pre-Cambrian origin and helps determine the water supply. The rocks are mostly impermeable granite-gnesises, migmatites, as well as extensive areas of schists, phylites, and quartz (Smith and Mortgomery, 1962). The rocks are neither porous nor permeable except where they are deeply weathered or have zones of weaknesses such as cleavages, joint, fissures, lineaments and softer belts (Ayoade, 1988). The topography of the study area is made up of undulating terrain almost entirely surrounded by rocks. Some of these rocky outcrops which are mainly deep-seated, bare, lenticular inselbergs are often called by local names such as *'Olosunta', 'Orole', 'Ajaribi', 'Opolokogun', 'Ogerekogun','Egungun'*, and others. The terrain is generally between 350m- 400m above the sea level. Landforms also include different types of valleys and erosion residuals such as tabular hills. Most of these hills still reflect the signature of underlying rocks, palimpsests, vicissitudes, or relics of older inselbergs (Olatunji, 2010).

III. METHODOLOGY

For the purpose of this study, both primary and secondary sources of data were employed. Transect walks and Direct Interview were used to collect data on the location of each of the eleven wards that make up the town, Ikere-Ekiti. Opinion and community leaders were engaged in transect walk to move round and helped to determine the boundaries of the wards. Global Positioning System (GPS) was used to capture the locational data of the eleven wards that make up the urban centre (Fig. 1). The data were later mapped using GIS Arcview 8.3 software.

A total of 210 copies of the questionnaire were distributed using systematic random sampling technique. Out of the 11 wards, 6 wards were identified for the administration of the questionnaire (Fig. 1). After the first electoral ward, (Atiba/Aofin- 01), every other wards were picked respectively. This shows that every ward has equal chance of being picked. An average of 35 copies of the questionnaire were administered in each ward. Having identified the first household, every 10th household was picked. The results of the collated data using SPSS version 10 were subjected to factor analysis statistics. The over 100 poverty variables converged at the 25th rotation into 14 poverty factors (Appendices I & II).

For proper urban poverty mapping, data for the other wards that were not considered in the course of questionnaire administration were captured using Geostatic Analytical tool called Inverse Distance Weighted (IDW). IDW is based on the algorithm of distance with the assumption that things that are close to one another are more alike than those that are farther apart. Those measured values closest to the prediction location will have more influence on the predicted value than those farther away (Watson and Philip, 1985). IDW therefore, assumes that each measured point has a local influence that diminishes with distance. It determines the power function (p) value by minimizing the Root Mean Square Prediction Error (RMSPE). The RMSPE is a summary statistic quantifying the error of the prediction surface.

IV. RESULTS AND DISCUSSION

The five poverty factors with factor loadings of not less than 4% were mapped out for all the eleven wards as follows:

4.1 Income, Housing and Housing characteristics**.**

Ugele and Aroku wards recorded the least relative mean monthly income in the town while fringes of Oke - Osun, Atoba/aafin, Okeruku wards recorded medium mean monthly income and Are/Araromi, Afao/ Kajola, Agbado/ Oyo, Idemo, Odose wards had high mean monthly income (Fig. 2). In this settlement, there was a sort of relationship between housing type and income distribution. For example, in Ugele and Aroku wards, majority of the inhabitants were students of Ekiti State College of Education who did not earn income while the indigenes were mostly farmers.

But in Oke-Osun, Agbado/ Oyo, Afao/ Kajola wards, majority were government workers who earned monthly incomes. This further explained the type of housing units in the wards. At Ugele and Aroku wards, most housing units lacked the usual urban services like good toilets, bathrooms, kitchens and electricity. In this part of the town, bathrooms and kitchens were detached separately from the main building (Fig. 2). Most times, a sort of make-shifts were in common place, whereas, there were 'open defecation' and central dumping sites. Indeed, this area of the town depicted real poverty of housing and housing characteristics. In the other wards, we have in most cases, both toilets, bathrooms and kitchens indoor and
less number of households using them compared to Ugele and Aroku wards where firewood remained the major source of energy used in the kitchens (Fig.2).

4.2: Commerce and Communication Gadgets.

Commercial activities were very low in Ugele and Aroku wards while Atiba/ Aafin, Are/ Araromi and Ogbonjana wards had medium commercial activities. Afao/ Kajola, Idemo, Oke- Osun, Odose, Agbado/ Oyo wards were relatively high in terms of commercial activities(Fig. 3) This situation was explained by the fact that major roads passed through these wards and therefore creating easy accessibility for commercial activities. In Ugele and Aroku wards, people travelled high mean distance to buy goods and services. Here, there were no markets or stores or shops in most cases. The traditional Oba market at Atiba/ Aafin ward remained their major centre of patronage. In most of the other wards, small shops characterized the commercial landscape apart from the traditional market centre. The level of poverty is equally reflected in the ownership of communication gadgets(Fig. 3). In most of the houses in Ugele and Aroku wards, there were no radio sets, no television sets not to talk of refrigerators and other communication gadgets because these facilities were termed to be luxury to them. Less than 50% of the respondents could boast of handsets if not for the students' population in these wards (Fig. 3).

4.3: Educational Facilities.

Agbado/ Oyo and Okeruku wards were characterized by high supply of educational facilities as these wards host the State college of education and some secondary and primary schools (Fig.4). At Oke- Osun and Atiba wards, there were medium level supply of educational facilities while other wards recorded relatively low supply of educational facilities. There was a sort of 'pull- factor' by the presence of the State College of Education as the two wards experienced more modern structure with educated people living in these areas (Fig.4).

4.4: Water Facilities.

It should be generally noted that there was scarcity of potable water in the town but some wards suffered more compared to others. For example, Ugele ward and parts of Oke-Osun and Are/Araromi wards usually face acute shortage of water while other parts of Are/ Araromi, Oke-Osun and Aroku wards experienced a relatively medium supply of water facilities (Fig.5). Other wards were better serviced with water facilities through rainfall, dug-out wells and boreholes, streams and pipe-borne water. The pipe-borne water served a very negligible part of the town while dug-out wells and streams were largely relied upon especially by the urban poor. It was only those who were rich that could afford borehole, thus, the poor usually travelled longer distance to access potable water from both boreholes and pipe borne water outside their neighbourhoods (Fig.5).

4.5: Roads and Drainage Facilities.

The major road passed through the town from Ado- Ekiti to Akure, Ondo State while other neighbouring towns like Ise- Ekiti and Igbara- Odo were equally served with tarred roads. There were few other secondary arteries that were being serviced with tarred roads thus, parts of Atiba/ Aafin, Okeruku, Ugele, Oke-Osun and Aroku wards were poorly serviced with road arteries (Fig.6). Most houses were not accessible through road (untarred) but through major and minor pathways. At the centre of the town where we had Idemo, Ilapetu/ Ijao, parts of Agbado/ Oyo and Odose wards, roads and drainages were relatively high in supplies while the supplies of roads and drainages in Afao/ Kajola, Are/ Araromi, Odose, Agbado/ Oyo were of a medium level (Fig.6). Accessibility to urban centre was hampered by the seasonality in the usage of available access roads. There was the need to create more accessible roads to the farmsteads to allow the movement of farm produce to the urban centre. In most of the new developed areas of the town, households were sometimes weary of going out with their vehicles during the rainy season as floods, which are rampant because of lack of good drainages and culverts, became a common phenomenon and handicap (Fig.6).

V. CONCLUSION

It is apparent and clearly evident that the findings generated showed that there was a spatial variation in the intra-urban poverty of the town. For example, Ugele and Arokun wards exemplified high level of poverty relative to other wards. The results of the research work will therefore guide any poverty reduction policies and programmes that the government and or any Donor Agency would want to embark on. The local variation in degree of poverty must be considered before applying a global poverty reduction for the urban centre. Emphasis

of any poverty reduction projects should be focused on measures that will increase provision and accessibility of the poor to necessary social and physical infrastructure that can improve the life of urban poor. Any decision on sustainable urban development should be woven around the experiences, priorities and recommendations of the urban poor.

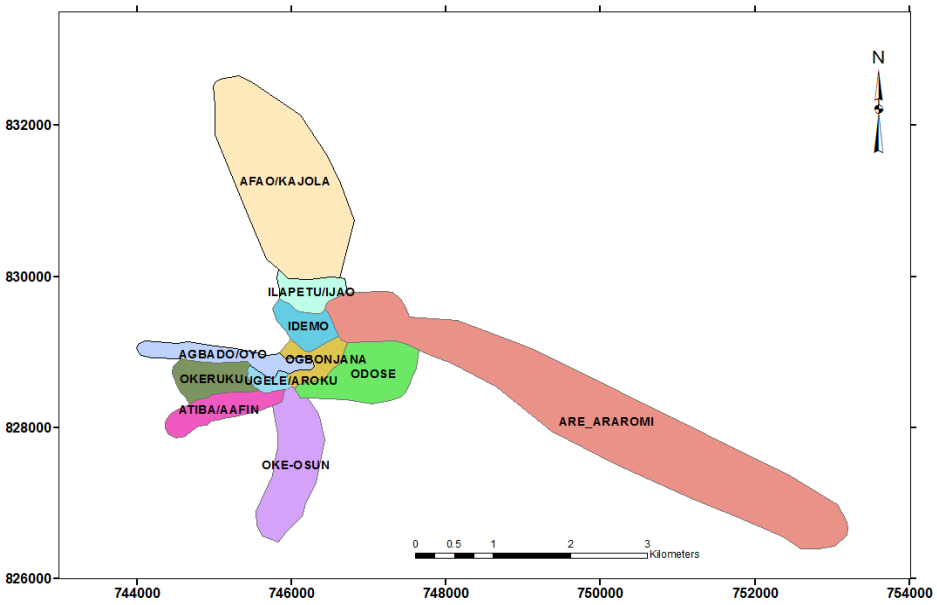

Fig. 1: The Electoral Wards in Ikere- Ekiti

Source: Field Work, 2014

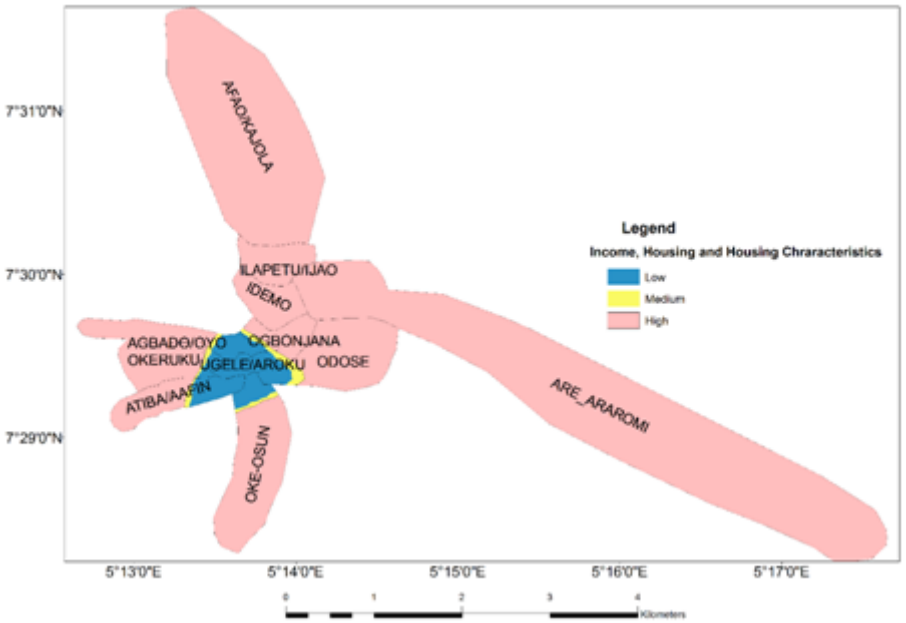

Fig.2: Income, Housing and Housing Characteristics in Ikere- Ekiti

Source: Field Work, 2014.

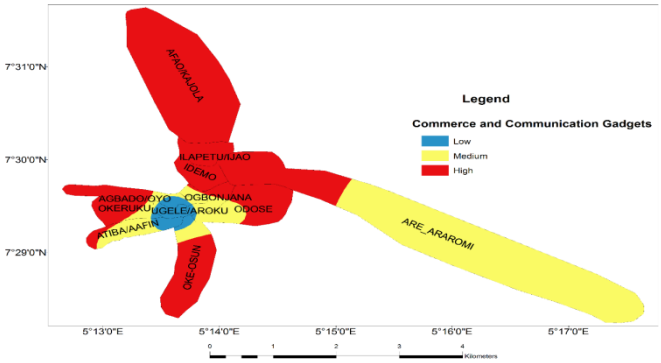

FIG. 3: Commerce and Communication Gadgets in Ikere-Ekiti.

Source: Field work, 2014.

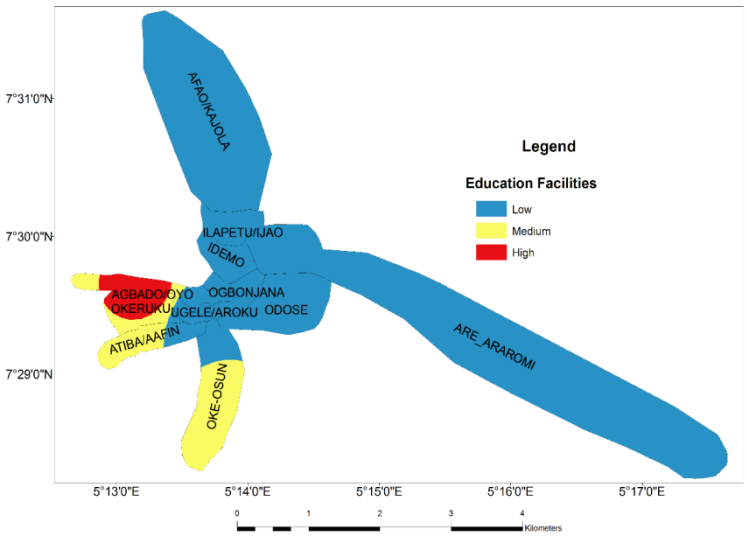

FIG. 4: Education Facilities in Ikere- Ekiti.

Source: Field Work, 2014

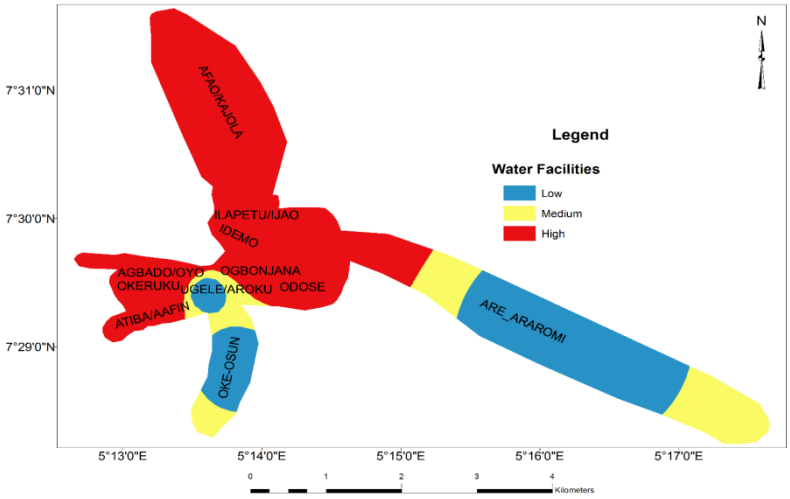

FIG. 5: Water Facilities in Ikere - Ekiti.

Source: Field work, 2014

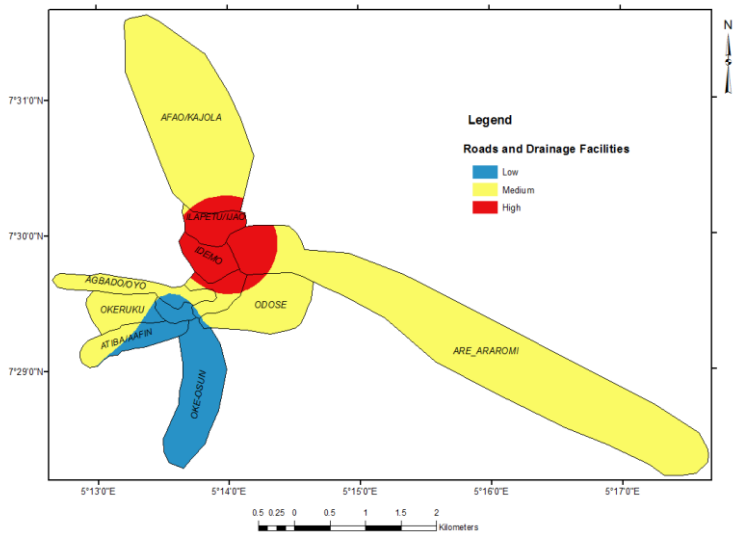

FIG. 6: Roads and Drainage Facilities in Ikere- Ekiti.

Source: Field work, 2014.

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APPENDIX I

COMMUNALITIES.		
	Initial	Extraction
V5a - Age	1	0.763629467
V5b - Gender	1	0.685102491
V6 - Marital Status	1	0.766737448
V7 - Level of Education	1	0.756215885

V8 - Religion	1	0.684533737
V9 - Occupation	1	0.776034286
V10 - Household Size	1	0.642613981
V11 - Average Monthly Income (in Naira)	1	0.78422159
V12 - Is the retail market in the area adequate	1	0.690102492
V13 - Estimated distance of the nearest retail shops to house	1	0.716718831
V14 - Distance to place of work	1	0.719599468
V15 - Mode of Travel	1	0.76321906
V16a - Type of Accomodation Building	1	0.894061434
V16b - No of People Living in the Building	1	0.727058568
V16c - No of Floor	1	0.880704779
V16d - No of Rooms	1	0.793608567
V17 - Nature of Occupancy	1	0.760105058
V18 - if rented, How much is paid as rent monthly(in Naira)	1	0.658703529
V19 - Age of Building (in Years)	1	0.718352435
V20 - Materials used for wall construction	1	0.756807321
V21 - If storey building, materials used for decking	1	0.850500769
V22 - Roofing Materials	1	0.669832684
V23 - Wall Finishing	1	0.627539454
V24 - Condition of Wall	1	0.72293327
V25 - Structural Condition of Building	1	0.771054462
V26 - Is the Building Accessible by Road	1	0.67230294
V27 - Source of Drinking Water	1	0.83889667
V28 - Source of Cooking and Washing water	1	0.869402708
V29 - If Pipe-borne water, how regular is the supply?	1	0.836028419
V30 - Do you pay for pipe borne water?	1	0.754239124
V31 - if yes, how much do you pay per month?	1	0.668461229
V32 - Agency Responsible for Water Supply	1	0.700433355
V33 - Distance of Water Source to the HH	1	0.780173284
V34 - Water Resources Location	1	0.766781682
V35 - Location of Bathroom	1	0.862654874
V36 - Number of Households using a bathroom	1	0.924484013
V37 - Location of Toilets	1	0.872307997
V38 - Number of Households using a toilet	1	0.927727731
V39 - Type of Toilet	1	0.749684953
V40 - Location of Kitchen	1	0.90146237
V41 - Number of Households using a Kitchen	1	0.930128632
V42 - Types of Energy used in Kitchen	1	0.59540823
V43 - Distance of Nearest Market	1	0.772502208
V44 - Range of Goods sold in the market	1	0.720121806
V45 - Description of Market Environment	1	0.786658499
V46 - Are there shopping malls and/or supermarkets around?	1	0.724994478
V47 - Type of Market wanted	1	0.704529422
V49 - What types of goods would you want them to sell	1	0.716589
V50a - Types of Waste generated	1	0.701423801
V50b - Method of waste storage	1	0.635378228
V51 - Methods of Waste Disposal	1	0.680965189
V52 - Frequency of Collection	1	0.739327274
V53 - Condition of Drainage System	1	0.671113034

V54 - Type or Class of Road in Locality	1	0.788554336
V55 - Condition of Road	1	0.717649158
V56 - Is the road provided with drainage?	1	0.822422126
V57 - If yes, kind of drainage available	1	0.727914807
V58 - Do you have difficulty in accessing your house?	1	0.8113596
V59 - If yes, what is responsible for inaccessibilty?	1	0.814248506
V60 - Means of Access to your house	1	0.725437291
V61 - Source of Electricity Supply	1	0.640613689
V62 - If PHCN, what is the distance of the Nearest Transformer to the House?	1	0.798908758
V63 - Average Monthly Bill Paid by the Household	1	0.799381057
V64a - Category of Health Facilities	1	0.724545391
V64b - Ownership of Health Facility	1	0.745374314
V65 - Condition of Health Facility	1	0.636822639
V66 - Do you have a Police Post in the Neighbourhood?	1	0.822447674
V67 - If available, State type	1	0.790109023
V68 - Distance of Nearest Police Station to House	1	0.845472275
V69 - Distance of Nearest Fire Station to House	1	0.818285227
V70 - Do you have Postal Agency in your Neighbourhood?	1	0.667820593
V71 - Is there neighbourhood Vigilante in this Area?	1	0.811977898
V72 - How Effective are they?	1	0.827974178
V73 - Who Pays for Security Services?	1	0.844076102
V74 - Type of Communication Gadget owned	1	0.674406246
V75a - Educational Facilities Available	1	0.774549391
V75b - Ownership of Educational Facilities	1	0.654701247
V75c - Distance to HH	1	0.644238708
V76 - Rating of the Level of Service Delivery provided in Locality	1	0.704814872
V77 - Priority Projects in Community	1	0.703957741
V78 - Before Facilities were provided, were the people consulted ?	1	0.925775675
V79 - If yes, At what Satges were they involved?	1	0.927121413
V80a - Type of Religious Centers	1	0.771675214
V80b - Numbers of Religious Centers	1	0.71309901
V81a - Type of Recreational/Cultural Facilities Available	1	0.881144519
V81b - Number of Recreational/Cultural Facilities	1	0.870790246
V82 - Are you a Member of any Voluntary Organization?	1	0.657494297
V83a - Area of Intervention	1	0.712217342
V83b -	1	0.713502642
V84 - How Accessible is Land to Womenfolk for Housing/Property Development	1	0.81459562
V85 - Commonest Gender Related Vices/Crimes	1	0.804524896
V86 - Cultural Heritage Facilities Available in Neighbourhood	1	0.668249626
V87 - Condition of Drainage System	1	0.724760688
V88 - Environmental Condition in Neighbourhood	1	0.620230878
V89 - As there been an incident of Outbreak of Communicable DIseases before?	1	0.864967759
V90 - If yes, What are the likely Cause?	1	0.820019501
V91 - Usual Health Problem caused by Environmental Conditions	1	0.662070957
V92 - What Attracted you to Area?	1	0.640374695
V93 - Would you Relocate from Area if Other Options are	1	0.877091176

Available?		
V94 - If No, why?	1	0.903025073
V95 - If yes, where else in the town?	1	0.844749575
V96 - Planning Agency Responsible for Development Control	1	0.652571956
V97 - Sources of Noise in Neighbourhood	1	0.758758619
V98 - Observed Effects of Noise on Individuals and Families	1	0.77393564
Extraction Method: Principal Component Analysis.		

APPENDIX
II

Total Variance Explained						
Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	15.23548041	14.6495004	14.6495004	15.23548041	14.6495004	14.6495004
2	9.337435396	8.978303265	23.62780366	9.337435396	8.978303265	23.62780366
3	5.953564515	5.724581265	29.35238493	5.953564515	5.724581265	29.35238493
4	5.18236709	4.983045279	34.33543021	5.18236709	4.983045279	34.33543021
5	4.247202074	4.083848148	38.41927836	4.247202074	4.083848148	38.41927836
6	3.484381415	3.350366745	41.7696451	3.484381415	3.350366745	41.7696451
7	3.310389974	3.183067283	44.95271238	3.310389974	3.183067283	44.95271238
8	2.910712274	2.798761802	47.75147418	2.910712274	2.798761802	47.75147418
9	2.549870181	2.451798251	50.20327244	2.549870181	2.451798251	50.20327244
10	2.478736902	2.383400867	52.5866733	2.478736902	2.383400867	52.5866733
11	2.412097282	2.319324309	54.90599761	2.412097282	2.319324309	54.90599761
12	2.297837449	2.209459086	57.1154567	2.297837449	2.209459086	57.1154567
13	2.067802476	1.988271612	59.10372831	2.067802476	1.988271612	59.10372831
14	1.939926322	1.865313771	60.96904208	1.939926322	1.865313771	60.96904208
15	1.855093505	1.783743755	62.75278584	1.855093505	1.783743755	62.75278584
16	1.72714951	1.660720683	64.41350652	1.72714951	1.660720683	64.41350652
17	1.619953195	1.557647303	65.97115382	1.619953195	1.557647303	65.97115382
18	1.584256549	1.523323605	67.49447743	1.584256549	1.523323605	67.49447743
19	1.532218034	1.473286572	68.967764	1.532218034	1.473286572	68.967764
20	1.391207637	1.337699651	70.30546365	1.391207637	1.337699651	70.30546365
21	1.270559606	1.221691929	71.52715558	1.270559606	1.221691929	71.52715558
22	1.204015646	1.157707352	72.68486293	1.204015646	1.157707352	72.68486293
23	1.170767997	1.125738459	73.81060139	1.170767997	1.125738459	73.81060139
24	1.151717116	1.107420304	74.91802169	1.151717116	1.107420304	74.91802169
25	1.110239518	1.067537998	75.98555969	1.110239518	1.067537998	75.98555969
26	0.992169147	0.954008795	76.93956849			
27	0.978713459	0.941070633	77.88063912			
28	0.957454542	0.920629367	78.80126849			
29	0.939289366	0.903162852	79.70443134			
30	0.904522724	0.869733389	80.57416473			
31	0.878363261	0.844580059	81.41874479			
32	0.839057556	0.806786111	82.2255309			
33	0.817375257	0.785937747	83.01146864			
34	0.789725628	0.759351565	83.77082021			
35	0.761819063	0.73251833	84.50333854			

36	0.727532313	0.699550301	85.20288884			
37	0.692482624	0.665848677	85.86873752			
38	0.666526409	0.640890778	86.5096283			
39	0.629435201	0.605226155	87.11485445			
40	0.579254363	0.556975349	87.6718298			
41	0.574900558	0.552788998	88.2246188			
42	0.568286256	0.546429092	88.77104789			
43	0.532846192	0.512352108	89.2834			
44	0.522462641	0.502367924	89.78576792			
45	0.499446864	0.48023737	90.26600529			
46	0.464729949	0.44685572	90.71286101			
47	0.446924734	0.429735321	91.14259633			
48	0.441157274	0.424189687	91.56678602			
49	0.429482304	0.412963754	91.97974977			
50	0.411812384	0.395973446	92.37572322			
51	0.405473026	0.38987791	92.76560113			
52	0.383261449	0.368520624	93.13412175			
53	0.36517989	0.35113451	93.48525626			
54	0.346961441	0.33361677	93.81887303			
55	0.339023832	0.325984454	94.14485749			
56	0.327240997	0.314654805	94.45951229			
57	0.319574256	0.307282939	94.76679523			
58	0.30723336	0.295416692	95.06221192			
59	0.29569732	0.284324346	95.34653627			
60	0.28521122	0.274241558	95.62077783			
61	0.263567042	0.253429848	95.87420767			
62	0.259326379	0.249352288	96.12355996			
63	0.239194325	0.229994543	96.35355451			
64	0.229943259	0.221099288	96.57465379			
65	0.220475758	0.211995921	96.78664971			
66	0.214754073	0.206494301	96.99314401			
67	0.202307593	0.194526532	97.18767055			
68	0.192684671	0.185273722	97.37294427			
69	0.187037393	0.179843647	97.55278792			
70	0.176748006	0.169950005	97.72273792			
71	0.166532835	0.160127726	97.88286565			
72	0.160697008	0.154516354	98.037382			
73	0.155097952	0.149132646	98.18651465			
74	0.144282094	0.138732782	98.32524743			
75	0.132654508	0.127552411	98.45279984			
76	0.131375655	0.126322745	98.57912259			
77	0.127957353	0.123035916	98.7021585			
78	0.118293704	0.113743946	98.81590245			
79	0.107055582	0.10293806	98.91884051			
80	0.10430173	0.100290125	99.01913063			
81	0.099353782	0.095532482	99.11466312			
82	0.095235268	0.091572373	99.20623549			
83	0.091835039	0.088302922	99.29453841			
84	0.080388885	0.077297005	99.37183541			
85	0.075206497	0.07231394	99.44414935			
86	0.071630315	0.068875303	99.51302466			
87	0.061542827	0.059175796	99.57220045			
88	0.056901097	0.054712593	99.62691305			
89	0.053612091	0.051550088	99.67846313			
90	0.047521966	0.045694198	99.72415733			
91	0.042586931	0.040948972	99.7651063			
92	0.039323046	0.037810621	99.80291693			

93	0.039032132	0.037530896	99.84044782			
94	0.035011159	0.033664576	99.8741124			
95	0.025936379	0.024938826	99.89905122			
96	0.023824978	0.022908633	99.92195986			
97	0.019558888	0.018806623	99.94076648			
98	0.017332712	0.016666069	99.95743255			
99	0.01444024	0.013884846	99.97131739			
100	0.012287176	0.011814593	99.98313199			
101	0.008557175	0.008228053	99.99136004			
102	0.005858356	0.005633035	99.99699308			
103	0.002733126	0.002628006	99.99962108			
104	0.000394075	0.000378919	100			
Extraction Method: Principal Component Analysis.						