

## **International Journal of Research Publication and Reviews**

Journal homepage: www.ijrpr.com ISSN 2582-7421

# An Assessment of Poverty Level in Rural Communities of Akwa Ibom State, Nigeria

## Victor M. Akpan\*, Victor E. Umoren, and Angela U. Attah

Department of Urban and Regional Planning, University of Uyo, Nigeria. Email: vicmosa14@gmail.com

#### ABSTRACT

Determining the structure and level of poverty in any community is essential in addressing poverty in such community. This research work was therefore carried out in rural communities of Akwa Ibom State, Nigeria to determine their present poverty level in order to aid efficient policy making. Spatial sampling framework (grid cells) was employed to select 93 rural communities for the study. Data on poverty indicators were elucidated from 1158 respondents in the study area through questionnaire administration. Factor analysis was performed on twenty-seven variables and it yielded six factors with basic human needs factor accounting for 36.511% of the variation in the original variables set. The six factors (F1, F2, F3, F4, F5, and F6) accounted for 68.656% of total variance in the original primary variables. The cumulative factor scores for each community were used to determine the poverty level of such community. Based on the performance of each community, the study classified all the sampled communities into four groups namely: poor (5), moderately poor (50), very poor (32) and extremely poor (5) communities. Findings from the study further revealed that 4 (AtanUkwuk, Obianga, EsukMbiam and Ineukpana) of the 5 extremely poor communities were riverine communities. Based on these findings, the following recommendations were made: That special attention should be given to riverine communities; basic needs dimension of poverty should be given a priority; and massive provision of infrastructural facilities in the study area to stimulate socio-economic development of the area.

## Keywords: Poverty, Poverty level, household, rural communities

#### Introduction

It is widely known that poverty is a global phenomenon. Poverty, as a multifaceted concept, encompasses a variety of conditions associated with hardship and lack of resources to meet the basic human needs (Ravallon, 2016). Similarly, Inyangmme (2021) noted that poor life expectancy, high risk of death, hunger, lack of purchasing power, limited access to social and economic services are all basic characteristics of poverty. Many of the issues facing the world today are caused by poverty (Ademola and Abang, 2015). The degree of problems posed by poverty varies from one country to another likewise policies designed to address poverty. However, reducing poverty in developing economies is a major challenge faced by the development stakeholders today (UNDP, 2007).

Although poverty is a worldwide phenomenon, it has been observed that Nigeria is one of the countries that are worst hit by poverty. In fact, it is one of the poorest among the poor countries of the world (UNDP, 2007). As at 2019, 46.5% of Nigerians lived in extreme poverty based on poverty line of 1.9 USD per day (Inyangmme, 2021). As stated by Olurunfemi (2020), the scourge of poverty is a threat to the Nigeria population as its incidence is on the increase with biting effects more on the rural dwellers where the bulk of the population lives. National Bureau of Statistics figure of 2022 revealed that of the estimated 133 million poor people in Nigeria, 106 million (79.7%) live in rural areas (National Bureau of Statistics, 2022). This therefore brings to the fore, the rural focus of this study.

There is high incidence of poverty in Akwa Ibom State. This view was asserted to by Ukpong (2017) when attributing the high incidence of poverty in Akwa Ibom State to low level of development. Ukpong (2017) further opined that more than 74% of the adult population living in Akwa Ibom State live below the poverty line of One US Dollar per day. People living below the poverty line (\$1/day) are said to be very poor (Abdullahi, 2018). Their lifestyles are defined by social deprivation, limited welfare services, low per capita income, overcrowded accommodation, low level of education, low level of capital resources and informal sources of capital for business (Ekpo and Uwatt, 2005). Poverty is therefore associated with people or households who are unable to have a decent and a dignified life. The poor are mostly located in rural areas than in urban settlements (National Bureau of Statistics, 2022). This makes this study apt as it focuses on rural communities of Akwa Ibom State where majority of the poor reside.

## The Study Area

## Location Setting

Akwa Ibom State is located in the southern part of Nigeria. It lies between latitudes  $4^0$  3' and  $5^0$  32' North of the equator; and longitude  $7^0$  25' and  $8^0$  30' East of the Greenwich Meridian. It is bordered on the north by Abia and Cross River States. In the south, the State is bordered by the Atlantic Ocean and on the south-west and west by Rivers and Abia States respectively (Akwa Ibom State, 1989). Figure 2.1 shows the location of Akwa Ibom State on the map of Nigeria.

Akwa Ibom State is one of the naturally endowed areas in Nigeria. It has a landmass of 7249 Km<sup>2</sup>(Office of the State Surveyor General, 2023). The State was created on 23rd September, 1987 from the former Cross River State by General Ibrahim B. Babangida led Administration. Akwa Ibom State is administratively divided into 31 Local Government Areas (LGAs) with Uyo serving as the state capital city.



Figure 2.1: Akwa Ibom State on the Map of Nigeria.

Source: Office of the State Surveyor General, Akwa Ibom State (2023).





## **Research Method**

#### Sampling Design

Spatial sampling framework was employed in the study. The selection of the rural communities for the study was facilitated by drawing a map of Akwa Ibom State on a scale of 1cm to represent 1km, and dividing same into grid squares (quadrates) of 0.25km<sup>2</sup> which were clearly and serially numbered. A total of 930 quadrates were arrived at. The quadrates system allows for random selection of the needed number of cases or points within a quadrate (Harvey and Reed, 2004: Atser, 2008 and Ayadu, 2021). A table of random numbers was thereafter used to select rural communities

as units of observation from sampled quadrates because the grid maps contain the names of communities thus; it was easy to know the communities within each quadrate.

In the light of the foregoing, where a quadrate contains two or more communities, only one with the highest population was selected to represent such quadrate. This method is similar and in line with the study of Ayadu (2021), Udoh (2012), Nwankwolaa (2009) and Aster (2008) that produced accurate results using grid squares as the unit of observation. The study adopted 10% (Ayadu, 2021; Uzoagulu, 1998; and Okoko, 2006) sample fraction and a total of 93 out of 930 quadrates were randomly selected using the table of random numbers.

To determine the number of rural household heads to be sampled in all the communities selected, the Author adopted Stroud and Booth (2007) formula for sample size which is stated below;

$$\mathbf{S} = [\frac{\mathbf{N} - \mathbf{P} \left( \mathbf{N} \right)}{\mathbf{n}}]$$

Where S = Required Sample, P = Expected value at 70% base (Constant)

N = The total population size, n = number of working area (villages)

$$S = \left[\frac{(179,474) - (0.7 \times 179,474)}{93}\right]$$
$$S = \frac{53842}{93} = 579$$

The above figure remains the minimum number of questionnaire to be distributed. However, the above figure was multiplied by two to ensure a more robust output; hence 1158 questionnaire was administered in the study area. This implies that 1158 rural household-heads were selected from 93 settlements for the survey. The study employed the use of systematic random technique in the distribution of questionnaire in the 93 selected villages and a sampling interval of 5 was adopted. Table 1 shows the number of questionnaire that was distributed based on each village's estimated population in relation to the chosen sample size.

Table 1	1: Show	ing the	distribution	of q	questionnaire	on	household	-heads i	n the	e selected	villages.
---------	---------	---------	--------------	------	---------------	----	-----------	----------	-------	------------	-----------

S/N		Assigned	Names of Villages	L.G.A	Population	Population	Sample
		No			(2006)	(2023)	size
	1.	457	Ikot Akpanya	Etinan	1,018	1,549	10
	2.	639	Ikot Umiang Ede	Etinan	993	1,511	10
	3.	701	AkpasakEfa	Etinan	2,033	3,093	20
	4.	583	EkpeneUkpa	Etinan	3,467	5,275	34
	5.	550	Ikot Ananga	Etinan	476	724	5
	6.	215	Atan Aya	Ibiono	268	408	3
	7.	242	AfahaNsai	Ibiono	1,123	1,709	11
	8.	168	Ikot Idem	Ibiono	512	779	5
	9.	266	Ikot Ada Idem	Ibiono	982	1,494	10
	10.	933	Usuk Aka	Ibiono	974	1482	10
	11.	244	OdiokItam	Itu	1,257	1,913	12
	12.	198	Ikot Anuten	Itu	753	1,146	7
	13.	199	Ikot Offiong	Itu	1,747	2,658	17
	14.	195	Ikot Ukap	Itu	605	921	6
	15.	224	Ikot Nya	Itu	288	438	3
	16.	114	NdiyaEtuk	Ikono	1,103	1,678	11
	17.	092	Itak Ikot Akpan Edem	Ikono	691	1,051	7
	18.	117	Ikot Ossong	Ikono	612	931	6
	19.	163	EkpeneObomNkuoro	Ikono	482	697	4
	20.	138	Ikot Ette	Ikono	235	358	2

Equation 4.1

21.	061	EtokIton	Ikono	107	163	1
22.	210	Utu EdemUsuk	Ikot Ekpene	2,857	4,347	28
23.	049	NdotNkpe	Ini	1,310	1,993	13
24.	048	IbamEdet	Ini	884	1,345	9
25.	109	ObotNdom	Ini	534	813	5
26.	327	Atanukwuk	Ini	228	347	2
27.	032	EdemIdim	Ini	2,316	3,524	22
28.	645	IdikpaNsit	NsitAtai	572	870	6
29.	558	Ikot Uyo	NsitAtai	427	650	4
30.	709	Ikot Okpudo	NsitUbiu m	203	309	2
31.	516	Minya ntak	MkpatEn in	2,116	3,220	21
32.	586	Minya	MkpatEn in	1,481	2,254	14
33.	763	Ikot Etefia	MkpatEn in	871	1,325	9
34.	461	Ikot Annung	Ibesikpo Asutan	597	908	6
35.	431	Ikot ObioOdongo	Ibesikpo Asutan	1,995	3,036	19
36.	285	Ikot Akpasia	Ibesikpo Asutan	471	717	5
37.	868	Odio	Eket	2,008	3,055	20
38.	835	EsitUrua	Eket	2,909	4,426	29
39.	768	Ikot Abia	Eket	2,167	3,297	21
40.	870	Nditia	Eket	219	333	2
41.	285	AfahaEsang	Abak	2,043	3,109	20
42.	264	Ikot Obioko	Abak	1,139	1,733	11
43.	314	Ikwek	Abak	1,111	1,691	11
44.	341	Ikot AkpaEdem	Abak	509	775	5
45.	443	Ikot Udobong	EtimEkp o	1,975	3,005	19
46.	359	NtoObio	EtimEkp o	1,722	2,620	17
47.	360	Ikot Akpapan	EtimEkp o	510	776	5
48.	474	Ndot	EtimEkp o	411	625	4
49.	237	Ikot Abiat	Essien Udim	746	1,135	7
50.	205	NtoNsek	Essien	1,533	2,332	15

			Udim			
51.	261	Ikot Akpan Essang	Essien Udim	554	843	5
52.	236	Ikot Ntuen	Essien Udim	598	910	6
53.	228	Ikot Akpan	Essien Udim	429	653	4
54.	284	Mkpatak	Essien Udim	368	560	4
55.	831	Abat	Onna	1,919	2,920	19

Table 1: Cont.

S/N	Assigned	Names of Villages	L.G.A	Population	Population	Sample
	No			(2006)	(2023)	size
56.	117	Ikot Ossong	Onna	5720	8,704	56
57.	678	UrueIta	Okobo	1,598	2,432	16
58.	468	EsukInwangEkeya	Okobo	4167	6,341	41
59.	563	EbighiAnwa	Okobo	908	1,382	10
60.	562	EyoNko	Okobo	577	848	5
61.	010	Nda	Okobo	346	526	3
62.	749	Ikot Abia	ObotAka ra	688	1,047	7
63.	717	Uda	Mbo	2,018	3,070	20
64.	813	AsakIkang	Mbo	1,066	1,622	10
65.	847	Iyesin	Mbo	594	904	6
66.	384	Ibete	Mbo	716	1,089	7
67.	903	Ikot Inyang	Ika	1,255	1,910	12
68.	567	Mkpanak	Ibeno	6,746	10,265	66
69.	605	EsukMbiam	Oron	430	654	4
70.	483	Obianga	Eastern Obolo	470	715	5
71.	791	Ikot Osudu	Ikot Abasi	511	778	5
72.	827	Ikot Akpaidiang	Ikot Abasi	776	1,181	8
73.	792	AtanObom	Ikot Abasi	788	1,199	8
74.	063	Ikot UkpongEkwere	Ikot Abasi	1,016	1546	10
75.	478	Akan ObioUruan	Uruan	1,259	1,916	12
76.	510	Ikot Akpa Idem	Ukanafu n	553	841	5
77.	713	Afaha Obo	Ukanafu	4282	6,516	42

			n			
78.	684	Ubodung	UrueOff ong	1,334	2,030	13
79.	692	Oyo Eyekip	UrueOff ong	250	380	2
80.	686	Eyonsek	UdungU ko	570	867	6
81.	773	Ekpene obo	EsitEket	4,598	6,996	45
82.	742	Uquoisoedoho	EsitEket	1,386	2,109	14
83.	838	Ineukpana	EsitEket	104	158	1
84.	810	Ntak Inyang	EsitEket	1,217	1,852	12
85.	806	Akwata	EsitEket	667	1,015	7
86.	393	Ibesitokpokoro	OrukAna m	1,197	1,821	12
87.	610	Itung	OrukAna m	2102	3,198	21
88.	609	Eteben	OrukAna m	2386	3,630	23
89.	756	Mbiaso	OrukAna m	595	905	6
90.	940	Ikot Inuen	OrukAna m	385	586	4
91.	482	NtakObioAkpa	OrukAna m	1,519	2,311	15
92.	759	NtakIbesit	OrukAna m	864	1,315	8
93.	682	Offot	OrukAna m	2879	4,381	28
				117,995	179,474	1158

## Source: Author's Data Analysis, 2023

## **Result and Discussion**

The objective of the study was to investigate the poverty level in the rural communities of Akwa Ibom State with emphasis on the 93 sampled communities. Data on poverty indicators in the study area were obtained through questionnaire administration and field observation by the Authors. Out of 1158 questionnaire administered on household heads only 1142 questionnaire representing 98.1% were returned, collated and subjected to factor analysis.

## i.Factors Structure for Poverty in Rural Communities of Akwa Ibom State.

In order to determine the poverty level of rural communities in the study area, factor analysis was performed. Factor Analysis Technique was employed using data on 27 variables gathered from 93 rural settlements in Akwa Ibom State to achieve a parsimonious description of the variable. The application of principal factor analysis procedure in Varimax with Kaiser Normalization rotated method on the dependent data yielded a six-dimensional solution as shown in Table 2. The communalities which can be regarded as indications of the importance of the variables in the analysis are generally high (above 0.50). This implies that all of the identified variables (27) for the study are appropriate and relevant. The relative importance of the level is that F1 is more important than F2 while F2 is more important than F3 and so on. The six factors (F1, F2, F3, F4, F5, and F6) accounted for 68.656per cent of total variance in the original primary variables. This can be seen as combination criterion variables for defining factors structure for poverty in the study area. The factors were named based on the high positive loading of the variables that made up each of the factors as shown in Table 2.

#### Factor 1: Basic Needs Factor

The first factor was named as basic needs factor. It is defined by 16 variables related to those that defined the basic needs of the people. It is indeed the most important factor as it accounted for 36.511% of the variation within the distribution of dependent (y) variables. The naming of factor 1 depends on its positive loading on variables such as:

- Y3 Ownership of transport means, .844
- Y11 Monthly expenditure on education, .828
- Y10 Monthly expenditure on food, .799
- Y26 Monthly Income of household, .751
- Y23 Nature of kitchen, .748
- Y20 Nature of toilet, .737
- Y5 Clothing quality, .722
- Y13 Monthly expenditure on transportation, .703
- Y2 Household energy, .653
- Y21 Nature of bathing facility, .633
- Y18 Nature of wall, .632
- Y6 Household communication devices, .629
- Y15 Meals/feeding per day, 562
- Y14 Monthly expenditure on health, 546
- Y1 Water sources, .521
- Y8- Sources of credit facility. .430

## Factor 2: Building Quality/Ownership Factor

The second factor is named building quality and ownership factor as the 4 variables with high and significant loadings on this dimension all defined the quality of building in which a person lives in as well as its ownership. It accounted for 11.827% of the total variance in the original data matrix.

Y17 -Nature of floor, .820

- Y19 Number of household with toilets, .819
- Y16 -Nature of building, .638

Y24 - Tenure of housing units, .519

#### Factor 3: Business Factor

Factor three is named business factor as it is defined by 2variables that enhance business investment opportunities of the people in the study area. It accounted for 6.732% of the variation in the original data set.

Y9 - Access to credit facility, .485

Y7 - Ownership of business enterprise, .431

#### Factor 4: Health /Sanitation Factor

Factor 4 is named as health/sanitation factor due to positive and significant loadings observed in 2 variables relating to sanitation and health survival of the rural dwellers. The factor accounted for 5.797% of the variation within the distribution of dependent (y) variables. The variables with the significant positive loadings under factor 4 are:

Y4 - Waste disposal facility, .591

Y27 -Low Infant Mortality Experience, .515

## **Factor 5: Occupation Factor**

Factor 5 is defined by 1 variable, that is, occupation of the household heads; hence it is named occupation factor. Factor 5 accounted for 3.983% of the variation in the original data set. The variable with the highest score under factor 5 is shown thus:

Y25 - Occupation of household head, .373

#### Factor 6: Convenience Factor

Factor 6 is defined by 1 variable with the highest positive and significant loading. Factor 6 accounted for 3.806% of the total variance in the original data set. The variable with the highest positive loading under this factor is:

Y22 - Number of rooms occupied by household, .473

## Factor Analysis for Poverty Structure in the study Area

Table 2.							
	Factor No.	F1	F2	F3	F4	F5	F6
	Eigen Value	9.858	3.193	1.818	1.565	1.075	1.028
	Percentage of Variance	36.511	11.827	6.732	5.797	3.983	3.806
	Cumulative percentage	36.511	48.337	55.069	60.866	64.849	68.656
	Variables	Loadings					
Y1	Water sources;	.521			.450		
Y2	Household energy	.653					
Y3	Ownership of Transport Means	.844					
Y4	Waste disposal facility	.447	.357		.519		
Y5	Clothing quality	.722					
Y6	Household communication devices	.629	.372		.411		
Y7	Ownership of business enterprise	.649		.431			
Y8	Sources of credit facility	.430				.355	
Y9	Access to credit facility	.598		.485			
Y10	Monthly expenditure on food	.779					
Y11	Monthly expenditure on education	.828					
Y12	Monthly expenditure on clothing			665			
Y13	Monthly expenditure on transportation	.703					
Y14	Monthly expenditure on health	.546		569			
Y15	Meals/feeding per day	.562		.337		308	.311
Y16	Nature of building	.544	.638				
Y17	Nature of floor	.352	.820		306		
Y18	Nature of wall	.632	.383				
Y19	Number of household with toilets	.355	.819		318		
Y20	Nature of toilet	.737			312		
Y21	Nature of bathing facility	.633					331
Y22	Number of rooms occupied by household	.536					.473
Y23	Nature of kitchen	.748					
Y24	Tenure of housing units	477	.519	.371			
Y25	Occupation of household head	603				.356	.373
Y26	Monthly Income of household	.751					
Y27	Infant Mortality Experience				.515	532	.378

Source: Authors' Data Analysis, 2023

## ii. Poverty Level of Households in the Study

In order to determine the poverty level of households in the study area, the underlying factors structure for poverty performances were taken into consideration. The performances of all the factors in each community were aggregated to make an informed decision on the poverty level of such community.

Furthermore, the cumulative factor scores of all the six identified factors structure for poverty in each of the community as shown in Table 3 were used to classify the rural communities into four groups as follows:

- -8.001 -4.000 indicated extremely poor community
- -3.999 -0.001 represented very poor communities
- 0.001 3.999 stood for moderately poor communities

4.000 - 8.000 portrayed poor community

## Table 3: Poverty Level of Sampled Communities

VILLAGES	FS1	FS2	FS3	FS4	FS5	FS6	Poverty Level
Ikot Akpanya	-0.19343	0.22818	1.04482	-0.56818	0.48121	-0.09414	0.89846
Ikot Uminang Ede	-0.33916	0.39372	-2.693	-0.17514	0.15005	0.01608	-2.64745
AkpasakEfa	-0.60377	-0.15598	0.43184	-0.19711	-0.40206	-0.01074	-0.93782
EkpeneUkpa	-0.182	-0.50848	1.03201	-0.29011	2.89794	-0.55655	2.39281
Ikot Ananga	-0.29433	0.22617	-2.82679	-0.16435	0.20179	-0.05221	-2.90972
Atan Aya	-0.60377	-0.15598	0.43184	-0.19711	-0.40206	-0.01074	-0.93782
AfahaNsai	-0.2315	0.4628	-2.38969	-0.21303	0.08584	0.17872	-2.10686
Ikot Idem	-0.31334	0.37748	-2.58771	-0.20351	0.18777	-0.06775	-2.60706
Ikot Ada Idem	1.20155	-0.19575	0.21534	-1.54749	1.98323	0.08104	1.73792
Usuk Aka	-0.74521	0.45731	-0.81401	-0.25331	0.48498	0.35811	-0.51213
OdiokItam	-0.2009	0.42319	0.73317	7.19518	-0.41545	0.11296	7.84815
Ikot Anuten	-0.45787	-0.22614	-0.14903	-0.21872	-0.23504	-0.34072	-1.62752
Ikot Offiong	-0.68598	0.22291	-0.16573	-0.15079	-0.36308	-0.10117	-1.24384
Ikot Ukap	-0.50652	0.24283	0.41696	-0.17485	-0.08438	0.34635	0.24039
Ikot Nya	-0.73945	0.2685	0.28447	-0.22304	-0.22079	-0.14325	-0.77356
NdiyaEtuk	0.73382	0.64657	-0.81442	-1.15673	0.61922	1.04478	1.07324
Itak Ikot Akpan Edem	-0.58433	0.25204	0.87244	-0.12948	0.74082	0.32094	1.47243
Ikot Onwong	-0.63279	0.28242	0.03043	-0.08298	-0.6752	0.20655	-0.87157
EkpeneObomNku oro	-0.80101	0.38818	-1.31005	-0.25854	1.55532	0.40128	-0.02482
Ikot Ete	-0.68655	0.46466	-0.97131	0.14163	0.05727	0.83301	-0.16129
EtokIton	0.27677	0.56839	-3.28317	0.00191	0.10791	-5.55948	-7.88767
Utu Idem Usuk	2.15655	0.85422	-0.52023	0.0031	0.89129	0.84636	4.23129
NdotMkpe	-0.67098	0.24706	-0.61228	-0.15955	-0.16692	-0.22176	-1.58443
IbamEdet	-0.47	0.3182	0.03686	-0.18662	-0.39986	-0.11872	-0.82014
ObotNdon	-0.75992	0.45916	-0.91236	-0.11797	-0.19601	-0.04612	-1.57322

AtanUkwuk	-0.92326	0.25248	-0.66134	0.3558	-0.40081	-3.2213	-4.59843
Edem Idem	-0.37602	0.37717	-0.92079	-0.15187	-0.26272	-0.03831	-1.37254
IdikpaNsit	-0.89774	0.2556	0.43877	-0.29703	0.53137	-0.0082	0.02277
Ikot Uyo	-0.87622	0.28317	0.10076	-0.23901	0.59239	0.12885	-0.01006
Ikot Okpudo	0.84921	-0.73534	1.20019	-0.59151	-0.28256	-4.19132	-3.75133
MniyaNtak	0.31025	0.09678	0.29857	0.80739	1.79753	0.81285	4.12337
Mniya	2.80799	0.77785	-1.18549	-1.13767	0.84075	1.2494	3.35283
Ikot Etefia	2.04559	0.33466	0.08989	-2.01769	0.74629	1.06121	2.25995
Ikot Annung	0.73839	0.62417	-0.50561	-0.54929	0.06338	1.35306	1.7241
Ikot ObioOdongo	3.04789	0.45744	-1.35247	0.50631	0.39698	0.8931	3.94925
Ikot Akpasia	-0.61742	0.3204	-0.97926	0.03922	-0.53012	0.22397	-1.54321
Odio	1.13914	0.33229	0.79243	0.11468	-1.33454	-1.16397	-0.11997
EsitUrua	2.91664	0.24336	-0.59897	1.55775	0.49885	0.36576	4.98339
Ikot Abia	2.74175	-0.21267	1.25275	0.16233	-2.19586	-1.05885	0.68945
Nditia	1.00571	0.2364	-0.5159	0.20266	-0.86716	-0.43571	-0.374
AfahaEsang	-0.51377	0.59748	0.02854	0.56075	0.40673	-0.76374	0.31599
Ikot ObioOko	-0.77679	0.37371	-0.01261	-0.11939	-0.53169	0.3774	-0.68937
Ikwek	0.36319	0.23714	0.37087	0.16581	-1.71311	-0.29076	-0.86686
Ikot Akpaden	-0.81042	0.0526	1.0772	-0.38386	0.01485	0.16395	0.11432
Ikot Udobong	-0.55407	0.26488	0.25957	-0.37998	0.24131	-0.3276	-0.49589
Nto Obo	-0.79178	0.20131	0.72127	-0.28479	-0.17837	0.03096	-0.3014
Ikot Akpakpan	-0.68348	0.28205	0.17087	-0.06698	-0.71007	0.45877	-0.54884
Ndot	-0.19627	-0.18174	1.20598	-0.90659	0.16105	-0.21984	-0.13741
Ikot Abiat	-0.77432	0.19096	0.25563	0.11751	-1.07544	0.81067	-0.47499
NtoNsek	-0.66637	0.10962	0.5557	0.0302	-1.00658	0.63344	-0.34399
Ikot Akpan Essang	0.72572	-0.14877	0.77124	-0.86153	-0.0232	-0.08488	0.37858
Ikot Ntuen	-0.96047	0.3147	-0.03773	-0.14816	0.33702	0.158	-0.33664
Ikot Akpan	-0.41578	0.07111	-0.1616	0.47593	0.08296	1.33243	1.38505
Mkpatak	0.13484	-0.27063	0.65248	0.83638	2.13762	-0.15992	3.33077
Abat	-0.14615	0.33834	0.65799	1.08414	0.05326	-1.36615	0.62143
Ikot Onwon	-0.5408	-0.04732	0.46827	3.25652	4.33595	-0.59839	6.87423
UrueIta	-0.44939	-0.11235	1.31645	-0.58816	0.23423	-0.19594	0.20484
EsukInwangEkeya	-0.00891	0.37544	0.57481	-0.75815	2.29223	-0.39197	2.08345
EbighiAnwa	-0.71605	0.14644	0.52904	-0.22543	-0.34815	0.09418	-0.51997
EyoNko	-0.59602	0.40934	-0.00143	0.04447	-0.91953	0.983	-0.08017
Nda	-0.67269	-0.37652	0.55398	0.06926	-0.97293	0.49819	-0.90071
Ikot Abia	-0.70494	0.11983	0.79495	-0.31756	-0.22923	0.09563	-0.24132

Uda	0.19386	-0.04956	1.11419	-0.20858	1.18059	-1.20726	1.02324
Asakikang	-0.4383	0.21624	0.23799	-0.20344	-0.61165	0.33673	-0.46243
Iyesin	0.73243	-0.14736	0.99082	-1.39334	0.79223	-0.40031	0.57447
Ibete	-0.63749	0.2988	0.15154	-0.10916	-0.59319	0.04848	-0.84102
Ikot Inyang	-0.52667	-0.05759	0.59097	0.21794	-1.52078	1.1219	-0.17423
Mkpanak	3.62951	0.24711	0.71483	-0.17947	-1.17737	-0.48029	2.75432
EsukMbiam	0.20569	-4.68664	-0.00488	-0.6104	0.06687	-0.85465	-5.88401
Obianga	-0.32195	-5.86791	-0.38315	-0.07953	0.01626	0.2109	-6.42538
Ikot Osudu	0.03152	-0.23342	1.05527	-0.71601	-0.42144	0.01977	-0.26431
Ikot Akpaidiang	-0.79586	0.14818	0.26902	0.20495	1.18865	0.45756	1.4725
AtanObom	-0.58037	-0.09737	0.94427	-0.67571	0.76468	0.0959	0.4514
Ikot	0.84168	0.01477	0.14655	0.78595	1.24234	1.40529	1 10 550
UkpongEkwere							4.43658
Akan Obi Uruan	-0.61816	0.29275	0.14706	-0.22275	-0.42801	-0.05211	-0.88122
Ikot Akpa Idem	-0.29381	0.57797	-2.26906	-0.03514	-0.38561	0.48303	-1.92262
Afaha Obo	-0.54255	-0.01466	0.72338	0.08042	-1.22925	0.78906	-0.1936
Ubodung	-0.61564	0.47161	0.0481	-0.20384	-0.38095	0.06946	-0.61126
Oyo Eyekip	0.00654	-0.11706	-0.7731	0.30644	-1.66407	-0.04527	-2.28652
Eyonsek	-0.26039	0.19889	0.47586	-0.17636	-0.25839	0.47923	0.45884
Ekpene Obo	1.68392	-0.10396	1.09636	1.16561	-1.54103	-0.59315	1.70775
Uquoisoedoho	-0.45216	0.02245	1.02006	-0.36203	-0.35608	-0.05171	-0.17947
Ineukpana	0.60713	-4.98845	-2.26409	1.06498	-0.17301	1.62778	-4.12566
Ntak Inyang	0.78321	0.21053	0.84213	0.33227	0.23082	-0.28949	2.10947
Akwata	0.18054	-0.02485	1.01818	-1.03851	1.16995	-0.4649	0.84041
IbesitOkpokoro	-0.29751	0.61552	-1.19669	0.35207	-0.85508	-0.11936	-1.50105
Itung	-0.54843	0.09004	-0.20337	-0.11908	-0.47281	0.54956	-0.70409
Eteben	-0.61815	0.29273	0.14703	-0.22271	-0.42796	-0.05205	-0.88111
Mbiaso	-0.25292	0.03374	0.4053	-0.30749	-0.03824	0.62949	0.46988
Ikot Inuen	-0.51957	0.21427	0.35735	0.00178	-1.13048	0.88356	-0.19309
NtakObioAkpa	0.12529	-0.29665	1.17007	0.09224	-0.13643	-0.23413	0.72039
NtakIbesit	-0.58727	0.27394	-0.43193	-0.09394	-0.52333	0.16021	-1.20232
Offot	1.94741	0.46281	0.43253	1.09834	-0.7794	0.83562	3.99731
L	I	I	1	1	1	1	I

#### i.Extremely Poor Communities

Table 3 revealed that 5 (5.38%) rural communities in the study area that were classified as being extremely poor. Their conditions can be said to be pitiable as expressed by poor factors structure. In the list are EtokIton, Obianga, EsukMbiam, AtanUkwuk and Ineukpana. These communities were the worst hit communities when it comes to poverty incidence in the study area.

## ii. Very Poor Communities

From the Table 3, it is obvious that 50 (53.76%) communities were classified as being very poor. Their poverty conditions are bad although a little better than those in extremely poor class. Being the modal class, it opens up an avenue for generalization of the entire study area as being very poor.

#### iii. Moderately Poor Communities

Table 3 shows that 32 (34.41%) communities in the study area were considered to be moderately poor. Their factor's structure loadings showed that they are better off when compared to communities in extremely poor and very poor classes.

## iv. Poor Communities

Table 3 showed that 6 communities in the study area are considered to be poor based on their factors structure. They stand a better chance of crossing the poverty line if necessary investment is made to better the living conditions in those communities.

The summary of poverty situation in the study area as expressed in Table 4 and Figure 3 revealed that 50 communities representing 53.76% of the sampled communities were very poor. Since this is the modal class, the entire study area can be seen to be very poor.

#### Table 4- Summary of Poverty Level in the Study Area

S/N	Poverty Level	Number of Communities	Percentage
1	Extremely Poor Communities	5	5.38
2	Very Poor Communities	50	53.76
3	Moderately Poor Communities	32	34.41
4.	Poor Communities	6	6.45
	Total	93	100

## Source: Authors' Field Data Analysis, 2023



Figure 3 - Summary of Poverty Level in the Study Area

Source: Authors' Field Data Analysis, 2023

### iv.Conclusion

This study has affirmed that there is high incidence of poverty in the rural communities of Akwa Ibom State. This is based on the performance of factors structure for poverty in each community which was aggregated and used to determine its poverty level. The study has shown that 5 communities – EtokIton, Obianga, EsukMbiam, AtanUkwuk, and Ineukpana - were extremely poor, 50 communities were very poor, 32 communities were moderately poor while 6 communities were poor. The extremely poor communities were relatively poor in terms of the quantum of road transport infrastructure available in their communities. Similarly, the communities that were considered to be poor were communities with mild poverty prevalence rate. These communities were OdiokItam, Ikot Ossong, Utu EdemUsung, Minya Ntak, Ikot UkpongEkwere and EsitUrua. Based on these findings, government and other relevant stakeholders should make frantic effort beyond the minimum critical level to improve the living conditions of the rural dwellers especially those living in the extremely poor communities. This should be by way of creation of employment opportunities and provision of infrastructural facilities.

This study had some limitations, such as potential sampling bias and the overrepresentation of larger communities, and the reliance on household heads for data collection, which may exclude vulnerable groups. However, the strengths are the robust spatial sampling approach, the use of factor analysis to explore multidimensional poverty, and the comprehensive data collection across various geographical areas. Future studies should focus on achieving a more representative sample by including smaller communities and diverse groups like women and children. Additionally, integrating qualitative methods and objective data cross-checks would enhance the depth, reliability, and accuracy of the findings.

#### REFERENCES

Abdullahi, A. (2018). Poverty reduction and food security. Paper presented at a Dialogue organized by Akwa-Ibom State Government to mark the 2018 World Poverty Day.

Ademola A. A. and Abang S. O. (2015) Analysis of poverty status of rural farm families in Akwa Ibom State, Nigeria. *Global Journal of Agricultural Sciences*, 14: 45-5

Atser, J. (2008). Analysis of spatial patterns of social infrastructure in rural areas of Akwa-

Ibom State, Nigeria. A Ph.D Thesis submitted to the Department of Geography and Regional Planning, University of Uyo.

Ayadu, K. E. (2021). Community Participation in Rural Water Supply in Akwa Ibom State, Nigeria. Ph.D Thesis, University of Uyo, Uyo. 221p

Ekpo, A.H., and Uwatt, B. U.(2005). Akwa Ibom State of Nigeria: Poverty Profile and Economic Transformation. Uyo: Foundation for Economic Research and Training, Uyo. s

Harvey, P. A. and Reed, R. A. (2004). Rural Water Supply in Africa: Building Blocks for Hand pump Sustainability. WEDC, Lough borough University, UK.

Inyangmme, U. A. (2021). Planning Implications of Spatial Pattern of Urban Poverty in Akwa Ibom State, Nigeria. Ph.D Thesis, University of Uyo, Uyo.

Koko, E. (2006) Urban Transportation Planning and Modeling. Millennium Publisher. Akure Nigeria. 392p

National Bureau of Statistics (2022).Nigeria Multidimensional Poverty Index Survey Results 2022<u>https://www.nigerianstat.gov.ng/</u>pdfuploads/nigeria%20multidimensional%20poverty%20index%20survey%20results%202022.pdf (Retrieved on 12th February, 2023)

Office of the State Surveyor General, Akwa Ibom State (2023). Maps of Nigeria, Akwa Ibom State, NsitAtai L.G.A and NsitAtai Road Network. (Collected on February 18, 2023)

Olurunfemi, O. S. (2020). Rural road infrastructural challenges: An impediment toagricultural development in Idanre Local Government Area of Ondo State, Nigeria. *Ghana Journal of Geography*, 12 (2): 108-124

Ravallion, M. (2016). The Economics of Poverty. Oxford University Press, New York.

Udoh, U. (2012). Effects of Housing Conditions on Health in Akwa Ibom State. Ph.D Thesis, University of Uyo. Uyo

Ukpong, E. (2017). Akwa-Ibom State socio-economic study report. MOED Publishers, Uyo,

Uzoagulu, A. E. (1988). Practical Guide to Writing Researches Project Reports in Tertiary Institutions. John Jacobs Classic Publishers, Enugu, 189p.