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Analysis Of Rural-Urban Migration on Urban Resources Utilization in Obio-Akpor Local Government Area of Rivers State, Nigeria

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ABSTRACT

The study was carried out to analyze the effect of rural-urban migration on the utilization of urban resources in Obio-Akpor Local Government Area of Rivers State, Nigeria. A total of eighty respondents were selected from four communities in the study area using random sampling and multi-stage sampling technique. Data were collected using a well-structured questionnaire. Descriptive statistics and bivariate logistics regression model were used in the assessment. The result revealed that majority (76.3%) of the respondents were male while (51.3%) of the respondents fall between age range of 45-59 years. Most (80%) are married while only 48% spent 16 years in formal schooling. Majority (60%) had households' size of 1-3 persons. Also, most respondents (50%) have lived more than 30 years in the study area. Only (47.5%) had above #1000000 as income realized in a year, while most (60%) engaged in transportation as their alternate income source. The multiple responses recorded showed that lack of basic amenities and flooding as a result of climate change are the major reasons for rural-urban migration. The result from the bivariate logit regression model revealed that age (0.050986), household size (0.089528) and years of residence (0.088442) were positive and statistically significant in influencing respondents' responses on the utilization of urban resources. Only income (9.53E-08)) and years spent in formal schooling (-0.030674) were statistically negative. Majority (20%) claimed that electricity supply was the most utilized urban resources. Only (15.9%) accentuated that overpopulation of persons competing for scarce urban resources are the major constraints in the study area. Therefore, government and state actors should take into consideration the benefits of establishing rural developmental projects that will improve rural livelihood activities. Also, more urban resource facilities should be developed and distributed in strategic areas of the study areas.

KEYWORDS: *Rural - Urban, Migration, Utilization, Urban Resources*

1. INTRODUCTION

It has been asserted that rural dwellers have been found to engage in primary economic activities that form the foundation for the country's economic development (Abah,2010). But unfortunately, there was no sustained, comprehensive and conclusive implementation of rural development policies in Nigeria thus resulting to a high rate of rural- urban migration (Ajadi,2010). Rural areas contribute to the national economy of most developing countries through its agricultural practice along little influences from both indigenous and alienate assisted innovations to deal with the unfavorable conditions posed by climatic and environmental activities of man. These unfavorable conditions include; flooding, oil spillage, gas flaring, community conflicts and other peculiarities. Also, seasonal variations and other consequences of climate change has tampered with the production cycle of most planting process and has affected the income of most rural farmers and discouraged a few. This sad development has caused drift in rural livelihood activities. For example, illegal refining of crude oil product (kpofire), in some communities in Rivers State, has influenced migration to urban cities, since large area of land have been polluted by crude oil spillage and bush burning. With increasing number of migrants leaving rural communities to urban cities and towns, there is an increasing number of people exposed to the resources characterized by urbanization. Like living organisms, cities require huge amounts of natural resources, raw materials, food, energy, and goods to sustain the activities of their inhabitants (European Environmental Agency, 2015). Although, the processes of densification and urbanization are accelerating resources depletion and the degradation of urban ecosystems (Galli et al., 2020). Many towns within urban cities are faced with challenges induced by the high human density. These challenges are as follows; intense traffic congestion, unstable electricity supply, social vices, water shortages, water pollution, land use, waste management problems, inadequate availability and access to public services, as well as industrial and climate change induced challenges. Migration from rural to urban areas also affect the income of family urban dwellers. This is because as family members who migrated from rural to urban areas increases, there will be stress on the utility of urban household income which limits the diversification portfolio of income generation in few cases, while in other cases, other socioeconomic barriers limit the aspirations of improved income of urban households. Urban congestion may encourage crime and other conflicts of interest, increase in household purchase, increased pressure on natural resources and services. With many people chasing fewer goods, market prices will increase. Furthermore, excessive rural-urban migration will increase competition for jobs, school and housing. Overcrowding in service providing sectors, scarcity of necessary goods and poor maintenance of public infrastructure; like waste management and water supply. Knowledge gain in this study will highlight the negative effects of migration on utilization of urban resources. On this fact, it becomes necessary to ask the following research questions.

(1) What are the socioeconomic characteristics of urban household heads in the study area?
(2) What are the factors that influence rural-urban migration?
(3) What are the respondents' socioeconomic characteristics that affects their responses on the utilization of urban resources in the study area.
(4) What are those urban resources that are over -stressed in the study area

(5) What are the Constraints encountered by the respondents in the study area. This paper will give answers to these questions.

Materials and Methods

This study will be carried out in Obio/Akpor local government area of Rivers State. A major economic hub and a famous city in the Rivers State. It has its capital at Rumuodomaya and covers an area of 260km² with a population of 464,789 according to 2006 population census. The original indigenous occupants of the area are the Ikwerre people. Obio/Akpor is located between latitude 4°45'N and 4°60'N and longitude 6°50'E and 8°00'E. Its geology comprises basically of alluvial sedimentary basin and basement complex. Due to high rainfall, the soil in the area is usually Sandy or Sandy loam. It is always leached, underlain by a layer of impervious pan. The following urban communities are within Obio-Akpor; Alakahia, Atali, Awalama, Choba, Egbelu, Elelenwo, Eligbam, Elimgbu, Elioparanwo, Eliozu, Eneka, Eligbolo, Iriebe, Mgbuesilaru, Mgbuoba, Mgbuosimini, Mpakurche, Nkpa, Nkpelu, Ogbogoro, Oginigba, Oro-Igwe, Oroazi, Ozuoba, Rukpakwolusi, Rukpokwu, Rumuadaolu, Rumuaghaolu, Rumualogu, Rumuchiorlu, Rumudara, Rumudogo, Rumuekini, Rumuekwe, Rumueme, Rumuepirikom, Rumuesara, Rumuewhara, Rumuibekwe, Rumuigbo, Rumukalagbor, Rumunduru, Rumuobiokani, Rumuogba, Rumuokparali, Rumuolumeni, Rumuobochi, Rumuodomaya, Rumuoji, Rumuokoro, Rumuokwu, Rumuokwachi, Rumuokwuota, Rumuokwurusi, Rumuola, Rumuolukwu, Rumuomasi, Rumuomoi, Rumuosi, Rumuoto, Rumurolu, , Rumuwegwu, Woji.

Model Specification:

Logit regression Model

The respondents were classified into two categories; those who responds that urban resources have been over utilized or over stressed and those that responds that urban resources have not been over utilized or over stressed. The response variable will be in binomial regression from taking values of 1 to represent those who responds that urban resources has been over utilized or over stressed and 0 for otherwise.

Logit Regression expressed as;

$Z_i = p_1/1\text{-}p_1 = B_0 + B_1X_1 + B_2X_2 + B_3X_3 + B_4X_4 + B_5X_5 + B_6X_6 + B_7X_7 + B_8X_8B_9X_9 .... BiXi$

if the distribution term (U_i) is taken into account, The Logit model becomes:

$Z_i = \sum_{i=1}^{n} \text{Bi}\, X_i$

WHERE:

Pi = probability that a respondent will responds or not. Given as X*i* (1 =responded; 0 = not responded)

Bi = Coefficient of parameter

U_i= Error term or disturbance term

X_1=Age (Years)

X_2 = Level of formal education (Years)

X_3 = processing experience (years)

X_4 = Estimated annual income (Naira)

X_5 = Household Size

β = Constant

Results and Discussions

1. Socio-economic Characteristics of the Respondents in the study area.

Table 1 below, shows that majority (76.3%) are mostly male headed households while (23.8%) are female headed households. This agrees with Posel findings which states that household heads are mostly male because of the cultural background in Nigeria. Also, most (51.3%) falls between age range of 45-59 years while majority (80%) are married and only (48.8%) spent 16years in formal schooling. Utmost (60.0%) had household size of 1-3 persons, while majority (50%) had lived more than 30 years in the study area and only (47.4%) earned above N1,000,000.00.

Table 1: Distribution of Socio-characteristics of the Respondents in the Study Area

Socio-economic Characteristics	Frequency	Percentage
Gender		
Male	61	76.3
Female	19	23.8
Total	**80**	**100**
Age		
0-14	0	0
15-29	0	0
30-44	28	35.0
45-59	41	51.3
Above 60	11	13.8
Total	**80**	**100**
Marital Status		
Married	64	80.0
Divorcee	2	2.5
Widow	10	12.5
Singles	4	5.0
Total	**80**	**100**
Year spent in formal schooling		

0	3	3.8
6	26	32.5
12	12	15.0
16	39	48.8
Total	**80**	**100**
Household size		
1-3	48	60.0
4-7	18	22.5
8-11	10	12.5
Above 11	4	5.0
Total	**80**	**100**
Years of residence		
1-10	3	3.8
11-20	15	18.8
21-30	22	27.5
Above 30	40	50.0
Total	**80**	**100**
Income Status		
Less than N100,000	3	3.8
N200k - N400,000.00	18	22.5
N500k- N700,000.00	21	26.3
Above N1000,000.00	38	47.5
Total	**80**	**100**
Other sources of income		
Land agents	4	5.0
Transportation	48	60.0
Entertainer	12	15.0
Trading	10	12.5
Others	6	7.5
Total	**80**	**100**

Source: Field Survey, 2023.

Distribution of respondents according to various factors that influences rural-urban migration in the study area.

2. Factors that Influences Rural-Urban Migration

Multiple responses were recorded in table 2 below. From the table, most (27.9%) of the respondents attested that lack of basic amenities and flooding were responsible for their rural-

urban migration. These findings agree with the findings of Alarima (2018), who reported that the dichotomy between the rural and urban areas in the availability of basic amenities for the youth is responsible for rural-urban migration among the farming youths. Also, supported was Eze (2016) who reiterated that poor income generating opportunities, escaping unfavorable conditions, transfer as a factor of migration and escaping conflict and insecurity of life were the push factors among respondents rural-urban migration in the Eastern part of Nigeria. This finding has buttressed the fact that majority of people migrated from rural communities to the cities as a result of lack of social amenities in rural communities and lack of access to adequate provision of welfare service, search for employment and improve standard of living, and for provision of security, education healthcare service which are not available in their former place of residence (but available in the cities).It is very useful to know that rural development efforts in Nigeria have not been given the integrated and comprehensive approach it requires (Ele,2006). The degrading view of rural areas is as a result of the difference between the urban facilities and inferior available facilities in rural areas.

Table2: Showing the frequency distribution of respondents according to various factors that influences rural-urban migration.

Factors responsible for Rural-Urban migration	**Frequency**	**Percentage**
Poor rural economy	42	20.9
Poor rural infrastructure	49	24.4
Conflict and insecurity	54	26.9
Lack of basic amenities and flooding	56	27.9
Total	**201**	**100**

Source: Field Survey, 2023.
Multiple responses recorded.

The Effects of Respondents' Socio-Economic Characteristics as They Affects Their Responses on The Utilization of Urban Resources.

The positive values in the coefficient implies that increasing the independent variable by one unit will increase their response rate to utilization of urban resources by the value of their coefficient while the negative values of the coefficient imply that increasing the independent variable by one unit will bring about a reduction in the response rate of the respondent on their socio-economic characteristics as its affects utilization of urban resources.

Looking at age of respondents (0.050986), years of residence of respondents (0.088442) are positive and statistically significant and logical in responding to the utilization of urban resources. These results revealed that as urban respondents age and their years of residence increases, they are in the position to responds whether urban resources are highly utilized or not, since they knew when those resources were installed or established. Households (0.089528) are also positive, showing that as respondents household increases the more, they will be interested to logically

responds on how urban resources are utilized. It was only income (9.53E-08) and years spent in formal schooling (-0.030674) were statistically insignificant negative and illogical in affecting respondents' responses on the utilization of urban resources. Their negative responds could be that as respondent's income and level of schoolings increases. There will be the tendency that they will not be willing to develop interest to responds to utilization of some urban resources. Since they can afford some of these resources for example electricity supply. Most urban respondents who have huge income and highly educated can provide alternative energy sources like solar energy and generator set. The alkaline criteria are 0.747978, showing that the model used has good fit.

3. Bivariate logit regression result showing socio-economic characteristics of the respondent as they affect their responses on the utilization of urban resources in the study area.

Dependent Variable: Y
Method: ML - Binary Logit (Newton-Raphson / Marquardt steps)
Date: 04/09/23 Time: 09:50
Sample: 1 80
Included observations: 80
Convergence achieved after 5 iterations
Coefficient covariance computed using observed Hessian

Variable	Coefficient	Std. Error	z-Statistic	Prob.
C	-1.853197	1.906922	-0.971827	0.3311
AGE	0.050986	0.026202	1.945890	0.0517
HHS	0.089528	0.272434	0.328624	0.7424
INCME	9.53E-08	2.05E-06	0.046416	0.9630
SCH	-0.030674	0.128227	-0.239220	0.8109
YRES	0.088442	0.075864	1.165803	0.2437

McFadden R-squared	0.149900	Mean dependent var	0.887500
S.D. dependent var	0.317974	S.E. of regression	0.307582
Akaike info criterion	0.747978	Sum squared resid	7.000881
Schwarz criterion	0.926630	Log likelihood	-23.91914
Hannan-Quinn criter.	0.819605	Deviance	47.83828
Restr. deviance	56.27368	Restr. log likelihood	-28.13684
LR statistic	8.435399	Avg. log likelihood	-0.298989
Prob (LR statistic)	0.133816		

Obs with Dep=0	9	Total obs	80
Obs with Dep=1	71		

Source: Field Survey, 2023.

4. Various Urban Resources That are over Utilized in the Study Area.

Multiple responses were recorded. From table 3 below, majority (20.7%) revealed that electricity supply was over utilized with lots of illegal connections. land, pipe borne water, disposable site/waste management, good road network/access road, urban health centers, recreation sites among others, are resources that are stressed. This implies that these resources are used every day to the extent that availability and supply becomes difficult due to overuse. According to Ijeoma *et al.,* (2012), in sub-Saharan countries the number of people without electricity has increased since year 2000. This indicates, over the years, cities have experienced high level of migration and consumption of energy resources. It was only 17.2% of the respondents who agreed that rural-urban migration pressures availability and affordability of housing accommodation. This agrees to the findings of Gonzalez and Ortega, (2013), that accentuated a migration-driven 1 percent increase in population can leads to an increase in house prices of 1 to 1.6 percent in the following year, and a 0.8 to 1 percent increase in the number of dwellings (due to new construction activity). Recently, there are lots of stress faced by urban dwellers as a result of high population density.

Table 4: showing distribution of respondents according to stressed urban resources in the study area**.**

Overutilized Urban Resources	**Frequency**	**Percentage**
Accommodation/housing	65	17.2
Electricity	78	20.7
Land	56	14.9
Pipe borne water	34	9.0
Disposable sites/Waste management	58	15.3
Good road network/Access Road	23	6.1
Urban health centers	12	3.2
Recreational sites	42	11.1
Others	9	2.4
Total	**377**	**100**

Source: Field Survey, 2023.

Multiple responses recorded.

5. Constraints Encountered in the Study Area.

Multiple responses were recorded on table 5 below. Looking at the table, it could be deduced that most (15.9%) revealed that over population as a result of rural-urban migration was their major constraints. It was only (7.5%) who attested those other constraints like transportation systems, unhabitable housing systems, scarcity of petroleum, kerosine with price fluctuations and so on are their major constraints. This finding is in consonance with the findings of Ehinomen and Adeleke (2012). They asserted that Premium motor spirit (PMS), dual purpose kerosene and auto gas oil are important energy sources in urban areas with fluctuation in prices. However, despite their importance, as major energy sources their prices are fraught with problems ranging from

occasional shortages in supply, inefficient distribution and contending prices which causes lots of stress to urban dwellers.

Table 5 showing distribution of respondents according to various constraints encountered in the study Area.

Constraints Encountered	Frequency	Percentage
Lack of steady power supply	55	12.1
High rate of Insecurity (kidnappers & scammers	62	13.7
High level of urban pollution as a result of gas flaring & kpo fire etc.	36	7.9
Over population making movement difficult	72	15.9
High price of consumable goods & high cost of living	66	14.5
Fuel scarcity	65	14.3
Unsafe clean water etc.	64	14.1
Others	34	7.5
Total	**454**	**100**

Source: Field Survey, 2023.

Multiple responses recorded.

Conclusion and Recommendations

This study concludes that majority (76.3%) of the respondents were male while (51.3%) of the respondents fall between age range of 45-59 years. Most (80%) are married while only 48% spent 16 years in formal schooling. Majority (60%) had households' size of 1-3 persons. Also, most respondents (50%) have lived more than 30 years in the study area. Lack of basic amenities and flooding as a result of climate change are the major reasons for rural-urban migration. Age (0.050986), household size (0.089528) and years of residence (0.088442) were positive and statistically significant in influencing respondents' responses on the utilization of urban resources. Electricity supply was the most utilized urban resources. Urban population density causes over utilization of urban resources in the study area. Therefore, government and state actors should take into consideration the benefits of establishing rural developmental projects that will improve rural livelihood activities. Also, more urban resource facilities should be developed and distributed in strategic areas of the study areas.

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