

Empirical Investigation of the Determinants of Poverty in Kano Metropolis, Nigeria

Ibrahim Inuwa Balarabe
Department of Economics and Management Science
Nigeria Police Academy, Wudil, P.M.B. 3474, Kano-Nigeria
E-mail: ibinuwa@gmail.com

Abstract

This paper provides some explanations of the causes of poverty in Kano metropolis by investigating poverty determinants that are too often neglected in the literature and in policy debates. The study comprises of six local governments in the state which include Dala, Fagge, Gwale, Municipal, Nasarawa and Tarauni. Primary data was collected using questionnaire and interview from one hundred and twenty (120) residents selected in the study area. The data was analyzed using a probit regression analysis and the result showed that all coefficients of the explanatory variables have a positive relationship with poverty except that of education which has a negative relationship. Therefore, the paper recommended that government should improve its program on economic growth and empowerment. It should also double its support to educating youth so as to make them self reliant in the future.

Keywords: Poverty, Probit model, Kano Metropolis, Nigeria.

1. Introduction

The case of poverty in Nigeria has reached an alarming rate because the most pathetic feature of Nigerian society today is that, majority of its members are living in a state of destitution while the remaining relatively insignificant minority are in affluence. These skewed economic relations do not reflect the geographical spread of resources endowment; rather it is a product of classical greed, injustice and selfishness which is beyond any economic principle. Though, it is true that where one comes from can be a strong determinant of one's economic status because of different opportunities and constraints, but what is happening in our society today differs very much from this. The problem of poverty is a worldwide phenomenon and has attracted much attention in recent years. People perceive poverty as a threat to the very existence of humankind. Unequal distribution of global wealth has exacerbated the problem of poverty in the developing countries. It is estimated that one third of world population live in chronic poverty (Garba, 2006).

2. Statement of the Research Problem

The issue of poverty especially in Kano State is very important to study because it affects many residents in the State who are now struggling to survive due to many reasons. Firstly, poverty in Kano has been on increase after the January, 2012 insurgents' attack which resulted in loss of many lives and properties in the state and the subsistent government decision to ban Achaba operation (motorcyclist activity) due to the prevalent insecurity situation. The effort, though positive, has contributed much in the current poverty problem since most of the affected motorcyclists that form large portion of our youths cannot afford to buy the tricycle (Adai-daita sahu) and uninterestingly government has done nothing to provide the affected people considerably with alternatives; as Achaba operation used to be the source of their livelihood. Secondly, the issue of poor and unstable power supply in the state forced many factories to close down and some moved to the Southern part of the country where power supply is relatively stable. This situation of metropolitan poverty has left many people out of work and uncertain on how to provide for themselves and their families (Inuwa, 2012).

The objective of this research is to investigate the determinants of poverty in Kano metropolis focusing on Dala, Fagge, Gwale, Municipal, Nasarawa and Tarauni local government areas. In this research, we consider a number of factors that may influence socio-economic conditions and cause poverty to many residents in the study area. The study intends to bring to the attention of policymakers the prevalence of poverty in the urban area and offer suggestions to tackle it. This is because urban poverty has been a low priority on research development agenda of Nigerian government for over two decades and this have been dominated by rural development and rural poverty.

3. Overview of Kano state

Kano state was created on May 27, 1967. It originally included Jigawa and in 1991 Jigawa was given an autonomy therefore it became a state. Kano state capital is Kano. It has an estimated population of 13 million approximately (Census, 2006). It has 44 local government areas. It shares borders with Jigawa state to the northeast, Bauchi and Kaduna states to the south and Katsina state to the northwest. Historically, Kano state has been a commercial and agricultural state, it was popularly known for the groundnut and cotton, skin and craft

production. The state has more than 13,664 square kilometers of cultivable land and is the most extensively irrigated state in the country. The state is endowed with mineral resource deposits such as cassiterite (tin), columbine, feldspar, glass sand, limestone, lead, zinc, copper, wolfram and bauxite. Hausa language is commonly spoken (Wikipedia, 2012).

4. Definitions of Poverty

Poverty is the state for the majority of the world's people and nations. It exists when certain sections of people cannot even satisfy their basic primary needs in terms of food, cloth and shelter. It has been an unmitigated curse of the underdeveloped nations. It is a matter of great regret to state that more than one third of our population even today is below the poverty line.

According to Encarta (2004), poverty is said to exist when people lack the means to satisfy their basic needs. In this context, the poor are identified by a determination to what constitutes basic needs these needs are those necessary for survival covering those who fall below the population as a whole in terms of nutrition, housing, clothing, health and education.

For the World Bank, poverty indicators include hunger, lack of shelter, being sick and not being able to see a doctor, not having access to school and not knowing how to read. Poverty is not having a job, is the fear for the future living one day at a time. Losing a child to illness brought about by water borne disease. Poverty is powerlessness, lack of representation and freedom (World Bank, 2004).

Official definition of poverty by government (Vision, 2010), poverty is a condition in which a person is unable to meet minimum requirements of basic needs of food, health, housing, education and clothing.

Another one by the World Bank (1999) argued that in some instance, the gender had dimension for men and women, boys and girls. The processes causing poverty affect men and women in different ways and degree. Female poverty is more prevalent and typically more severe than male poverty.

Now the question is why so? Is it enough to blame poor people for their own predicament? Have they been lazy, made poor decisions and been solely responsible for their plight? What about their governments? Have they pursued policies that actually harm successful development? Such causes of poverty and inequality are no doubt real.

5. Empirical Literature of poverty

Poverty has no geographical boundary. It is seen in the north, west, south and east. It is found in rural as well as urban areas of Nigeria. It is a complex human phenomenon associated with unacceptably low standard of living which has multiple dimensions, manifestations and causes (World Bank, 2001). According to Soludo (2006) Nigeria has been a country of paradoxes even though it is abundantly blessed with both natural and human resources but the potentials remain largely untapped and even mismanaged. With a population estimated at about 140 million, Nigeria is the largest country in Africa and one sixth of the black population in the world. It is the eight largest oil producer and has the sixth largest deposit of natural gas in the world. But unfortunately, the growth per capita income in the 1990s was zero while the incidence of poverty in 1999 was 70%. As a result of different economic reforms and policies, the latest household survey by the National Bureau Statistics (NBS) indicated that the incidence of poverty has significantly dropped from 70% in 1999 to 54% in 2004 while the urban and rural poverty for that year was 43.19% and 63.27% respectively. Though, the incidence of poverty in Nigeria is higher in the rural area than in the urban centers, the urban slum-dwellers form one of the most deprived groups. The recent renewed interest in urban issues has been due to the wide spread idea that urbanization is speeding up. At the end of the year 2000 about half of the world's population live in urban areas, while in 1975 this was only 28%. In 1970, developing countries level of urbanization was 25%. In 1994, it increased to 37% and it is projected to be 57% by 2025 (UN, 2004).

A study conducted in 2008 showed that, all northern states have all the natural and human resources to rubbish poverty, but ironically they are the hit, ravaged and rubbished by chronic and devastated poverty. Poverty is one of the most profound problems being grappled with in the northern states of Nigeria. It has contributed substantially to the erosion and undermining of the foundation of peaceful coexistence and stable national development. This is paradoxical as it is clearly and inexplicable issue of poverty amidst plenty. The statistics are graphic and confounding. As much as 76 percent of northerners are said to be living in poverty, earning an income of less than the equivalent of one American dollar a day. It further showed that poverty in northern Nigeria has great regional, sectoral and gender disparities. The current shortage of staple leading to the increase in prices of the most foodstuffs is a warning about the severity of physiological/disjointed deprivation bare physical survival of the people. Apart from water, food is the most basic input for human survival; in addition human deprivation, income poverty and social deprivation have become aggravated. Poverty is a problem afflicting most people in northern states. It is considered as one of the manifestations of underdevelopment. The poor in the northern states are still widely considered worse off as many indications reflecting the ability to provide for the physical subsistence for the upliftment or human dignity are below expectation. Thus, poverty

constitutes a threat to the growth and security of northern states as well as the general standard of living of the northern populace, Sani (2008).

Another report by the UNDP 2004 shows during the period 1980-2004, the national poverty rates were as follows: 28.1% (1980), 46.3% (1985), 42.7% (1992), 65.6% (1996) and 54.4% (2004). This means that poverty incidence in the country recorded increase between 1992 and 1996. The results also showed appreciable decrease in poverty between 1985 and 1992 and between 1996 and 2004. Even with the drop in population rates, the population has maintained a steady increase in poverty from 17.1m in 1980 to 68.7m in 2004. Nigerians in terms of physical quality of life index scored 38% in 1991, the human development index was 0.391 in 1998, ranking the country as the 142nd out of the 174 countries surveyed. In the year 2002, the Human Development Index (HDI) score was 0.466, which ranked the country still in the low human development countries, in the 151st ranking among 177 countries surveyed.

Another report by the International Monetary Fund (IMF) and the World Bank in 2004 showed that cutbacks in health, education and other vital social services around the world which resulted from structural adjustment policies as conditions for loans and repayment was responsible for the poverty in developing nations. So they are required to open their economies to compete with each other and with more powerful and established industrialized nations. Inequality is often a measure of relative poverty. Absolute poverty, however, is also a concern. For example, the new poverty line is defined as living on the equivalent of \$1.25 a day. With that measure based on latest data available 2004, 1.4 billion people live on or below that line. Furthermore, almost half the world—over three billion people—live on less than \$2.50 a day and at least 80% of humanity lives on less than \$10 a day.

In general poverty may be seen as a situation of very low income culminating in very low consumption levels. It has both income and non-income dimensions, which are usually interconnected. It is manifested in the form of low income, exposure to disease, low standard of living, unemployment and high degree of social inequality among the people.

6. Data source and sampling

The source of data in this research is primary. Questionnaires were administered to those who can read and write while structure interview was conducted to those who cannot read and write. The sample size of the research was randomly drawn from the six metropolitan local government areas. In each area, twenty residents were selected and a total of one hundred and twenty residents were chosen as respondents.

7. Model specification

The statistical methodology used in this research is the OLS estimation model. It followed that of Osinubi (2013) in his study of 'A theoretical and empirical investigation of poverty in rural Georgia Counties in United States'. The model was expressed in the following linear equation;

$$RRLPVRVTY_i = \beta_1 + \beta_2 FMLHH + \beta_3 NOHS + \beta_4 OUTMICO + \beta_5 BLK + \beta_6 WHT + \beta_7 FDSTMPS + \beta_8 HWYPVD + e_i \quad \text{I}$$

Where;

RRLPVRVTY_i = dependent variable representing residents who are below poverty line.

FMLHH = explanatory variable representing households headed by women.

NOHS = explanatory variable representing residents who do not have a high school diploma.

OUTMICO = explanatory variable of residents whose head left them and moved to another town.

BLK = explanatory variable representing residents who are Black people in the study area.

WHT = explanatory variable representing residents who are White people in the study area.

FDSTMPS = explanatory variable representing residents who received food stamps in the area.

HWYPVD = explanatory variable representing residents who lived by highway mileage.

In order to investigate the empirical determinants of poverty in Kano metropolitan areas, Osinubi's model is adopted and modified to form the following linear equation:

$$PVTY_i = \beta_1 + \beta_2 FWH + \beta_3 UNE + \beta_4 OUM + \beta_5 EDU + e_i \quad \text{II}$$

Variables explained;

PVTY = dependant variable representing residents who are below the poverty line.

FWH = explanatory variable representing households headed by women with no husband (1= if the head is woman, 0= if otherwise).

UNE = explanatory variable representing residents who are unemployed (1= if employed, 0= if unemployed).

OUM = explanatory variable representing residents who moved from Kano to another state outmigration (1= if the head of household moves to another state, 0= if otherwise).

EDU = explanatory variable representing residents who have a high school diploma education (1= if the resident has higher school diploma, 0= if otherwise).

Given the selected variables, the coefficient signs of each variable could be predicted. The sign of variable

representing households headed by women will have a positive relationship with the poverty. The sing of variable representing head of household who is unemployed will also have positive relationship poverty. The sing of variable representing a household whose head moved to another state will have a positive relationship with poverty. While that variable representing household level of education will have a negative relationship with poverty.

8. Result and discussion

Table 1: Estimated Probit Results

| Variables | Estimated coefficient | Marginal probability |
|------------|-----------------------|----------------------|
| FWH | 0.7575 | 0.0214** |
| UNE | 0.3515 | 0.3558* |
| OUM | 0.3910 | 0.2278* |
| EDC | -0.6308 | 0.1176* |

Source: Researcher's computation using E-views (7.0).

Number of observations 120; log likelihood -44.23365, restricted log likelihood -48.95730, significant at *** (0<0.01) ** (p<0.5) *(p<0.10); Source: computer printout, 2014.

Probit regression model was used to identify factors responsible for poverty in Kano metropolis. In the table above, coefficients of three out of four explanatory variables are statistically significant in the model. So it is evident from the table that the variables are significant in investigating determinants of poverty in the model. The marginal effects were indication of unit change in exogenous variable on the probability of poverty increase to the households.

FWH was found to be statistically significant at 5% with a positive value of coefficient 0.7575. The expectation is that the higher the population who has households headed by females with no husbands present will have a higher percentage of poverty. This indicates that a 1% increase in female-controlled households will increase the probability of poverty by 2% holding all other variables constant. The assumption for this is that in a single parent household, only one income is reflected. Women on average make less than their male counterparts because they are less educated and less skilled and also child care constraints can further hinder their job performance therefore, they receive lower wage rates and they are less likely to participate in the labour force. This was justified by Osinubi (2013) in his study on a theoretical and empirical investigation of poverty in rural Georgia Counties in United States.

Another explanatory variable is the percentage of people with no job represented by UNE. The variable was found to be statistically significant at 10% but has a positive coefficient 0.35149. The expectation here is that the higher the households who are unemployed the higher the percentage of poverty in that population. This indicates that a 1% increase in unemployment will result in 36% probability increase in poverty.

The outmigration OUM is statistically significant in the model at 10% with a positive value of coefficient 0.391081. It is expected to have a positive relationship with poverty. By holding all other variables constant, the poverty will increase by 39% if the household's heads abandoned their family and moved to another state. This indicates that about 1% increase in outmigration will increase the probability of poverty by 23%.

Education (EDC) was found to be statistically significant at 10% with a negative value if coefficient 0.630790. About 1% increase in educational status will decrease the probability of poverty by 12%. The no high school diploma variable was hypothesized to have a negative relationship with poverty. This means that percentage of people with no high school education increased it will also increase poverty. The regression result for this variable was constant with the hypothesis that 1% increase in educational status will decrease poverty by 12%. The assumption here is that, historically people without high school diplomas are more susceptible to economic hardship than those with high school diploma.

9. Conclusion and recommendations

The research was conducted to investigate the empirical attributes of poverty in Kano state. Four independent variables were tested using a probit regression model to see the significance of each proposed cause of poverty. Variables used included households headed by women in the residence, people with no job in a given residence, people with no high school diploma and households whose heads moved to another state. To do this, a probit regression linear model was employed.

The research recommends that government should improve its programs on economic growth and empowerment. It should increase its efforts to educate youths so as to build and strengthen their human capital and get out of poverty and to contribute more to the economy and society. Government should also intensify effort to provide people with credit facility to afford alternatives to Achaba which will improve their per capita income, since it banned the motorcycle operation in the state. It further recommends that a meaningful and long-term alleviation of hunger should be rooted in the poverty alleviation program since poverty leads to hunger and a hunger is a terrible symptom of poverty.

References

- Economics Dictionary; (2006), Published by arrangement with Academic (India) publishers, New Delhi- 110008. 1st Edition, 2006
- Encarta (2000), `Encyclopaedia Britannica.
- Garba, A. (2006), `Alleviating Poverty in Northern Nigeria`, A paper presented at the Annual Conference of Zumunta Association USA, Minneapolis, MN, July 28-29, 2006.
- Inuwa, I.B. (2012): "Assessment of the Determinants of Employment in the Kofar Wambai Shoe Making Industry, Kano State": A publication in the 2nd Edition of **NJOBED**, Vol. 1 No.2 (ISSN2141-3296) JUNE, 2012. Department of Business Administration and Management, School of Management Studies, Kano State Polytechnic, Kano.
- Jhingan, M.L. (2002) "The Economics of Development and Planning" Vrinda Publication (p) ltd. B-5, complex, mayor vihar, phases I Delhi-110091.
- National Bureau of Statistics (NBS, 2006), `Poverty Profile in Nigeria`. Ganfeek ventures, pg-87.
- Osinubi, A. (2013), ``A theoretical and Empirical Investigation of Poverty in Rural Georgia Counties``, A paper presented at the Southern Agricultural Economics Association (SAEA) Annual Meeting, Orlando, Florida, 3-5 February, 2013.
- Soludo, C. (2006), `Potential Impacts of the Global Finance Architecture on Poor Countries`. Edited by Charles Soludo and Monsuru Rao. ISBN 9782869781580, 2006, CODERSIA, Senegal paperback pg-80.
- United Nations Development Program (1996, 2004); Nigerian Human Development Report, UNDP, Nigeria
- United Nations (2004); federal Government of Nigeria: Poverty Reduction Program 2003- 2007; Abuja, Nigeria.
- World Bank (1999, 2004), ``Nigeria Poverty in the Midst of Plenty the Challenges of Growth with Inclusion``, A world Bank Poverty Assessment Handbook
- World Bank (2001), `World Development Report 2000/2001: Attacking poverty`. http://en.wikipedia.org/wiki/Kano_state

APPENDIX

Dependent Variable: PVTY
 Method: ML - Binary Probit (Quadratic hill climbing)
 Date: 07/02/14 Time: 04:12
 Sample: 1 120
 Included observations: 120
 Convergence achieved after 4 iterations
 Covariance matrix computed using second derivatives

| Variable | Coefficient | Std. Error | z-Statistic | Prob. |
|-----------------------|-------------|-----------------------|-------------|-----------|
| C | 0.043575 | 0.501705 | 0.086854 | 0.9308 |
| FWH | 0.757546 | 0.329130 | 2.301662 | 0.0214 |
| UNE | 0.351459 | 0.380640 | 0.923335 | 0.3558 |
| OUM | 0.391081 | 0.324285 | 1.205981 | 0.2278 |
| EDU | -0.630790 | 0.403118 | -1.564779 | 0.1176 |
| McFadden Rsquared | 0.096485 | Mean dependent var | | 0.858333 |
| S.D. dependent var | 0.350170 | S.E. of regression | | 0.340609 |
| Akaike info criterion | 0.820561 | Sum squared resid | | 13.34168 |
| Schwarz criterion | 0.936706 | Log likelihood | | -44.23365 |
| Hannan-Quinnriter. | 0.867728 | Deviance | | 88.46729 |
| Restr. Deviance | 97.91459 | Restr. log likelihood | | -48.95730 |
| LR statistic | 9.447300 | Avg. log likelihood | | -0.368614 |
| Prob(LR statistic) | 0.050841 | | | |
| Obs with Dep=0 | 17 | Total obs | | 120 |
| Obs with Dep=1 | 103 | | | |

The IISTE is a pioneer in the Open-Access hosting service and academic event management. The aim of the firm is Accelerating Global Knowledge Sharing.

More information about the firm can be found on the homepage:
<http://www.iiste.org>

CALL FOR JOURNAL PAPERS

There are more than 30 peer-reviewed academic journals hosted under the hosting platform.

Prospective authors of journals can find the submission instruction on the following page: <http://www.iiste.org/journals/> All the journals articles are available online to the readers all over the world without financial, legal, or technical barriers other than those inseparable from gaining access to the internet itself. Paper version of the journals is also available upon request of readers and authors.

MORE RESOURCES

Book publication information: <http://www.iiste.org/book/>

IISTE Knowledge Sharing Partners

EBSCO, Index Copernicus, Ulrich's Periodicals Directory, JournalTOCS, PKP Open Archives Harvester, Bielefeld Academic Search Engine, Elektronische Zeitschriftenbibliothek EZB, Open J-Gate, OCLC WorldCat, Universe Digital Library, NewJour, Google Scholar

