# Comparative analysis of poverty status of rural and urban households in Kwara state, Nigeria

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**Abstract:** Poverty is a global menace that threatens the standard of living of the people across various countries of the world. This study made a comparative analysis of the poverty status of the urban and rural househols in Kwara State, Nigeria. Specifically the study examined the demographic and socio-economic characteristics of the people, examined their poverty profile and identified the determinants of poverty among the respondents. Primary data obtained from 250 respondents in urban and rural settlements of the state were used. Descriptive statistics, weighted poverty measures and logistic regression models were the tools employed for the analyses. The study revealed prevalence of poverty among the rural households, female-headed ones, those with no formal education, and households with farming as their only occupation. Poverty level was also dicovered to increase with household size, low per capita income, low educational status and living in the rural settlements. The study therefore calls for access to formal education by the people, control of family size through appropriate techniques, creation of more jobs in the rural areas, diversification of job activities by the people as well as improvement of the female individuals' access to job opportunities.

**Keywords:** Poverty profile, determinants, weighted poverty measures, job opportunities.

## INTRODUCTION

Poverty is a global phenomenon which threatens the survival of mankind. It cuts across creed, race, and space. Poverty is a multifacet event in nature with physical, economic, social and psychological dimensions (Narayan and Chambers, 2000). This informed the United nations declaration of 1996 as the "International Year for the Eradication of Poverty" and October 17 of every year designated as the "International Day for the Eradication of Poverty" worldwide. Similarly, the decade 1997 – 2006 has been declared United Nations Decade of Eradication of Poverty (Usman, 2001). Poverty is now

acknowledged as the main goal of international development, for instance the millenium declaration of the United nations signed by 189 countries commits the global community to reduce by half the proportion of the world's poor and hungry by 2015 (IFPRI, 2001).

Most previous analysis follow the conventional view of poverty as insufficiency in securing basic goods and services (Sen, 1983; Blackwood and Lynch, 1994; Olayemi, 1995; Ravallion, 2004). Others view poverty, in part, as a function of education, health, life expectancy, child mortality, housing, sanitation, potable water supply and adequate nutrition

(Obadan, 1997; Englana and Bamidele, 1997). By and large, the poor have been described as those who cannot satisfy their basic needs of food, clothing and shelther, unable to meet social and economic obligations, lack gainful employment, are deprived of access to basic facilities and human well being and unable to attain minimum standard of living (Aigbokhan, 2000; World Bank, 2001).

The poor in most developing countries are found among five identifiable economic groups - the urban underdeveloped, the rural landless, the resource poor farmers, the urban underemployed and the unemployed (World Bank, 1997). Generally, the poor are disproportionately located in the rural areas and the urban slums.

Poverty has the consequences of breeding social disillusion with respect to what the societal objectives are and members' responsibilities towards attainment of these objectives. A society where the majorities spend 90% of their income on consumption with little or nothing for saving and eventual plough back into the economy would be impeded by slow growth. This means that the affected group would not be able to participate effectively in national development. Poverty in this sense would result in a vicious cycle reproducing itself in perpetuity. In the light of this, this study presents a comparative analysis of poverty status of rural and urban households in Kwara State, Nigeria. The specific objectives of the study are to describe the socio-economic and demographic characteristics of the households, profile their poverty status, and examine the determinants of poverty among the households.

## METHODOLOGY

### Study Area

This study was carried out in Kwara State, Nigeria. The state is located in the north-central zone of the country. It lies between latitudes $7^0 45'$N and $9^0 30'$N and longitudes $2^0 30'$E and $6^0 35'$E. With a population of about 2.37 million (NPC, 2006), the state is made up of four zones – A, B, C and D, with sixteen Local Government Areas (LGAs). The people of the state comprise the Yoruba, Fulani, Nupe and Baruba. Agriculture is the mainstay of the people of the state with over 80 per cent of the population living in rural areas [National Bureau of Statistics (NBS), 2005].

### Data Collection and Sampling Procedure

Primary data were used for this study. A four-stage sampling technique was used for the study. In the first stage, Zone C was purposively selected out of the four zones in the state because the zone has high concentration of rural and urban settlements (FOS, 2004). The second stage was a random selection of five LGAs from the zone. A random selection of one town and one village from each of the selected LGAs constituted the third stage. The last stage involved random selection of 25 households in each of the ten selected settlements to give a total of 250 households for the study.

The data used for the study was obtained with the use of structured questionnaire coupled with interview schedule. Information was obtained on both quantifiable and non-quantifiable factors affecting both income and expenditure pattern of the rural and urban households in the study area. Data were collected on household size, expenditure on various

consumer items, occupation employment and other household's non-food expenditure. The consumption items considered were food, accommodation, clothing, transportation, household goods, fuel, light, school fees, drinks and entertainments amongst others. The food items considered included yam, beans, cassava flour, rice, bread, egg, fish, meat, pap, vegetable, fruits amongst others.

**Data analysis**

Both descriptive and analytical techniques were used in the data analysis. Descriptive statistics used included percentages, tables, means, and mode. The Foster, Greer and Thorbecke (1984) class of weighted poverty measures were also used to profile the poverty status of the households. The formula is given as follows:

$$P_\alpha = \frac{1}{n}\sum_{i=1}^{q}\left(\frac{Z-Y_i}{z}\right)^\alpha$$

Where $\alpha = 0 - 2$ and indicate headcount, depth and severity of poverty respectively

n is the sample population

q is the number of the poor in the sampled population, and

z is the poverty line given as $(\frac{2}{3}, or \frac{1}{3})$ of the estimated mean per capita household expenditure. The isolation of the determinants of poverty was done using Logistic regression model. The logit regression model, a dichotomous regression model is based on cumulative logistic distribution function. The model is specified as follows:

$$P_i = E\left(Y_i = \frac{1}{X_i}\right) = \frac{1}{1+e^{-(\alpha+\beta X_i)}}$$

$$P_i = \frac{1}{1-e^{-z_i}}$$

Where $z_i = \beta_1 X_1 + \beta_2 X_2 \ldots . \beta_n X_n$ where $P_i$ is the cumulative logistic distribution function.

In order to obtain the value of $z_i$ the likelihood of obtaining /observing the sample need to be formed by introducing dichotomous response variables (Yi) such that

$$Y_i = 1 \; if \; household \; is \; poor \; and \; 0 \; if \; otherwise$$

$$X_i = independent \; variables; i = 1,2,3.8; \alpha_i \; and \; \beta_i \; are$$

The hypothesized independent variables used are:

$X_1 =$ Per capita income of the household ( N )

$X_2 =$ Household size

$X_3 =$ Age of the household head (years)

$X_4 =$ Gender of the household head (1 if male and 0 if otherwise)

$X_5 =$ Farm Size (ha)

$X_6 =$ Educational status of the household head

$X_7 =$ Marital Status

$X_8 =$ Type of settlement pattern (that is rural or urban D=1 if rural and 0 if otherwise)

**RESULTS AND DISCUSSION**

**Demographic and Socio-economic Characteristics of respondents**

Table 1 presents the demographic characterics of the respondents. The Table reveals that there are more male heads in the urban households than in the rural ones. There are more widows in the rural than the urban settlement.

Polygamous households were more prevalent in the rural areas. This accounts for large family size. The reason for this could be the quest to have much family labour for farm

activities which is more prevalent in the rural area.

More household heads in the urban area have formal education than the rural area. This could result from the migration of the educated people to cities in search of white collar jobs rather than farming in the villages. This is further reflected in the nature of the major occupation of the respondents – farming and civil service in the rural and urban areas respectively (Table 1). This corroborates earlier reports by Deere and Leon, (2003); World Bank, (2005); NBS, (2006) and Muhammad-Lawal *et al* (2009). The rural areas in the study area have aging population. This could result from migration of the youth to urban areas in search of green pasture.

The settlement pattern in the study area is more of urban than rural set-up. Over 63% of the rural dwellers earn not more than N15,000 as income per month as against 23% for the urban dwellers while the mean income is N9,860 and N14,003 for rural and urban dwellers respectively. This probably accounts for the higher level of consumption expediture recorded in the urban settlements than the rural areas (Table 2). This could also be a reflection of the assets in the settlements. More respondents obtain credit facility through cooperative societies in the rural area than the urban. This could result from fact that those in rural area are usually much closer to one another and can more easily form cooperatives than those in urban settlements.

Though there are more non-farmers in the urban than in the rural settlement, the average farm size in the latter is greater. This is logical as more piece of land would have been used for

residential apartments in the urban areas to accommodate the teeming population.

Table 1: Descriptive Statistics of Demographic Variables of Respondents

| Variable | Rural | Urban |
|---|---|---|
| **Settlement Pattern** | 43.5 | 56.5 |
| **Gender of the Head** | | |
| Male | 71.4 | 87.2 |
| Female | 28.6 | 12.8 |
| **Marital Status** | | |
| Single | 4.8 | 5.5 |
| Married | 70.2 | 78 |
| Divorced | 3.6 | 5.5 |
| Widowed | 21.4 | 11.0 |
| **Household Type** | | |
| Monogamous | 11.9 | 85.3 |
| Polygamous | 83.3 | 11.9 |
| Others | 4.8 | 2.8 |
| **Household Size** | | |
| 1-5 | 23.8 | 35.8 |
| 6-10 | 63.1 | 61.5 |
| >10 | 13.1 | 2.8 |
| Mean | 9 | 6 |
| **Educational Status** | | |
| No formal education | 45.5 | 11.8 |
| Primary | 25.7 | 28.3 |
| Secondary | 14.5 | 29.4 |
| Tertiary | 5 | 25.0 |
| Adult | 8.3 | 4.6 |
| Arabic Education | 1.2 | 9 |
| **Age of Household Head** | | |
| 25-40 years | 9.5 | 9.2 |
| 41-60 | 56.0 | 73.4 |
| >60 | 34.0 | 17.4 |
| Mean years | 58.5 | 42.8 |

Source: Field Survey, 2011

Table 2: Descriptive Statistics of Socio-Economic Variables

| Item | Rural | Urban |
|---|---|---|
| **Settlement Pattern** | 43.5 | 56.5 |
| **Monthly Expenditure (N)** | | |
| < 8000 | 33.3 | 13.8 |
| 8000-16,000 | 46.4 | 22.0 |
| 16,001-24,000 | 11.9 | 31.2 |
| >24,000 | 8.3 | 33.0 |
| Mean expenditure | 9,023 | 13,502 |
| **Credit Facility** | | |

| | | |
|---|---|---|
| Commercial Banks | 6.0 | 11.9 |
| Cooperatives | 89.3 | 66.1 |
| Money Lender | 2.4 | 2.8 |
| Friends and Relatives | 2.4 | 2.8 |
| Others | - | 5.5 |
| **Income (N)** | | |
| ≤5000 | 10.7 | 4.6 |
| 5001-10,000 | 42.9 | 9.2 |
| 10,001-15,000 | 9.5 | 9.2 |
| 15,001-20,000 | 7.1 | 33.0 |
| 20,001-30,000 | 14.3 | 24.8 |
| >30,000 | 15.3 | 19.3 |
| Mean income | 9,860 | 14,003 |
| **Assets** | | |
| Flat | 14.3 | 36.7 |
| Single Room | 40.0 | 32.1 |
| Bungalow | 4.8 | 5.5 |
| Boys quarter | 8.3 | 3.7 |
| Room and Parlour | 22.6 | 22 |
| **Farm size (ha)** | | |
| ≤1.0 | 17.4 | 41.6 |
| 1.1-2.0 | 24.8 | 21.4 |
| >2.0 | 10.1 | 8.3 |
| Not Farming | 47.7 | 28.5 |
| Average farm size (ha) | 1.14 | 0.93 |

Source: Field survey, 2011

**Poverty Profile of Respondents**

The profile of poverty of households in the study area is presented in Table 3 using the Foster, Greer and Thorbecke poverty measures. The table shows that there are more poor and core (extremely) poor people in the rural area than in the urban settlement. The high incidence of poverty of the rural dwellers could be connected with their low level of income, as over 50% earned not more than N10,000 as income per household per month as against 14% for the urban households (See Table 2).

Table 3: Poverty Profile of Respondents Based on Location

| Item | Rural | Urban |
|---|---|---|
| Moderate poor | 73%** | 59%** |
| Core poor | 25% | 6% |
| Non-poor | 27% | 41% |
| Mean Per Capita Household Expenditure | N2,740.47‡ | N4,095.63 |
| Core Poverty Line | N913.59 | N1,365.21 |
| Moderate Poverty Line | N1,827.18‡ | N2,730.42 |

‡ Tests are by location of households, denotes significant at 1%.

**, * denote significant at 1% and 5% respectively.

Source: Field Survey, 2011

The poverty status of the households was further decomposed based on demographic and socio-economic characteristics of the households (Table 4). More female-headed households were poor compared to the male-headed ones. The depth and severity of poverty were also higher for this category of households, 23% and 8% respectively as against 10% and 5% for the male-headed households. High incidences of poverty have been reported among female-headed households all over the world (Olorunsanya, 2009; Fagernas and Wallace, 2007 and FAO, 2008). The widowed sub-group of households had high prevalence of poverty in these marital sub-groups of households. The single-headed sub-group of households was less disadvantaged, 5% of the members in this sub-group of households were poor. The depth and severity of poverty follow the same pattern. Significant differences (P<0.01) existed between these sub-groups and the whole group.

Poverty incidences were highest among households with no formal education and lowest among those with post secondary education. The poverty depth and severity followed the same pattern. The results reveal that educational level of household heads was inversely related to the poverty status of the households. Households with educated members are more liable to adopt new technology than their unlettered

counterparts. This might result in increase in output and level of consumption. This is in agreement with earlier studies (Fagernas and Wallace, 2007 and FAO, 2008) that high level of education reduces poverty.

Table 4: Poverty Profile of Respondents Based on Socio-Economic Characteristics

| Item | $P_0$ | $P_1$ | $P_2$ |
|---|---|---|---|
| **Settlement Pattern** | | | |
| Rural | 0.73‡ | 0.26‡ | 0.14† |
| Urban | 0.59 | 0.18 | 0.08 |
| **Gender** | | | |
| Male | 0.47 | 0.10 | 0.05 |
| Female | 0.81‡ | 0.23‡ | 0.08‡ |
| **Age of the Household Heads** | | | |
| 25-40 years | 0.13 | 0.01 | 0.02 |
| 41-60 | 0.30 | 0.06 | 0.02 |
| >60 | 0.54 | 0.08 | 0.04 |
| **Marital Status** | | | |
| Single | 0.05 | 0.02 | 0.02 |
| Married | 0.23 | 0.06 | 0.05 |
| Divorced | 0.32 | 0.04 | 0.03 |
| Widowed | 0.76‡ | 0.12‡ | 0.07‡ |
| **Primary Occupation** | | | |
| Farming | 0.87 | 0.08 | 0.04 |
| Farming and others | 0.13 | 0.06 | 0.02 |
| **Educational Status** | | | |
| No formal education | 0.84‡ | 0.15‡ | 0.08‡ |
| Primary education | 0.22† | 0.10† | 0.05† |
| Secondary education | 0.16 | 0.05 | 0.03 |
| Tertiary education | 0.09‡ | 0.03‡ | 0.01‡ |
| Adult education | 0.34 | 0.09 | 0.04 |
| Arabic education | 0.72 | 0.11 | 0.05 |
| **Household Size** | | | |
| 1-5 | 0.20 | 0.01 | 0.01 |
| 6-10 | 0.32 | 0.14 | 0.10 |
| >10 | 0.60‡ | 0.19‡ | 0.15‡ |

‡,† Tests are from group total, denote significance at 1% and 5% respectively.

Source: Field Survey, 2011.

Households with farming as the only occupation had high incidence of poverty. Majority (87%) of households in this category were poor, and they also had high poverty depth

and severity. This is probably due to acclaimed low labour productivity in agriculture (Belshaw, 2002). Large household size contributed to high incidence of poverty in the study area. This could result from the inability of the household head to adequately cater for the depandants. The depth and poverty disparity followed the same pattern. There was also significant difference among this sub-group and whole group poverty incidence.

**Determinants of Poverty in the Study Area**

Table 5 presents the factors influencing poverty among the respondents in the study area. All the included variables in the models were significant with exception of farm size and marital status of the household heads.

Table 5: Determinants of Poverty among Urban and Rural Households in Kwara State

| Variable | Coefficients | t-test |
|---|---|---|
| Per capital income of the household | -0.766 | -5.759‡ |
| Household size | 0.277 | 2.083‡ |
| Age of the household head | 0.070 | 5.833‡ |
| Gender of the household head | -2.166 | -2.955† |
| Farm size | -0.034 | -0.241 |
| Educational status of the household head | -0.471 | -2.428‡ |
| Marital status | -0.342 | -1.082 |
| Type of settlement pattern | 0.281 | 2.674† |
| Constant | 3.976 | 2.413 |
| Likelihood Ratio | 2.947 | 2.947 |
| Cox & shell $R^2$ | 0.750 | 0.750 |
| Naqel Kerke $R^2$ | 0.975 | 0.975 |

Source: Field Survey, 2011

The coefficient of per capita income of household is negative, implying that poverty status of the household decreases as per capita income of household increases. This is likely

because more of the basic needs of households are met as their per capita income increases.

The positive coefficient of household size implies that poverty level of the respondents increases with increase in household size. This could result from the inability of the resources available to household to satisfy their needs as there are more household members.

The results indicate that those who are male have lower level of poverty than the female. This is likely because the male are known to have the ability to do tedious work than the female. The need to take the responsibity of catering for the household by the male, as it is the case in Nigeria, could also account for this. The negative coefficient of educational status of the household head is also logical, as education correlates with ability to adopt sound innovations and strategies at overcoming poverty.

Table 5 also shows that those who live in the rural area are poorer than the urban dwellers. This may be connected to the low level of income of the rural households compared to their urban coubterparts (See Table 2).

## CONCLUSION AND RECOMMENDATION

The results of the findings revealed incidence of poverty in the rural and urban part of the study area with a higher incidence among the rural households, female-headed households, less educated ones, households with large size, those with low per capita income and households with farming as their only occupation. Therefore, based on these results, the followings recommendations are suggested:

Government and development agencies should empower the rural people through creation of more jobs in the rural area. Besides, there should be no gender discrimination in creating jobs for the masses – women should be given ample opportunity to benefit from this effort. This would reduce the rate of poverty incidence among these groups of people.

Household heads should try and control the household's size. This could be through the use of modern family planning techniques. This however requires visiting the health centres around them for proper advice.

Government, NGOs and devopment agencies should promote access to formal education by the people. This could be through free education and award of scholarships. This would help the people to acquire skills to engage in activities that would improve their standard of living and reduce their poverty level.

Apart from farming, households should engage in other activities which can help increase income and improve their standard of living. Therefore, diversifying to these activities could assist in the achievement of the goal of poverty reduction in the economy. Policy makers should look for means of improving these activities and make good policies that will promote them without having negative effects on farming. Government and private sectors could also help to provide credit facilities that will help rural households to intensify their engagement in these activities which have the prospects of reducing poverty situation in the economy.

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