Australian Journal of Basic and Applied Sciences, 2(1): 134-140, 2008
ISSN 1991-8178
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# Income Inequality in Rural Nigeria: Evidence from Farming Households Survey Data

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**Abstract:** This paper analyzes income inequality among sample of farm households in rural Nigeria. Results show that the overall Gini coefficient of income inequality is 0.40, and that while farm income decreases income inequality, off-farm income increases inequality. Among the components of off-farm activities, agricultural wage, non-agricultural wage and self-employed income increase inequality, while remittances and other income (pensions and capital income) decrease income inequality. On the whole, farm income contributes about 35% while off-farm income contributes 61% to total inequality. Crop income – contributing about 33%, contributes more to total income inequality than any other income source. This is followed by self-employed income, which contributes 32% to total income inequality. Because growth in the off-farm sector is likely to increase inequality, the study recommends the removal of barriers faced by poor households in assessing better off-farm employment opportunities, so that it would have an equalizing effect on income distribution. This would require the provision of education and accessible credit schemes, coupled with provision of physical infrastructures that would create more economic opportunities for the poor households in the rural areas.

**Key words:** Farm income, Farming Households, Income Inequality, Gini Decomposition, Off-farm income, Nigeria.

## INTRODUCTION

Poverty and income inequality are closely related and it has been argued that income inequality is a manifestation as well as a strong cause of poverty (UNU/WIDER, 2000). Kolenikov and Shorrocks (2003), found that the high level of poverty in the late 1990s in Russia was due more to the rise in income inequality than to decline in average income. When economic growth increases, poverty rate decreases, but as income inequality increases, the incidence of poverty also increases. Because of the linkage between income inequality and poverty, reducing income inequality has become a major public policy challenge among development agencies and poverty-reduction experts. Yet, in most developing countries, discussions about poverty reduction strategies often focus almost exclusively on income growth, neglecting the potential roles of income redistribution and inequality UNU/WIDER, 2000). Most of the discussions often fail to recognise that, to achieve reduction in poverty, income growth has to be equitably distributed.

There are evidences in the literature that point to the increasing level of income inequality in developing countries over the last two decades (e.g. Addison and Cornia, 2001; Kanbur and Lustig, 1999). In Nigeria, the increasing level of income inequality has also been a concern to policy makers for a long time. For instance, Canagarajah *et al,* (1997), reported increasing level of income inequality between 1980s and 1990s as shown by an increase in the Gini-coefficient from 38.1% in 1985 to 44.9% in 1992. Similarly, Aigbokhan (1999), found that income inequality worsened after the Structural Adjustment Programme (SAP) of 1986. World Bank (2003), found that in 1997, the Gini index of income inequality was 0.506. Using the 2004 National Living Standard Survey (NLSS) data, Oyekale et al, (2006), found that the overall Gini index for Nigeria was 0.580. In sectoral sense, the study found income inequality to be higher in rural areas (Gini – 0.5808) as compared to urban areas (Gini – 0.5278), and that employment income increases income inequality while agricultural income decreases it. On the contrary, however, Awoyemi and Adeoti (2004), found that agricultural income is inequality increasing while wage and self-employed income are inequality decreasing.

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According to Litchfield (1999), studies on decomposition of income inequality are desirable for both arithmetic and analytical reasons. It can shed light on the structure and dynamics of income within different socio-economic groups in the economy. Estimating the contribution of each income source to total inequality and understanding the link between socio-economic characteristics and total inequality can also be useful to economic policy analysts and designers of poverty reduction programmes. Studies on income inequality decomposition are very scanty in Nigeria. Given the general belief that poverty is more widespread and prevalent in rural than urban areas (IFAD, 2001), and that inequality is higher in rural than urban Nigeria (Oyekale, *et al,* 2006), it becomes appropriate to conduct an in-depth analysis of rural income inequality, with the aim of identifying the income sources that contribute more to overall inequality and suggesting ways of reducing rural income inequality generally. This present study analyzes income inequality among rural farming households in Kwara State, Nigeria. The study intends to achieve two objectives. First, provide a descriptive analysis of the composition of household's income from different sources and estimate the overall income inequality. Second, estimate the contributions of each income source to overall income inequality.

The remaining parts of the paper are organized as follows. Section 2 provides a brief description of how income inequality can be measured. Section 3 describes the data and provides background information on the study area. Section 4 discusses the empirical results, while section 5 concludes with policy implications.

***Measuring Income Inequality:***

Inequality can be conceptualized as the dispersion of a distribution, whether one is considering income, consumption, or some other welfare indicators. It is a logical outcome of market economy, which is made up of structures and institutions such as businesses, formal and informal organizations, all of which serves as avenue for socio-economic integration. Income inequality is often studied as part of broader analyses covering poverty and welfare. As mentioned earlier, income is detrimental to economic growth and development, because it aggravates poverty, and this is why it is important to measure and monitor its level from time to time.

Income inequality can be measured in different ways. First, is by using the Gini-coefficient decomposition method. This method involves the estimation of the overall Gini-coefficient of total income, which can be decomposed according to the various income sources. According to Shorrocks (1982), if $Y$ is the total income and it consists of income from k sources, namely namely $y_1, y_2, \ldots\ldots, y_k$. Total income $Y$ is thus given as:

$$Y = \sum_{k=1}^{K} y_k \qquad (1)$$

The Gini coefficient of total income *(G)* can be expressed as:

$$G = \sum_{k=1}^{K} S_k G_k R_k \qquad (2)$$

Where $S_k$ stands for the share of income source $k$ in total income, $G_k$ is the Gini coefficient of income from source $k$, and $R_k$ is the correlation coefficient between income from source $k$ and total income $Y$. $G_k R_k$ is known as the pseudo-Gini coefficient of income source $k$. The contribution of income source $k$ to total income inequality is given as $S_k G_k R_k/G$, while the relative concentration coefficient of income source $k$ in total income inequality is expressed as:

$$g_k = G_k R_k/G. \qquad (3)$$

Income sources that have a relative concentration coefficient greater than one contribute to increasing total inequality, while those with a relative concentration coefficient less than one contribute to decreasing total inequality. The source elasticity of inequality, indicating the percentage effect of a 1% change in income from source $k$ on the overall Gini coefficient, is expressed as $(S_k G_k R_k/G) - S_k$. Note that the sum of income source elasticities of inequality should be zero. That is, if all the income sources changed by equal percentages, the overall inequality ($G$) remains unchanged.

The second popular method of measuring income inequality is the regression-based decomposition method. This method use regression technique to model the per capita income or expenditure as a function of explanatory variables. This is with the aim of determining how much income inequality is accounted for by each explanatory variables and how much is unexplained, as measured by the error term. The decomposition is done by specifying an income function as:

$$Y = X\beta + \varepsilon \quad (4)$$

$Y$ is the per capita income or expenditure, $X$ is the matrix of explanatory variables, $\varepsilon$ is the stochastic error term. The explanatory variables are exogenous individual, household and village-level characteristics, which determine income level. They capture household's income generating capacity in both formal and informal labour markets and self-employment. They can include, education, occupation of head, assets, market and location variables. Since the econometric results yield estimates of the income flows attributed to household variables, they allow the decomposition of inequality by factor income. The income contributed by the socio-economic variables as given in the estimated regression equation is:

$$Y_i = \sum_{k=1}^{K} y_k \quad \text{for all } i\text{th variables} \quad (5)$$

The income flow can then be used to directly calculate decomposition component for all regression variables and the contribution of each of the socio-economic factors ($Xi$) to Gini inequality can be estimated.

***Data and Household Survey:***

Data used in this paper are from a comprehensive household income and expenditure survey of farm households in Kwara State, north-central region of Nigeria. The data were collected between April and August 2006. Kwara State was chosen as the survey area because it has a characteristic of high prevalence of poverty. The nationwide living standard measurement survey (LSMS) conducted in 2004 shows that the state is among the six poorest in Nigeria in terms of income poverty (NBS, 2006). Apart from this, the state is among the top 20 states – out of 36, in terms of income inequality in Nigeria.

The total estimated population of the State is about 2.4 million people out of which 70% can be classified as smallholder farmers. The State has a total land area of about 32,500km$^2$, which is about 3.5% of the total land area of the country, which is put at 923,768km$^2$ (KWSG, 2006). Approximately 25% of the land area of Kwara State is use for farming. The farming system is characterized by low quality but surplus land, low population density and predominantly cereal-based cropping pattern. Farm enterprises are generally small in size, so that – and in spite of own production – most households are net buyers of food, at least seasonally (KWSG, 2006).

The sample consists of 220 farm households which were selected by a multi-stage random sampling technique. Eight out of the 16 local government areas in the state were randomly selected in the first stage. Then, five villages were randomly chosen from each of the selected 8 local government areas, and finally, five households were sampled in each of the 40 villages, using complete village household lists provided by the local authorities. A standardized questionnaire that covered information on household expenditure, consumption and income, including details on participation of individual household members in different income-generating activities was used in collecting the data. The interviews were carried out with the household head in the presence of other members of the household. Income data from the various sources were collected for each adult members of the household, from which total household income was calculated. Income data includes income from own-farm production both consumed at home and sold in the market. The quantity of the farm produce were collected in different units but converted to grain equivalent values. The monetary values were derived based on the local market prices per unit of the grain equivalent.

Broadly, I disaggregate activities and income into seven categories: i) crop income; ii) livestock income; iii) agricultural wage income, representing earnings from supplying agricultural wage labor to other farms; iv) non-agricultural wage income, including from both formal and informal employment; v) self-employed income from own businesses; vi) remittance income received from relatives and friends not presently living with the household; and vii) other income, mostly comprising capital earnings and pensions.

## RESULTS AND DISCUSSION

***Characteristics of Sample Households:***

Table 1 shows the selected characteristics of sample households. The average household size of five adult equivalents (AE) is consistent with the national average reported by NBS (2006). About 10% of the households are headed by women. The average educational status is slightly higher than the national average, which can probably be explained by the fact that the density of elementary schools is relatively high in rural areas of Kwara State. The average farm size of 1.9 hectares is comparable to the national average of two hectares.

**Table 1:** Selected Sample Characteristics (N = 220)

| Variable | Description | Mean | Std Dev | Min | Max |
|---|---|---|---|---|---|
| Household size | Number of household members expressed in adult equivalents (AE) | 5.07 | 1.305 | 2.5 | 11.5 |
| Male | Dummy for gender of household head (male = 1, female = 0) | 0.895 | 0.306 | 0 | 1 |
| Age | Age of household head (years) | 56.3 | 6.91 | 42 | 70 |
| Education | Number of years of schooling of the household head (years) | 7.01 | 4.62 | 0 | 20 |
| Farm size | Area cultivated by household in survey year (ha) | 1.90 | 0.58 | 0.8 | 3.5 |
| Productive assets | Value of household productive assets (naira) | 73761.8 | 53154.0 | 8100 | 424280 |
| Electricity | Dummy for access to electricity (yes = 1, no = 0) | 0.827 | 0.378 | 0 | 1 |
| Pipe-borne water | Dummy for access to pipe-borne water (yes = 1, no = 0) | 0.650 | 0.478 | 0 | 1 |
| Tarred road | Dummy for tarred road in the village (yes = 1, no = 0) | 0.740 | 0.439 | 0 | 1 |
| Distance to market | Distance from the village to the nearest market place (km) | 13.5 | 14.3 | 0 | 56 |
| Credit | Dummy for access to formal or informal credit (yes = 1, no = 0) | 0.204 | 0.404 | 0 | 1 |
| Total income | Total household income (naira/AE) | 30245.7 | 23416.4 | 1166.2 | 142165 |

Note: Official exchange rate in 2006: 1 US dollar = 120 naira; Std Dev is standard deviation. AE is adult equivalent

The infrastructure variables indicate that many of the farm households do not have access to electricity and pipe-borne water. Even fewer households have access to formal or informal credit, and the distance to the nearest market place is quite far on average. Total household income is approximately 30 thousand naira (250 US$) per capita per year over all income sources. This is somewhat lower than the national average in Nigeria, but appears reasonable for rural areas.

***Composition of Household Income:***

Table 2 shows how much different income sources contribute to total household income in the sample. The analysis provides background information on the amount and sources of income earn by an average rural farm household, which would later form the basis of the income inequality analysis. In order to better reflect household's living standards, the analyses build on per adult equivalent income instead of total income. The results indicate that all households derive income from farming, which, however, only accounts for half of total income on average. The other half is derived from different off-farm sources. Crop farming, which is mainly subsistence in nature, is by far the most important single source of income for the rural households, providing about 45% of total income. Despite the growing scepticism on the role of agriculture for reducing poverty among rural household, this result shows that, it remains the major source of rural income.

More than half of the sample households derive income from livestock enterprises, but income from this source is only 5% of total income. This suggests that the type of livestock activities is small-scale, mostly extensive free range backyard type. Eighty-eight percent of the sample households in rural Nigeria receive income from off-farm sources, and self-employed income is the most important, accounting for 24% of total income and 48.5% of off-farm income. Self-employed income is mainly derived from handicrafts, food processing, shop-keeping and other local services, as well as trade in agricultural and non-agricultural goods. Forty percent of the households participate in non-agricultural wage activities, but this source only contributes 6% to total income. The non-agricultural wage employment includes formal and informal jobs in construction, manufacturing, education, health, commerce, administration, and other services. The smaller contribution of non-agricultural wage income to total income could be because of the little educational and professional qualification of the rural farmers, which reduce their earning from available non-agricultural activities.

Even though all the sample households have land, about 44% receive income from supplying agricultural wage labour, which accounts for about 13% of total income. The phenomenon by which landed farmers - as oppose to landless farmers, participate in supplying wage labour is common in the study area. The reasons for this include the need to earn cash income to meet urgent financial need, reduce income risks and finance farm expansion (Reardon, 1997). Nearly two-thirds of the households receive remittances from local and international sources, but it contributes only 5% to total income. Given that a larger proportion of the households receive remittance income, which contribute a smaller share of total income, it would be risky for poor households to rely on this income source. Moreover, it depends more on the economic situation of the givers. The least important income source is other income, comprising capital earnings and pensions, contributing only 1% to total income.

Considering the total income of households participating in the various income activities, the results show that households participating in self-employed activities receive the largest annual income per adult equivalent of about 41,247 naira or US $ 344. This indicates that self-employed activity is the most remunerative, and the productivity of family labour is highest in self-employed activities in the area. However, because establishing self-employed business require initial investment, households that are disadvantage in terms of financial capital, will be constraint from reaping the potential benefit of self-employed activities.

**Table 2:** Composition of Rural Household Incomes

| | Mean Income per Capita (AE) | | Share of total income (%) | Participation rate (%) | Average income of participating households |
|---|---|---|---|---|---|
| | In Naira | In US Dollar | | | |
| Total household income | 30245.7 | 252 | 100.0 | 100.0 | 30245.7 |
| Total farm income | 15226.5 | 127 | 50.3 | 100.0 | 30245.7 |
| Crop income | 13797.8 | 115 | 45.4 | 100.0 | 30245.7 |
| Livestock income | 1428.7 | 12 | 4.9 | 54.0 | 28791.9 |
| Total off-farm income | 15019.3 | 125 | 49.7 | 87.7 | 32135.5 |
| Agric wage income | 3946.6 | 33 | 13.3 | 43.6 | 40746.3 |
| Non-agric wage income | 1828.9 | 15 | 6.0 | 39.5 | 35931.0 |
| Self-employed income | 7285.2 | 61 | 23.9 | 49.5 | 41246.8 |
| Remittance income | 1611.3 | 13 | 5.3 | 60.9 | 32518.1 |
| Other income | 347.1 | 3 | 1.2 | 24.1 | 34286.9 |

Source: Author's calculation. AE is adult equivalent.

**Table 3:** Gini Decomposition of Income Inequality by Income Source

| | Income share ($S_k$) | Gini coefficient ($G_k$) | Correlation with total income distribution ($R_k$) | Pseudo -Gini coefficient ($G_kR_k$) | Percentage contribution to total income inequality ($S_kG_kR_k/G$) | Relative concentration of income source ($G_kR_k/G$) | Source elasticity of total inequality ($S_kG_kR_k/G$)-$S_k$ |
|---|---|---|---|---|---|---|---|
| Total farm income | 0.503 | 0.421 | 0.651 | 0.274 | 34.6 | 0.688 | -0.157 |
| Crop income | 0.456 | 0.452 | 0.637 | 0.287 | 32.8 | 0.721 | -0.128 |
| Livestock income | 0.047 | 0.694 | 0.254 | 0.176 | 2.1 | 0.442 | -0.026 |
| Total off-farm income | 0.496 | 0.580 | 0.840 | 0.487 | 60.7 | 1.223 | 0.157 |
| Off-farm employment income | 0.432 | 0.643 | 0.829 | 0.533 | 57.8 | 1.339 | 0.146 |
| Agric wage income | 0.130 | 0.744 | 0.560 | 0.416 | 13.6 | 1.045 | 0.006 |
| Non-agric wage income | 0.060 | 0.839 | 0.526 | 0.441 | 6.6 | 1.108 | 0.006 |
| Self-employed income | 0.241 | 0.725 | 0.720 | 0.522 | 31.6 | 1.311 | 0.075 |
| Remittance income | 0.053 | 0.695 | 0.130 | 0.090 | 1.2 | 0.226 | -0.041 |
| Other income | 0.011 | 0.869 | 0.048 | 0.041 | 0.11 | 0.103 | -0.009 |
| Total | 1.00 | 0.398 | 1.00 | 0.398 | | | |

Note: Estimates are based on annual per capita incomes expressed in terms of adult equivalents.

***Income Inequality by Gini Decomposition:***

As mentioned earlier, the Gini decomposition method was used to estimate income inequality among the sample households. Table 3 presents the Gini decomposition of income inequality by income sources. The overall total income inequality of 0.40 in the sample is lower than Gini coefficient of 0.51 reported by FAO (2006) or 0.58 reported by Oyekale *et al* (2006) for Nigeria. The results seem to suggest that income inequality is lower in rural than urban areas of Nigeria, contrary to what was reported by other studies such as Oyekale *et al,* (2006). Among the disaggregated income sources, self employed income is the most correlated with total household income with a correlation coefficient of 0.72. This is followed by crop income (0.64) and agricultural wage income (0.56). Apart from other income, the most unequally distributed income sources are non-agricultural and agricultural wage incomes with Gini coefficients of 0.84 and 0.74, respectively. By decomposing the overall income inequality between farm and off-farm income, the result shows that off-farm income as a whole accounts for 61%, while farm income accounts for 35% of total inequality. This is in contrast to Adams (1999) and van den Berg and Kumbi (2006), who reported that farm income contributes more than off-farm income to inequality in rural Egypt and Ethiopia respectively. Looking at the second to the last column in Table 8, showing the relative concentration coefficients, the results show that while farm income is inequality-decreasing, off-farm income is inequality-increasing in the context of rural Nigeria. This is driven by agricultural wage, non-agricultural and self employed income, as incomes from remittances and other off-farm sources actually decrease inequality. The source elasticities suggest that a 10% increase in farm income would reduce the overall Gini coefficient by 1.6%, while a 10% increase in off-farm income would lead to an increase in the overall Gini coefficient in the same magnitude.

***Conclusion:***

Increasing income inequality and poverty continue to be the most challenging economic problem facing most developing countries. In this paper, I used household survey data collected from Kwara State, to analyze the sources of income inequality in rural Nigeria. The results show that the average income of rural household in the area is about thirty thousand naira per adult equivalent and this is made up of 50% farm and 50% off-farm income. The analysis shows that the overall Gini coefficient of income inequality is 0.40, which is

somewhat lower than average Nigeria Gini-coefficient of 0.51. While farm income is inequality-decreasing, off-farm income is inequality-increasing income source. However, among the components of off-farm activities, agricultural wage, non-agricultural wage and self-employed income increase income inequality, while remittances and other income decrease income inequality in the context of rural Nigeria. On the whole, farm income contributes about 35% while off-farm income contributes 61% to total inequality. Looking at the individual income sources, the results indicate that crop income – contributing about 33%, contributes more to total income inequality than any other income source. This is followed by self-employed income, which contributes 32% to total income inequality.

The first policy implication of this paper is that agricultural activities should be promoted among rural households in Nigeria. This is because, apart from being an inequality-decreasing income source, it remains a major income source for the rural households. Policy makers, therefore, must concentrate on measures to increase agricultural productivity through targeted efforts such as distribution of improved seed varieties and better extension services delivery. Despite the concern that agricultural growth may not provide the exit way out of poverty, the results of this paper seem to suggest that there is scope for poverty reduction through growth in agricultural income. The second implication is that direct targeting of the poor households for income transfer, should be considered to help reduce the high level income inequality in rural Nigeria. The results of the analysis show that remittance income decrease income inequality and contribute little to overall income inequality. The third and perhaps most important implication of the results is that, for the off-farm sector to contribute equitably to income growth of rural households there is need to remove entry barriers faced by disadvantaged households in participating in higher-paying off-farm activities. This is because, by removing the entry barriers, all households would be able to participate and the off-farm sector will have an equalizing effect on the income distribution, as labour is more equally distributed among households than land. Removing the barriers, would require, among others, the provision of education programmes and accessible credit schemes that can facilitate the establishment of off-farm businesses. Likewise, provision of physical infrastructure such as good roads, water and electricity would increase overall employment opportunities in the off-farm sector, and this could lead to income growth among poor households. Broad-based rural income growth would allow the poor and disadvantaged households to benefit from the structural change thereby reducing the level of income inequality in the rural areas of Nigeria.

## REFERENCES

Adams, R., 1999. Nonfarm Income, Inequality and Land in Rural Egypt. Unpublished Mimeo, PRMPO/MNSED, The World Bank, Washington, DC.

Addison, T. and G.A. Cornia, 2001. Income Distribution Policies for Faster Poverty Reduction. Discussion Paper No. 2001/93, World Institute for Development Economic Research (UNU/WIDER), Helsinki.

Aigbokan, B.E., 1999. The Impact of Adjustment Policies and Income Distribution in Nigeria: An Empirical Study. Research Report No. 5, Development Policy Centre, Ibadan, Nigeria.

Awoyemi, T.T. and A.I. Adeoti, 2004. The Decomposition of Income Inequality by Sources of Income: The Rural Nigerian Experience. African Journal of Economic Policy, 11(1): 1-16.

Canagarajah, S.J., G. Ngwafon and S. Thomas, 1997. The Evolution of Poverty and Welfare in Nigeria, 1985-1992. Policy Research Working Paper No. 1715

FAO, 2006. Food and Agricultural Organization of the United Nations, Millennium Development Goals Report, 2006. United Nations, New York.

IFAD, 2001. The rural poverty report 2001. International Fund for Agricultural Development: Rome, Italy. http://www.ifad.org/poverty/index.htm

Kanbur, R. and N. Lustig, 1999. Why is Inequality Back on the Agenda? Paper Prepared for the Annual Bank Conference on Development Economics, World Bank Washington DC., April 28-30.

Kolenikov, S. and A. Shorrocks, 2003. A Decomposition Analysis of Regional Poverty in Russia. Discussion Paper No. 2003/74. World Institute for Development Economic Research (UNU/WIDER), Helsinki.

KWSG, 2006. Kwara State Government of Nigeria, Planning Studies in Kwara state. Ministry of Land and Regional Planning, Ilorin.

Litchfield, J.A., 1999. Inequality Methods and Tools, Text for World Bank's Site on Inequality, Poverty and Socio-economic Performance. www.worldbank.org

NBS, 2006. National Bureau of Statistics, Socio-economic Survey of Nigeria, Abuja. Oyekale, A.S.; Adeoti, A.I. and Oyekale, T.O. (2006): Measurement and Sources of Income Inequality among Rural and Urban Households in Nigeria. PMMA Working Paper 2006-20, Poverty and Economic Policy Research Network (www.pep-net.org)

Reardon, T., 1997. Using Evidence of Household Income Diversification to Inform Study of the Rural Nonfarm Labour Market in Africa. World Development, 25(5): 735-748.

Shorrocks, A.F., 1982. Inequality Decomposition by Factor Components. *Econometrica*, 50(1): 193-212.

UNU/WIDER, 2000. United Nations University/ World Institute for Development Economic Research, World Inequality Database, Vol. 10, Helsinki.

van den Berg, M. and G.E. Kumbi, 2006. Poverty and the Rural Nonfarm Economy in Oromia, Ethiopia. *Agricultural Economics, (Supplement)*, 35: 469-475.

World Bank, 2003. 2002 Development Indicators, Washington DC: World Bank, Pages 74-75.