ANALYSIS OF POVERTY LEVEL AMONG SOME SELECTED HOUSEHOLDS IN GIREI LOCAL GOVERNMENT AREA OF ADAMAWA STATE, NIGERIA

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Abstract

Reducing poverty has remained foremost among Nigeria's developmental challenges. This study analysed poverty level among some selected households in Girei Local Government Area of Adamawa State, Nigeria. The specific objectives of the study were to; describe the socio-economic characteristics of respondents, determine the pattern of income distribution among the respondents, determine the incidence, depth and severity of poverty among the respondents, and lastly, identify the respondents' coping strategy to poverty in the study area. A multistage sampling technique was used to collect primary data from 80 household heads using structured questionnaire. Data collected were analysed using descriptive statistics, the Foster, Greer, and Thorbecke (FGT) weighted poverty index, and Lorenz curve. The result revealed that majority of the respondents were male (90%), educated (70%), married (88.57%) and whose primary occupation is mostly farming (50%). Income distribution as shown by the Lorenz curve revealed that, 79% of the respondents cumulatively earn only 56% of the income, indicating an incidence of income inequality. Poverty incidence among the respondents is 60%, having a poverty gap of 27% and a poverty severity of 10%. In response to the challenge of poverty, majority of the respondents adopt agricultural intensification and livelihood diversification (especially in non-farm activities) as coping strategies. The study recommends timely and affordable provision of farm inputs, provision of social amenities and encouraging entrepreneurial skills through training in the area.

Key words: analysis, households, Girei, Nigeria, poverty

INTRODUCTION

Poverty is prevalent in large parts of the world and is one of the leading challenges of mankind in the 21st century [1]. It is the more reason why eradication of extreme poverty and hunger by 2015 was placed foremost among the UN Millennium Development Goals (MDGs). Poverty is hard to define and as such, many different meanings and definitions are resorted to in the development field. [9] argued that, in order to define poverty, there ought to be a minimum standard that should be applied to all societies below which individuals can be said to be in poverty. [19] defined poverty as a lack of command over the basic needs of the people. Similarly, [11] further considered poverty as the inability to attain a minimal standard of living, measured in terms of basic consumption needs or the income required to satisfy them. Poverty has many trappings,

among which are malnutrition, illiteracy, low life expectancy, insecurity, powerlessness and low self-esteem [7].

In Nigeria, the problem of poverty has for a fairly long time been a cause of concern to the government [14]. Considering poverty as a multifarious and dynamic phenomenon, Nigerian government's efforts at combating the menace in all its ramifications could be dated back to the 1960s, immediately after the attainment of independence [18, 16]. The government and other international organisations were able to formulate a number of policies and initiated some programmes and projects aimed at eradicating poverty in the country. Some of these past initiatives includes; Operation Feed the Nation (OFN), River Basin Development Authorities (RBDA), Agricultural Development Programmes (ADP), Universal Primary Education (UPE), Agricultural Credit

Guarantee Scheme (ACGS), the Directorate of Food, Roads and Rural Infrastructure (DIFRRI). Recent effort in that regard includes; Millennium Development Goals (MDGs), National Poverty Eradication Programme (NAPEP), the National Economic Empowerment and Development Strategy (NEEDS), the National Fadama Development Project (NFDP), Local Empowerment and Environmental Management Project (LEEMP) now Community and Social Development Project (CSDP).

Despite the proliferation of cross-institutional collaboration to reduce poverty in the country, millions of Nigerians are still poor [8]. In fact, [4], described the problem as deep, widespread and multidimensional with varying degrees. However, available statistics reveals that poverty is more pronounced in North-eastern part of the country. For instance, Adamawa state has about 74.2% of its citizens below the poverty line of $1.25 per day [12]. [10] emphasized the need to consider material dimensions of poverty expressed in monetary values. [15] holds similar opinion, and considers the income dimension as the core of most poverty-related problems. He assert that, poverty may stem from changes in average income or changes in the distributed income. Hence, equitable distribution of income would increase the probability of the poor having access to basic needs such as food, clothing, housing, health, education among others. Whilst most poverty studies in the State considers the major towns of the State [17, 6], this very study specifically considered poverty and income distribution among households in Girei Local Government Area of the State. A household in the context of this very study is defined in line with that of the United Nations Department of Economic and Social Affairs (2008). According to them, a household is a group of two or more persons living together, who make common provision for food and other essentials for living. The persons in the group may pool their resources and may have a common budget; they may be related or unrelated persons or constitute a combination of persons both related and unrelated.This current study intends to achieve the following objectives;

(i)describe the socio-economic characteristics of the respondents,

(ii)determine the pattern of income distribution among the respondents,

(iii)determine the incidence, depth and severity of poverty among the respondents, and

(iv)identify the respondents' coping strategy to poverty in the study area.

MATERIALS AND METHODS

The study was conducted in Girei Local Government Area of Adamawa State. The study area lies between Latitude $9^0 11^{'} -9^0 39'$North and longitude $12^0 21^{'} -12^0 49'$ East of the Greenwich Meridian [2]. The area falls within the Northern Guinea Savannah Zone and has a tropical wet and dry climate. Dry season lasts for a minimum of five months (November-March) while the wet season spans April to October. Mean annual rainfall is about 700mm [3]. Song Local Government Area bound the Study area to the North, Fufore to the East and Yola North and Demsa to the South and West respectively. The area has a land mass of about 2,186 square kilometres. The total population is 129,995 and predominantly agrarian [13].

Multi-stage sampling technique was used in selecting the representative households used for the study. The first stage involves random sampling of four (4) wards out of the ten wards from the Local Government Area. In the second stage, 100 households were randomly selected from the four selected wards proportionate to their size. However, out of the 100 households served with questionnaires, eighty questionnaires were correctly filled and returned, hence were used for the analysis.

Descriptive statistics (involving the use of frequencies and means) was used to describe the socio-economic characteristics of the respondents, and also identify their poverty coping strategies. The Foster, Greer, and Thorbecke (FGT) weighted poverty index was used for the poverty analysis. Several researchers [17, 5] have used this approach to measure of poverty. The FGT index is given

by the formula:

$$P_\alpha = \frac{1}{N} \sum_{i=1}^{q} \left[\frac{Z - Y_i}{Z} \right]_\alpha$$

Where; Z is the poverty line, (the poverty line adopted for the study was $1.25 per day or ₦206.25 per day which was the Central Bank of Nigeria's official exchange rate as at April, 2014), Yi is the per capita expenditure in increasing order for all households; q is the number of poor people in the population of size N, and α is the poverty aversion parameter that takes values of zero, one or two. when α=0, Pα measures the proportion of people in the population whose per capita expenditure on food and non-food items fall below the poverty line (poverty incidence). When α=1, Pα measures the depth of poverty -how deep below the poverty line is the averagely poor (poverty gap). When α=2, Pα measures how farther the core poor are from the poverty line compared to the averagely poor (the severity of poverty). To measure the degree of income distribution, Lorenz curve was used. The Lorenz Curve shows the distribution of total income in relation to the total population. On the curve, the horizontal (X) axis shows the cumulative proportion of households while the vertical (Y) axis depicts the cumulative proportion of monthly income of the respondents.

RESULTS AND DISCUSSIONS

Respondent's Socio-economic Characteristics
Table 1 presents the socio-economic characteristics of the respondents. The respondents were mostly (70%) male, who mostly (89%) were within their economically active age (less than 60 years).
Majority of the respondents were married (83.75%), mostly educated (77.5%) with large household size of more than five people (about 84%).
With respect to primary occupation, majority (50%) of the respondents were farmers.
With respect to the monthly income, majority (63.75%) of them earn not more than ₦40,000.

Table 1. Socio-economic Characteristics of the Respondents (N=80)

Variable	Frequency	Percentage
Age (Years)		
20 – 29	06	7.50
30 – 39	21	26.25
40 – 49	31	38.75
50 – 59	13	16.25
≥60	09	11.25
Sex		
Male	56	70.00
Female	24	30.00
Marital Status		
Married	67	83.75
Single	07	8.75
Widowed/Divorced	06	7.50
Household size		
1 – 5	13	16.25
6 – 10	45	56.25
11 -15	18	22.50
16-20	4	5.00
Primary Occupation		
Farming	40	50.00
Trading	12	15.00
Civil Servant	21	26.25
Fishing/Artisans	7	8.75
Educational Attainment		
No-formal Education	18	22.50
Primary School	23	28.75
Senior Secondary School	28	35.00
Tertiary	11	13.75
Total	**80**	**100**

Source: Field survey, 2014

Analysis of Household Income and Expenditure
The respondents' monthly income is presented on Table 2.

Table 2. Distribution of Respondents by Household Monthly Income

Monthly Income (₦)	Frequency	Percentage (%)
≤ 20,000	20	25.00
20,001-40,000	31	38.75
40,001-60,000	13	16.25
60,001-80,000	10	12.50
80,001-100,000	06	7.50
Total	80	100

Source: Field survey, 2014

This shows an incidence of low income generation among the respondents. Similarly, the respondents' monthly consumption expenditure is shown on Table 3. The Table indicates that, majority (86%) of the

respondents' monthly consumption expenditure is not more than ₦30,000. This also reflects the low financial status of the respondents.

Table 3. Distribution of Respondents by Household Monthly Consumption Expenditure

Monthly Expenditure (₦)	Frequency	Percentage (%)
≤ 10,000	27	33.75
10,001-20,000	33	41.25
20,001-30,000	09	11.25
30,001-40,000	07	8.75
40,001-50,000	04	5.00
Total	80	100

Source: Field survey, 2014

Analysis of Household Income Distribution

Table 4. Cumulative Proportion of Respondents' Population and Income

Monthly Income (₦)	Population	Proportion of Population	Cumulative Population	Volume of Income (₦)	Income Proportion	Cumulative Income
≤ 20,000	20	0.25	0.25	368,000	0.14	0.14
20,001-40,000	31	0.38	0.63	723,000	0.28	0.42
40,001-60,000	13	0.16	0.79	331,000	0.13	0.55
60,001-80,000	10	0.13	0.92	360,000	0.14	0.69
80,001-100,000	6	0.08	1.00	757,000	0.31	1.00
Total	80	1.00		2,539,000	1.00	

Source: Field survey, 2014

Household Poverty Analysis

Based on the established poverty line, households were classified into either non-poor or poor. Figure 1 shows the incidence, depth and severity of poverty in the area. Poverty incidence (P_o) or head count is the proportion of households whose per capita monthly consumption expenditure falls below the established poverty line. The result of the analysis indicated that, 60% of the respondents were poor.

This confirms the findings of [12] who reported high incidence of poverty in the State. Poverty depth (P_1) measures the mean distance between the expenditure (or income) of the average poor and the poverty line. The result of this study shows a poverty gap of 0.27 (27%).

This implies that the expenditure of the poor has to increase by 33% for them to reach the poverty line level. Similarly, Poverty Severity (P_2) consider the distance that separates the poor from the poverty line, that is the poverty

among the Respondents

The essence of this analysis is to show the level of equality or otherwise in the distribution of income among the respondents. Cumulative monthly income of the respondents and their population (Table 4) were related using the Lorenz curve. From the curve, it can be seen that, 79% of the respondents earn only 56% of income while the remaining 44% of the income is held by only 21% of the respondents. Strikingly, 30% of the income is in the hands of people in the highest income bracket, representing just 8% of the respondents. This shows clear indication of income inequality in the area.

gap and it also reveals the inequality among the poor.

The findings of the analysis of shows a poverty severity of 10% (or 0.10). This implies that 10% of the respondents live very far below the poverty line.

Analysis of Household Poverty Coping Strategies

In response to the challenge pose by poverty, the respondents adopt range of strategies to increase their stream of income. Cultivation of several crops/expansion of farmlands (Agricultural intensification) is ranked top most (57.5%), livestock keeping (about 39%) is second, and then trading (26%).

Therefore, the key strategies being adopted by the respondents can broadly be considered as agricultural intensification and livelihood diversification (especially by adding non-farm activities) as can be seen on Table 5. Migration as a consequence of poverty is less likely as only 1% of the respondents considered that a coping strategy.
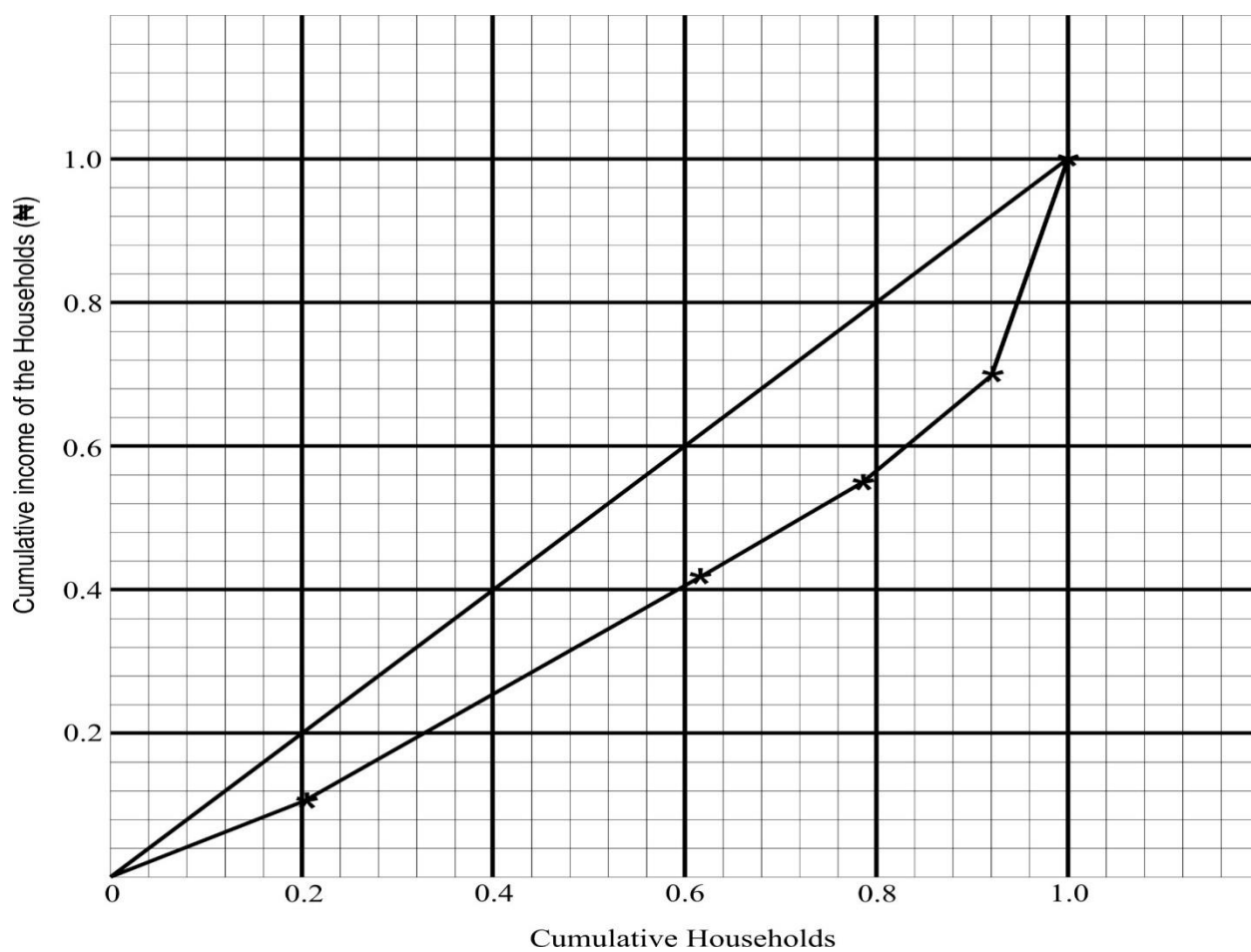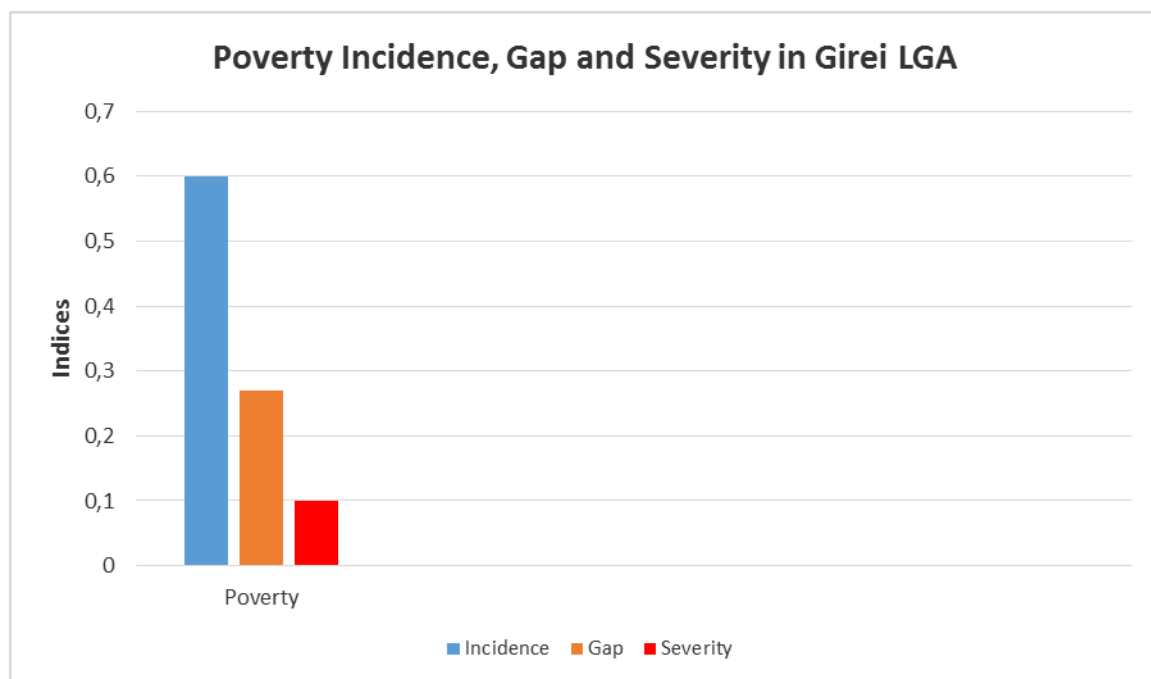
Fig. 1. Respondents' Lorenz Curve

Fig. 2. Poverty, Depth and Severity in Girei LGA
Source: Field survey, 2014

Table 5. Distribution of Respondents' Poverty Coping Strategies (**N=80**)

Strategy (ies)	Frequency	Participation Rate (%)
Cultivation of Several Crops/Farm Expansion	46	57.5
Animal Husbandry	31	38.75
Beer Brewing/Sale	09	11.25
Craft Making	09	11.25
Remittance	18	22.50
Trading	21	26.25
Hair Dressing/Barbing	44	5.00
Carpentry	02	2.50
Casual Wage Labour	12	15.00
Firewood Gathering/Sale	03	3.75
Grinding Mill Operation	02	2.50
Masonry/Bricklaying	03	3.75
Mechanic/Electrician	02	2.50
Motorcycle Transport (*Okada*)	13	16.25
Migration	01	1.25
Oil Pressing	02	2.50

Source*:* Field survey, 2014

CONCLUSIONS

This study analysed poverty in some households in Girei Local Government Area of Adamawa State. The findings of this research revealed that, there is high incidence of poverty and income inequality among the respondents in the area. Furthermore, in response to the challenge of poverty, majority of the respondents adopt agricultural intensification and livelihood diversification (especially in non-farm activities) as coping strategies.

Based on these findings, it is therefore recommended that:

-Farming activities should be made more profitable for the farmers thorough timely provision of agricultural inputs (especially improved seeds, fertilizer and machineries) at affordable rates.

-There is the need for all development actors in the area to provide basic social amenities like roads, health facilities, portable drinking water and electricity among others. This will improve the quality of lives of the residents of the area.

-Poverty alleviation initiatives should also promote the provision of micro loans to the people in order to encourage diverse and more remunerative livelihood activities.

-Entrepreneurial skills in the area should be encouraged through trainings and provision of start-up capital where possible.

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