

Analysis of Food Security and Poverty Status of Household in Calabar Metropolis, Cross River State, Nigeria

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Abstract

A fundamental challenge the world faces today is ensuring that millions of households living in poverty have access to enough food to maintain a healthy life, information on food security and poverty are not readily available especially in Nigeria. This study analysed food security and poverty status of households in Calabar South and Calabar Municipality in Cross River State Nigeria. The specific objectives were; to determine the food security and poverty status of the households and on gender basis, compare the poverty and security level of households as well as ascertain the coping strategies adopted against food insecurity. Multistage sampling technique was used in sampling; the data were collected through structured questionnaires. Foster Greer Thorbecke (FGT) and food security index (FSI) were used to analyse poverty and food security status. The results showed that majority (67.9% and 66.7%) of the household heads were males in the study area. The food security index result showed that 55.4% and 70% of the households in Calabar South and Calabar Metropolis respectively were food secured. The poverty index showed that poverty head counts, depth and severity were 0.41, 0.115 and 0.75 and 0.43, 0.14 and 0.59 in Calabar South and Calabar Municipality respectively. While 60% and 44.4% were male of the household heads that they were –food insecure in Calabar South and Calabar Municipality respectively. More so, 60% and 44.4% of the male headed household were food insecure in Calabar South and Calabar Municipality respectively. It also reveals that 39.1% and 53.8% are females while 60.9% and 46.2% are males of the household-heads that are poor in Calabar South and Calabar Municipality. The study therefore recommends that to remedy food security and poverty problem there should be sources of income for both male and female household heads to increase income. There should be interventions both money and food items based on the factors (Household heads, Female household heads) that affected poverty and food security from the results.

Keywords: Analysis, food security, household, poverty

Introduction

Hunger and food insecurity which have assumed global dimensions are likely to persist and even increase in certain regions, except urgent, determined and concerted action is taken, given the anticipated

increase in the world's population and the stress on natural resources (Omotesho *et al.*, 2006). Food is a basic necessity of life, its importance at the household level is obvious since it is a basic means of sustenance and adequate intake of quality food is a key

requirement for healthy and productive life. Helen (2002) asserted that food is useful for maintaining political stability and ensuring peace among people while food insecurity can result in poor health and reduced performance of children. The importance of food is also shown in the fact that it accounts for substantial part of typical Nigerian household budget. Food security is defined as a situation where all people at all times have access to enough food for active and healthy life (FAO, 1996). Food security therefore exists when all people at all times have physical and economic access to sufficient, safe and nutritious food, to meet their dietary needs and preference for active and healthy lifestyles (National Special Programme for Food Security, 2005). It is a critical factor for economic growth and development of a nation (Akanji 1993; Onyibo, 1997 and Adegboye, 2004). This has as a matter of fact created a global concern that calls for urgent approach that are workable in tackling or minimizing the obstacles against the achievement of the objectives of the universal food security. The incidence of food security and poverty are particularly devastating in the developing countries as lots of resources are been channeled towards programmes aimed at eradicating food insecurity and poverty by

various international organizations and government of developing nations (Babatunde *et al.*, 2007). According to Sanusi *et al.*, (2005) the percentage of food insecure households was reported to be 18 % in 1986, and over 45% in 2005 in Nigeria.

About 852 million men, women and children worldwide are chronically hungry due to extreme poverty; while up to 2 billion people lack food security intermittently due to varying degree of poverty FAO (2003). Poverty has become an important topic of discussion among world leaders; this was reflected in the theme of the World Vision 2020 Africa conference held in Uganda (IFPRI, 2003). Poverty is multifaceted and has no single universally accepted definition. The World Bank (2001) defined poverty as a pronounced deprivation of human wellbeing; which include vulnerability to adverse events outside their control, being badly treated by the institutions of state and society and being excluded from having a voice and power. Any household or individual with insufficient income or expenditure to acquire the basic necessities of life is considered to be poor (Olayemi, 1995). In Africa, the incidence of poverty has been increasing significantly for many years. For instance, it is documented that the number of poor people increased by about

two-thirds between 1970 and 1985, and rose from 180 million (47% of the population) in 1985 to 265 million by the year 2000 (Aluyor, 2000), no wonder it is said that the extent and depth of poverty in the developing world is a disgrace (Pinstrup-Andersen and Pandya-Lorch, 2001). Different groups of the poor in Africa are affected differently because they are faced with different constraints, needs, and roles in the society. In fact, virtually all African countries are known to be in poverty, and their people experience very poor living conditions. Poverty is a multi-dimensional, socioeconomic and cultural the World Vision 2020 Africa conference held in Uganda (IFPRI, 2003). Poverty is multifaceted and has no single universally accepted definition.

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Problem Statement

Food security according to FAO (1996) is defined as the access by all people at all times to sufficient, safe and nutritious food for a healthy and active life while The World Bank (2001) defined poverty as a pronounced deprivation of human wellbeing; which include vulnerability to adverse

events outside their control, being badly treated by the institutions of state and society and being excluded from having a voice and power. The definition of food security entails key determinants which include food availability, accessibility and sustainability. Availability connotes the physical presence of food in large amount; accessibility suggests sufficient purchasing power while sustainability demands continuous access to this food by the households. Although food security and poverty has been a major challenge in Nigeria, effort to control the situation, reduce its effect to the barest minimum or possibly eliminate this problem completely has been of little success.

Several works have been carried out by various authors on food security and poverty in Nigeria, this include Omonona *et al.*, (2007); Emenyonu *et al.*, (2010); Uchechi and Nwachukwu (2010) as well as Amaza *et al.*, (2006). However, there have been paucity of published studies on food security situation and poverty status of households and for Cross River state generally, and Calabar Municipality and Calabar south in particular, there are apparently very few in relative terms. Therefore, this study is intended to provide the empirical evidence of food security

situation and poverty status-of households in Calabar south and Calabar municipality, Cross River State. The general objective is to analyze the food security and poverty status of households in Calabar south and Calabar municipality, Cross River state. The specific objectives are to:

- i. Determine the food security and poverty -status of households in the areas and also on gender basis,
- ii. Compare the poverty and food security levels of households in the area and on gender basis,
- iii. Ascertain the coping strategies adopted by the households against food insecurity

Research Hypotheses

The following null hypothesis is stated to be tested at the end of this work.

1. There is no significant difference in the poverty levels of households in Calabar South and Calabar Municipality.
2. There is no significant difference of the levels of food security among households in the study area,
3. There is no significant difference between the level of poverty and food security of female and maleheaded households.

METHODOLOGY

The study is carried out in Calabar metropolis the capital of Cross River State. The city is divided into two local government areas namely: Calabar Municipality and Calabar South Local Government Areas. Calabar South has its headquarters in the town of Anantigha. It has an area of 264km² and a population of 191,630 at the 2006 census. Calabar south is located in the southern senatorial district of cross river state and lies between 5 ° 32 and 4° 27 N of the equator and longitude 7° 50 and 7° 57 E of the meridian. It is bounded in the north by Calabar Municipality, to the south by Bight of Bonny and wide expanse of the Atlantic Ocean. To the east is bounded by the great qua river and west by Calabar River (Akintoye, 1995). The dominant vegetation type in the study area is the mangrove forest, which gives rise to the existence of wetlands; although, there is a high rate of *Nypa* palm species existence. Animal species found in the area include different species of fishes and other sea foods (periwinkles, snails), and many endemic mammal species and threatened (Okon, 2008).

Calabar Municipality lies between latitude 04° 15' and 5° North and Longitude 8° 25' east. In the North, the Municipality is

bounded by Odukpani Local Government Area in the northeast by great qua river. Its Southern shores are bounded by the Calabar River and Calabar South Local Government Area. Calabar Municipality has its headquarters in the city of Calabar. It has an area of 331.551km² and a population of 179,392 at the 2006 census. Calabar Municipality Government Area plays a dual role. Apart from being the capital city of Cross River state, it also plays its role as headquarters of the southern senatorial district. The main policy thrust on agriculture in Calabar is the overall increase in productivity and food production with emphasis on crop production and improvement; livestock and fisheries development; and the general extension of relevant agricultural information and services to farmers. The major crops cultivated are cassava, water leaf, fruited, pumpkin, maize, and oil palm trees (population census, 2006 in: Agbor, 2007 in: MOFINEWS,2007).

Sampling Technique and Sample Size

A multistage sampling technique was employed to select households in the two study areas. The first stage is the random selection of Calabar agricultural zone from the three agricultural zones in Cross River

State. The second stage is the random sample of Calabar South and Calabar Municipality from the six local governments that make up Calabar agricultural zone. The third stage is the random selection of the three clans in each local government which are Ekpo Edem, Efut Uwanse and Efut Abua east in Calabar South as well as Akim Qua, Big Qua and Kasuk clans in Calabar Municipality. The fourth stage is the random sample of three communities in each clan in the two study areas which include Ekpo Abasi, Efio Ene and Edibe Edibe in Calabar South also Atekong, Diamond Hill and Mekenge in Calabar Municipality. The fifth stage involves the collection of estimated numbers of households in each community through the local chiefs of these communities. Ekpo-Abasi, Efio Ene and Edibe Edibe had 180, 190, and 210 households respectively while Atekong, Diamond Hill and Mekenge had 110, 120 and 90 respectively. This was used as the baseline. The sixth stage is to purposively sample 10% of the total households in each community. The sample size was 409.5 on the basis of 50%, based on male and female household heads (HHH)

Model Specification

Food security index: Households

were classified based on their social-economic characteristics using table and percentages. The percentage was used to represent the proportion of food secured and food insecure household population within socio-economic classes. The tables were used to represent information about respondents, food insecurity incidence and different result analysis. Food security index was used to analyze the data. The households were classified into food secure and food insecure households using food security index, which was used to establish food security status of various households. It is given by:

$$F_i = \frac{\text{Per-capita food expenditure for the household}}{2}$$

3 Mean per capita food expenditure of all households.

Where;

F_i = Food security index

$F_s > 1$ = Food secure household

$F_s < 1$ - food insecure household

$$F_i = \frac{E_i}{2/3E}$$

E_i = Per capital food exp

E = Mean per food exp

A food secure household is therefore that whose per capita monthly food expenditure

fall above or is equal to two-third of the mean per capita food expenditure. On the other hand, a food insecure household is that whose per capita food expenditure falls below two-third of the mean monthly per capita food expenditure. Poverty Index: The data collected was analyzed using the Foster Green and Thorbecke (1984) model which includes the head count ratio P_0 , poverty (income) gap ratio PI , and poverty severity P_2 . The simplest and most common measure of poverty is the headcount ratio or the "incidence of poverty." The poverty headcount is the number of people in a population who are poor, while the poverty headcount ratio (H) is the fraction who are poor.

The poverty headcount and the headcount ratio are only concerned with the number of people below the poverty line. They are insensitive to the depth or severity of poverty and to changes below the poverty line. However, the headcount ratio is the most commonly used measure of poverty because of its simplicity and ease of calculation (Fields, 1997). The P index proposed by Foster et al. (1984) incorporates some degree of concern about poverty through a "poverty aversion" parameters.

Discussion

Poverty and food security status of household: The result of poverty index showed that, poverty head counts, depth and severity were found to be 0.41, (41%), 0.115 (11%) and 0.75 (75%) for Calabar South and 0.43 (43%), 0.14 (14%) and 0.59 (59%) representing Calabar Municipality. These results correlated with Agbachom (2018) which explained that poverty is severe among the rural areas, which Calabar South is located.

On the food security index, the result showed that 44.6% and 30% of the house hold in Calabar Municipal were food insecure, while 55.4% and 70% were food secured respectively. This is contrary to Agbachom (2018) who researched on food security across Cross River State.

Conclusion

Food insecurity and poverty is an important issue be it in the urban or rural area. The study reveals that 44.6% and 30% of households in Calabar South and Calabar

Municipality respectively, are food insecure and 41.1% and 43.3% of households in Calabar South and Calabar Municipality respectively are poor. There were more households that are food insecure in CalabarSouththan households in Calabar Municipality while the incidence of poverty, depth and severity was relatively higher among households in Calabar Municipality hence it is important for policy makers to focus on measures that would alleviate food insecurity and poverty in Calabar metropolis in general as this study shows that food insecurity and poverty is still a problem among households in Calabar.

channeling productive resources towards them would be a landmark achievement in reducing poverty and enhance food security.

Recommendations

1. In line with the study findings therefore, there is an urgent need to remedy food insecurity and poverty in Calabar metropolis. To remedy food security and poverty problem, there should be improvement in enhancement of human capital basically in female education.
2. Household heads should be encouraged to diversify their livelihood sources to increase income which would in turn boost their food security and reduce poverty.
3. Furthermore, gender policy measure that would focus on building women by

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