MIGRATION, POVERTY STATUS AND FOOD SECURITY OF FARMING HOUSEHOLDS IN ABIA STATE, NIGERIA

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ABSTRACT
The study analyzed migration, poverty status and food security of farming household in Abia State, Nigeria. Multi-stage, simple random techniques were employed to select 90 respondents. Primary data were collected with the use of a well-structured questionnaire through the aid of enumerators. Data were analysed using descriptive statistics such as frequencies, percentages and averages (mean) and inferential statistical tools such as correlation analysis. The result showed that 35.56% of the respondents were males and 75.56% were females with mean ages of 33.76 years. Majority (93.3%) of the respondents have formal education ranging from primary to tertiary school. The mean household size was 6 persons per household. Result on net migration ratio of immigrants revealed that 23.33% of the households had a negative ratio. On a contrary, a very large proportion of the respondent (76.66%) had positive migration ratio. Majority (58.59%) of the households had value above the poverty line. Result revealed that households with per capita Total Expenditure that fall below the poverty line of N4948.08 were poor and core poor representing 26.67% and 14.44%, respectively. A greater proportion (63.3%) of the respondents are food unsecured. The Pearson correlation analysis between migration and poverty status was (-0.341**). The correlation analysis between poverty status and food security was (-0.313**). The major constraint was 'Poor yield (33.33%), also the major coping strategies employed by the farming households to enable them manage the conditions which they are faced with was use of pesticide and fumigation against pest (32.33%). There is a need for Government to invest in human capital in the rural areas, educate and create awareness on the benefits of small family size (for instance, through enlightenment campaigns) and establish micro- credit institutions effectively targeted towards meeting the financial needs of the rural populace. It is suggested that credit/loan facilities should be made available and accessible to target households at moderate interest rates to reduce the impact of income risks.
Keywords: Migration, Poverty Status, Food Security, Farming Household, Abia State.

INTRODUCTION

Migratory movements have multiplied greatly in recent years, because of improved transport, communications, and expansion in urban informal sector employment in most developed countries (Wuni, 2013). In developed countries, most social roles and status (attributed to gender and age, opportunities and constraints such as access to resources and the opportunity to migrate) are socially embedded. Internal migration is attracting increasing attention among researchers, academics, development practitioners, and policy makers, many of whom attribute the growth of rural–urban migration in particular to increasing unemployment and rural poverty in developing countries (Anarfi*et al*., 2001; Chant, 2000; Zhao, 2003). Afshar,(2003) contended that, the inadequacy of incomes, lack of gainful employment, coupled with poverty in the rural areas, have pushed people out of their villages in search of better sources of livelihoods in the urban areas. According to Anarfi*et al*. (2001), most of these migrants do not possess relevant skills or education that would enable them secure employment in the formal sector in urban places.

Despite years of commitments in agricultural research and development with evidences of achievements, hunger and poverty continue to confound the countries in the region (Damisa*et al*., 2011). Nigeria is one of the most resource-endowed nations in the world. But socio-economically, Nigerians are also among the poorest in the world (Etim*et al.*, 2009). Hence, there is a persisting paradox of a rich country inhabited by poor people, which has been the subject of great concern for many years, but more especially in the last decade (Etim and Patrick, 2010).

Poverty is more easily recognized than defined (Foster *et al*, 1984). Therefore, a universally acceptable definition of the term has remained elusive (Nsikak-Abasi and Solomon, 2010). However, poverty can be regarded as the inability to adequately meet the basic human necessities, such as food, shelter, clothing and medicare (CBN/IBRandD, 1999; IBRand D, 2010; Ibrahim, 2008). One of the famous studies dated 1899 was Seebohm Rowntree's conceptualization of factors influencing poverty (Foster *et al*., 1984). Rowntree used a concept of subsistence poverty as a measurement and drew a poverty line in terms of minimum weekly sum of money which was necessary to enable households secure the necessities for a healthy life. It is the value of income or consumption expenditure necessary for minimum standard of nutrition and other necessities (Foster *et al*., 1984).

Vast majority of Nigerian farmers are small-scale farmers who cultivate less than 5 hectares of land. This class of farmers has an important role to play in

combating poverty and creating widespread growth in developing countries. This is because they constitute more than 70% of the Nation's working population. Poverty in Nigeria is said to be mainly a rural phenomenon where up to 80% of the population live below the poverty line (NBS, 2013). For many households in Nigeria, especially in the rural areas, agriculture is their primary source of livelihood. Therefore, reducing poverty among the small scale farmers will improve the well-being of a vast majority of the Nigerian poor. The most compelling evidence of successful agriculture-led poverty reduction comes from the Green Revolution in Asia. Under the scheme, poverty in the region declined from 50% in the 1970s to 18% in 2004, while hunger declined from 30% to 16% over the same period (NBS, 2013).

Food demand in Nigeria has generally grown faster than either food production or total supply. CBN (2001) reported that the rate of increase in food production of 2.5 percent per annum does not keep pace with the annual population growth rate of 2.8 percent per annum. Fakiyesi (2001) also maintained that Nigeria's domestic food supply has been far short of the need of the population. This could result in reduced consumption among the poor. The urban poor in particular are lacking in education, basic technical skills and employment. Consequently these category of persons belong to the low – income groups and are therefore most vulnerable to food insecurity. Given the high cost of social services, nutritional level and food purchasing capacity tend to deteriorate as relatively large proportion of income goes to meeting these social services (Olayemi and Onyeweaku, 1998).

Food as a basic necessity of life is seen in the fact that it is a means of sustenance and an adequate food intake in terms of quantity and quality, is a key for a healthy and productive life (Omonona and Agoi, 2007). Food security is defined as when all people at all times have physical and economic access to sufficient, safe and nutritious food to meet their dietary needs and for food preference for an active and healthy life (NEPAD, 2006). Food security in a broad sense consists of having at all times an adequate level of basic products to meet increasing consumption demand and mitigate fluctuations in output and prices. According to Moharjan and Chhetri (2006), food security is widely seen as access by all people at all times to enough food for an active life, while food insecurity is the inability of a household or individuals to meet the required consumption levels in the face of fluctuating production, price and income. At the national level, food security exists when all people at all times have the physical and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for active and healthy life, while at the household level, food security implies physical and economic access to food that is adequate in terms of quantity, safety and cultural accessibility, to meet each person's need (Ingawa, 2002).

Food security is dependent on agricultural production, intra-household decision making, employment opportunities, household income and assets (wealth). According to World Bank (2001), food security is of three folds; food availability, food accessibility and food affordability. The Food and Agricultural Organization of the United Nations FAO identified the four pillars of food security as; availability, accessibility, utilization and stability. The farming sector itself needs critical assessment. Apart from the fact that farmers are under-earning, they are not cultivating enough; there are still enough lands not cultivated. Abudullahi (2008), adds that food is not only a basic need; it also provides the physiological foundation upon which other considerations and human activities are structured. Food security is not simply having sufficient and adequate quantities of foodstuffs but also entails access to the entire citizenry to these food items at affordable prices. (Abudullahi, 2008). Based on this the study tend to provide answers to the following research questions:What are the socio-economic characteristics of farming household in the study area; What is the household net migration ratio of immigrants and emigrant;What is the poverty status of farmers in the study area;What is the food security status of farmers in the study area;What is the relationship between migration, poverty status and food security status;What are the constraints faced by the household in food production in the study area;What are the coping strategies employed by in the study area?

Therefore based on research question stated above, the study intend to specifically:examine the socio-economic characteristics of the farming household in the study area;determine the household net migration ratio of immigrants (in-migration) and emigrant (out-migration); estimate the poverty status of the respondent in the study area;estimate the food security status of the respondent in the study area;estimate the relationship between migration, poverty status and food security status; identify the constraints faced by the household in food production in the study area;identify coping strategies employed by household in poverty reduction and food security in the study area

The following hypothesis were tested

H_1: There is no significant relationship between migration and food security status

H_2: There is no significant relationship between migration and poverty status.

RESEARCH METHODOLOGY

The study was conducted in Abia State, it has a land mass of 700 square km with 17 local government areas and was created out of Imo State on August 27,

1991. The state lies between longitudes 7^o 23^1 and 8^0 02^1 East of Greenwich meridian and latitudes 5^o 49^1 and 6^o 12^1 North of the equator (ASPC, 2008). Abia State is bounded on the east by the Cross River and AkwaIbom Sates, on the north by Ebonyi and Enugu States, on the West by Imo State and on the South by Rivers State. Abia consists of three agricultural zones, namely; Aba, Umuahia and Ohafia. The population of Abia State is 2, 833, 999 with 1, 434, 193 males and 1, 399, 806 females. This population consists of people in all walks of life with about 65 percent of their engagement in agriculture (ASPC, 2008). The annual rainfall ranges from 2000-2500mm while the temperature ranges from 22^0c to 35^0c. Abia state is made up of three Agricultural zones namely: Umuahia, Aba and Ohafia Agricultural zone. Farming is done at- subsistence level. The women only farm on their husbands land as they do not have direct title to land. The state is endowed with a rich fertile soil that supports the growth of the crops; Yam, cassava, cocoyam, melon, maize, oil palm, garden egg, cocoa, to mention but a few. Poultry, goat, pigs and sheep are the major livestock kept. Abia state is divided into 17 local government areas. These are group into three agricultural zones namely, Aba, Umuahia, and Ohafia zone. The study adopt multistage sampling technique. In the first stage three agricultural zones were selected. In the second stage two Local Government Areas (LGAs) were randomly selected from each of the zone. Third stage involve a random selection of three communities each from the 6 LGAs, set aside for the research (ie 18 communities). In the fourth stage, the assistance of Extension officers of the ADP's and state Ministries of Agriculture was employed to help identify 5 farming household giving a sample size of 90 respondent. Data for this study was of primary sources. Structured questionnaire complimented with oral interview was used in getting primary data.

Model specification

Net migration to live-in population

According to Echebiri and Mbanasor (2003), household net migration to live-in population ratio will be estimates as the quotient of the differences between household number of immigrants and emigrants and live-in population at the time of survey. This ratio will be adopted for this study

It is given as; I_i^*

$$I_i^* = \frac{HIM - HEM}{HLP} \quad \text{------} \quad 1$$

Where

HIM = household immigrants

HEM = household emigrants

HLP – household live-in population.

They assed that household live-in population will be made up of total household size and household immigrants who ordinarily are not permanent members of the household, relatives and friends on visit or taken temporary residency with household for periods long enough for active participation in household economics activities was classified as immigrants while aborigine of the household who had migrated to distant place for permanent residence lasting over three month was classified as emigrants.

Poverty Status Formula

The poverty status will be examined following Obayeluand Awoyemi,(2010) consumption expenditure poverty line for respondents to determine their poverty status. The formula is given as:

$$\text{PCE} = \frac{\text{Per Capita weekly Expenditure for the ith household}}{\frac{2}{3}mean\text{Per Capita weekly Expenditure of all household}} \quad \text{- - - } \quad 2$$

Where;

PCE= Per Capita Consumption Expenditure

PCE ≥ 1 Poor household

PCE ≤ Non poor household

Food Security Status formula

The FGT is the most appropriate model to determine the food security status of household because it does not only categorize the study population as either food secure or insecure, it also takes into account the extent of severity(deviation from minimum requirement).

To identify food secure and insecure household, food item consume for seven days will be obtain from respective households. The kilogram of food consume will be taken as proxy for nutritional well-being of the household since availability of sufficient quantities of nutritional adequate food is pre-requisite for food security (Qureshi, 2007)

Per adult equivalent calorie content will be estimated by

$$\frac{estimatetotalhouseholdcalorieintake}{hoseholdsize(afteradjustingtoadultequivalent,usingage-sexcategory)} \quad \text{- - } \quad 3$$

Household daily per adult equivalent calories intake will be estimate by:

$$\frac{\text{Household per adult calories intake}}{numberofdaysofconsuminggivenfooditem} \quad \text{....4}$$

Food security index (FSI)

$$\frac{\text{Household daily per adult equilvalent by household}}{standardrequirementofdailyperadultequivalent\ (2100kcalday/AE)} \quad \text{- - - } \quad 5$$

Household whose caloric consumption is greater than or equal to 2100kcal/AE will be categorized as food security; on the other hand, household whose consumption is less than 2100kcal/AE will be categorized as food insecure.

Food insecurity gap/surplus index (P)

Food insecurity gap measures the extent to whichhouseholds are food insecured and surplus index measures the extent by which food securedhouseholds exceeded food security line. This index is given as:

$$P = \frac{1}{M}\sum_{i=1}^{m} G_i$$

(Babatunde*et al.*, 2007) - ------ 6

Where,

P = Food insecurity gap or surplus index;

M = Number of households that are food secured (for surplus index) or foodunsecured (for food insecurity gap); and

Gi = Per capita calorie intake deficiency (or surplus) faced by i^{th}household.

$$G_i = \left(\frac{Y_i - R}{R}\right)$$

(Babatunde*et al.*, 2007) ----- 7

Head count ratio (H)

The Head count ratio measures the percentage of the population of household that are food secured or insecured. This is defined as:

$$H = \frac{M}{N}$$

(Babatunde*et al.*, 2007) -----8

Where, H = Head count ratio;

M = Number of households that are food secured (for surplus index) or foodinsecured (for food insecurity gap); andN = Number of households in the sample.

RESULTS AND DISCUSSION

Table 1 showed the distribution of household heads based on sex; 35.56% were males and 75.56% were female. The female house headships might have resulted from divorce, separation between the partners (husband and wife) or death of the male heads of the households (Oyekale*et al*, 2012). The dominance of women could be explained by the fact that most women in the study area do own farm lands due to tradition. This is typical in the study area where often the women, takes major decisions concerning the household food choice and wellbeing of the family. It could be that most male in Abia State has migrated to bigger city in search for white collar and other means of survival; therefore making the composition of the household in the area majorly of female.

Table 1: Distributions of Respondents according to socioeconomic characteristics (n= 120)

Variables	Frequency	Percentages
Sex		
Male	32	35.56
Female	58	75.56
Age (years)		
19-28	30	33.3
29-38	22	24.4
39-48	34	37.8
49-58	4	4.4
Mean	33.76	
Marital Status		
Single	8	8.9
Married	60	66.7
Divorced	16	17.8
Separated	6	6.7
Education		
No formal education	6	14.0
Primary Education	20	22.0
Secondary Education	48	38.0
Tertiary Education	16	17.8
Household		
1-4	26	28.9
5-8	42	46.7
9-12	12	13.3
13 – 16	10	11.1
Mean	**6**	
Total	**90**	**100.0**

Source: field survey, 2018

The result obtained in Table 4.1 above indicates that respondent within the age bracket of 19-28, 29-38, 39-48 and 49-58 years, constitutes 33.3%, 24.4%,37.8% and 4.4% respectively of total population. According to the Table majority of the farming households were between the age brackets of 39-48 years. However the mean ages was 33.76 years. This shows that the farmers were under 60 years which shows they were adults, matured and energetic and should be reasonable enterprising in farming. This indicates that the respondents are in their active work life and can engage in diverse income generating opportunities which could boost their food security and reduce their poverty level (Ahmed *et al.*, 2015)

The result in Table above show that 8.9% of the respondents were single, 66.7% where married, 17.8% where divorced and 6.7% where separated. Married respondent implies stability in household as family members work as team to supply essential labour in the farm; Nwaru (2004), reported this stability to create conducive environment for good citizen training, development of personal integrity and entrepreneurship, which are very important for efficient uses of resources and food security.

From the table an overwhelming majority (93.3%) of the respondents have formal education ranging from primary to tertiary school, while the remaining (6.67%) have no formal education. Educational level of respondents is an additional factor which is thought to influence the food security status of households. The awareness of food groups necessary for human growth and wellbeing may be dependent upon the level of education of the household head. The knowledge of these food groups ultimately influenced nutritional decisions that enhanced quality food intake. This is desirable because according to Obasi (1991), the level of education of a farmer not only increases his farm output but also enhances his ability to understand and evaluate new production techniques. The implication is that these respondents which had formal are better positioned to take advantage of new technique and innovation that could improve production and boost food security.

The table shows that 28.9%, 57.8% and 13.3% of respondent had a household size of 1-4, 5-8, and 9-12 persons, respectively. The mean was 6 persons per household. This is desirable, consistence and of great importance in production as rural household may rely more on their members than hired workers for labour on their home garden. This corroborates with the findings to Nwaru (2004). Again, as household size increases, income per head declines and the less food secure the household becomes. Babatunde*et al.*, (2007) noted that as the household size increases, the probability of households being food secure decreases.

Table 2: Classification of the households based on per Capita Total Household Expenditure

Poverty classification	PCTHE	Frequency	Percentage
Non-poor	≥ 2/3of PCTHE	53	58.89
Poor	< 2/3 of PCTHE	24	26.67
Core poor (extreme poverty)	1/3 of PCTHE	13	14.44
TOTAL		**90**	**100.0**
Poverty line		**4948.08**	

Source: Field Survey, 2018.

Table 2 showed that the per capita total household on food and non-food expenditure had a poverty line of ₦4948.08. Therefore any farmers whose mean per-capita income fall below the poverty line were regarded as being poor while those whose per-capita income were above the benchmark were non-poor (Yunez and Taylor, 2001; Adewunmi*et al.*, 2011). Majority (58.59%) of the households had value above the poverty line. Furthermore, the result revealed that households with per capita Total Expenditure that fall below the poverty line of ₦4948.08 were poor and core poor representing 26.67% and 14.44% respectively. This differs from the findings of Onwumere*et al.* (2017) which reported different poverty lines (₦12,625 and ₦ 7,838) across farmers in Abia State.

Table 3: Distribution of the respondents based on Food security status

Food security status	Frequency	Percentage
Food secured	60	66.7
Food insecure	30	33.3
Total	***90***	***100.0***

Source: Field survey, 2018.

The table above show that a greater proportion (63.3%) of the respondents are food unsecured. A food se-cure household is, therefore, that whose per capita monthly food expenditure is at least two-third of the mean per capita monthly food expenditure. On the other hand, a food insecure household is that whose per capita monthly food expenditure is less than two-third of the mean monthly per capita food expenditure. The study area could be regarded as food insecure given the fact that majority of the rural

households (63.3%) were able to meet the recommended calorie intake per capita per day. Only 33.7% of the households were food insecure and unable to meet the recommended daily per capita calorie requirements.

Table 4. Relationship between migration, poverty status and food security status

		MIGRATION	POVERTY STATUS	FOOD SECURITY
MIGRATION	Pearson Correlation	1	-0.341**	0.000
	Sig. (2-tailed)		0.001	1.000
	N	90	90	90
POVERTY STATUS	Pearson Correlation	-0.341**	1	-0.313**
	Sig. (2-tailed)	0.001		0.003
	N	90	90	90
FOOD SECURITY	Pearson Correlation	0.000	-0.313**	1
	Sig. (2-tailed)	1.000	0.003	
	N	90	90	90

**. Correlation is significant at the 0.01 level (2-tailed).

The estimation of the relationship between migration, poverty status and food security status was realized by use of correlation analysis and the result summarized in table 4 above. The Pearson correlation analysis between migration and poverty status was (-0.341**). Therefore, there is a negative relationship between migration and poverty status. This shows that increase in rate of migration, poverty statusdecreases poverty status and vice versa.

Table 5: Constraints of household in food production

Constraints	*Frequency	Percentage (%)	Ranking
Fungal disease	29	32.22	2nd
lack of improved seedlings	23	25.56	8th
Insufficient fund	25	27.78	5th
Insufficient land	18	20.00	11th
Poor yield	30	33.33	1st
Pest and diseases	25	27.78	5th
Erosion	28	31.11	3rd
Soil infertility	20	22.22	10th
Livestock Attack	24	26.67	7th
Migration	22	24.44	9th
Poor storage	27	30.00	4th
Poor attendance to farm	17	18.89	12th

Source: Field Survey, 2018 *** Multiple responses recorded**

Constraining factors to credit access and utilization by the farmers is present in Table 5. The table revealed that the major constraint was 'Poor yield (33.33%), and was ranked first. Other constraints faced by the respondents farming households in food production include fungal disease, lack of improved seedlings, insufficient fund, insufficient land, pest and diseases, erosion, soil infertility, livestock attack, migration, poor storage and poor attendance to farm.

Table 6: Coping strategies employed by household in poverty reduction and food security

Strategies	Frequency	Percentage (%)	Ranking
Use of fertilizer in crop production	30	33.33	2nd
Increased labour for agriculture	23	25.56	8th
Improving storage facilities	25	27.78	5th
Ensuring improved assess to land	18	20.00	11th
Use of Pesticide and fumigation against pest	29	32.22	1st
Cover cropping and irrigation	25	27.78	5th
Fencing in farms for security	28	31.11	3rd
Collection of loan	20	22.22	10th
Borrowing from friends	24	26.67	7th
Improved weeding practice	22	24.44	9th
Appeal to government for funds	17	18.89	12th
Partnership/cooperation	27	30.00	4th

Source: Field survey, 2018.

Poverty coping strategies employed by small scale farmers in the study area is shown in Table 4.13, from the above the major coping strategies employed by the farming households to enable them manage the conditions which they are faced with was use of pesticide and fumigation against pest (32.33%) this was followed by use of fertilizer in crop production with 33.33% of acceptance. Following closely was fencing in farms for security, it rank in the third place. Partnership/cooperation ranked 4th. Cover cropping and irrigation together with improving storage facilities ranked 5th. The rest included Borrowing from friends, Increased labour for agriculture, improved weeding practice, collection of loan, ensuring improved assess to land and appeal to government for funds, which had respectively.

CONCLUSION

The study conclude that the per capita total household on food and non-food expenditure had a poverty line of ₦4948.08. Majority of the households whose PCTHE had value above the poverty line. Households with per capita Total Expenditure that fall below the poverty line of ₦4948.08 were poor and core poor, also that a greater proportion (63.3%) of the respondents are food unsecured. Furthermore the study conclude that increase in rate of migration, decreases poverty status and vice versa. Also the Pearson correlation analysis between poverty status and food securitywas (-0.313**). Finally the study conclude that the major coping strategies employed by the farming households to enable them manage the conditions which they are faced with was use of pesticide and fumigation against pest.

REFERENCES

Abdullahi, A. (2008). Food security in Nigeria: How close are we? 2008, pp 4—6 (A paper presented at the Federal Radio Corporation's Annual Lecture- Abuja).

Abia State Planning Commission(ASPC) (2007). Abia State Statistical Yearbook. A Publication of Abia State Planning Commission, Umuahia.

Adewunmi, O.I., Adesimi, B. and Ezekiel, O.A. (2011). "Non-farm activities and poverty among rural farm households in Yewa division of Ogun State, Nigeria," *Journal ofSocial Science* 26(3): 217-224.

Afshar, R. (2003). "Dynamics of Poverty, Development and Population Mobility: The Bangladesh Case."Ad Hoc Expert Group Meeting on Migration and Development, organized by the Economic and Social Commission for Asia and the Pacific, Bangkok, 27-29 August.

Ahmed A.S. (2015) Partinership in Development waste management in Developed Countries linking Theories to Realities Habitat international 28 (3):467- 479.

Anarfi, J., Kwankye, S., Ofosu-Mensah, A, &Tiemoko, R. (2001). "Migration from and to Ghana*:* A Background Paper" Development Research Centre on Migration,Globalisation and Poverty. University of Sussex, Brighton. Working Paper C4.

Apata, T.G., Apata, O. M., Igbalajobi, O. A. and Awoniyi, S. M. O. (2010). Determinants of Rural Poverty in Nigeria: Evidence from small holder farmers in South-Western, Nigeria. *Journal of Science and Technology Education Research*, 1(4):85-91.

Babatunde, R. O.,Omotesho O.A andSholotan O.S (2007). Socio- Economics Characteristics and Food Security Status of Farming Households in Kwara State, North-Central

Nigeria. *Pakistan Journal of Nutrition* 6(1): 49-58.

CBN, (2001). Revised Microfinance policy framework for Nigeria. Retrieved on 21st November 2001, from www.proshareng.com/--/download.php?

Central bank of Nigeria (CBN), (2011). Revised Microfinance policy framework for Nigeria. Retrieved on 21st November 2012, from www.proshareng.com/--/download.php?

Central Bank of Nigeria/ World Bank, (1999): Nigeria's Development Prospects: Poverty Assessment and Alleviation Study, 8 March.

Central Bank of Nigeria/International Bank for Reconstruction and Development (1999). Nigeria Development Prospect, Poverty Assessment and Alleviation Study.8th March.

Chant, S. &Gutmann, M. (2000). Mainstreaming Men into Gender and Development: Debates, Reflections and Experiences.Oxford: OXFAM.

Damisa, M.A., Sanni,S.AAbdoulaye,T.KamaraA.Y and Ayanwale,A.(2011). Household typology based analysis of livelihood strategies and poverty status in the Sudan Savannah of Nigeria: Baseline conditions. *Publication of Journal Agricultural Environmental. Studies.* 2(1): 146-160.

Echebiri, R.N., andMbanasor, J.A. (2003). Rural Age Distribution and Farm Labour supply in food crop production systems in Abia state, Nigeria. *Journal of Tropical and Subtropical Agroecosystems*2(3): 129-136

Etim, N.A. and. Patrick,I.V(2010). Estimating the determinant of poverty among fishing households in AkwaIbom State, Nigeria. *Journal of Agriculture and Social Science*1(6): 61-63.

Etim, N.A., EdetG.E. and. Esu,B.B(2009). Determinants of poverty among peri-urban Telfera occidentals farmers in Uyo, *Nigeria Journal of Agriculture and Social Science* 1(5): 49-51

Fakiyesi, O. M. (2001). Encouraging Growth to reduce Poverty in Nigeria: In CBN: *Nigerian Economic and Financial Review:* 39(2):61-91.

Foster, J., Greer,J. and Thorbecke,E.(1984). A class of decomposable poverty measures. Econometrica, pp52.

Ibrahim, U. (2008): An Analysis of Strategic Factors Affecting the Performance of Small and Medium Industries (Sms) in Borno State of Nigeria. Ph.D. Dissertation, St. Clements University, West indies UK.

Ingawa, S. A. (2002): Keynote address at the 8th Annual conference of the Agricultural Extension Society of Nigeria held in Benin City, 16 – 19 September, In Olowu T. A. (ed). Processings of the Agricultural Extension Society of Nigeria.

International Bank for Reconstruction and Development. World Bank Updates: Poverty Estimates for Developing World. World Bank (IBR&D) Geneva, Switzerland. www.econ.worldbank.org. (2010).

Moharjan, K.L. and Chhetri, A.K. (2006). Household Food Security in Rural Areas of Nepal: Relationship between socio-economic characteristics and food security status. Paper Presented at the International Association of Agricultural Economists' Conference, Gold Coast, Australia, August 12-26.

NBS (National Bureau of Statistics) (2005). Poverty Profile for Nigeria. Federal Republic of Nigeria. 2005.

NEPAD (Comprehensive Africa Agriculture Development Programme) (2006). Addis-Ababa: New Partnership for Africa's Development.

Nsikak-Abasi A. E. and Solomon. V. A.. (2010) Determinants of Rural Poverty among Broiler Farmers in Uyo, Nigeria: Implication for Rural Household Food Security. *Journal of Agricultural and Social Science.* (6): 24 – 28.

Nwaru, J. C (2004) " Rural Credit Market and Arable Crop Production in Imo State of Nigeria" Ph.D Dissertation Department of Agricultural Economics Michael Okpara University of Agriculture Umudike, Nigeria.

Obasi, P.C. (1991). Resource Use Efficiency in Food Crop Production: A Case Study of the Owerri Agricultural Zone of Imo State, Nigeria. M.Sc. Thesis, Department of Agricultural Economics and Extension University of Ibadan, Ibadan Nigeria. Pp. 32-36.

Obayelu, O. A. and Awoyemi, T. T. (2010) "Spatial dimension of poverty in rural Nigeria" *Journal of Development and Agricultural Economics* 2(6): 231-244

Olayemi J.K and OnyenweakuC.E (1988) Quantitative Methods for Business Decisions. Bosude Printers Limited, Ibadan, Nigeria. pp346

Omonona, B. T, andAgoi, G.A. (2007). An analysis of food security situation among Nigerian urban households; Evidence from Lagos State Nigeria. *Journal of Central European Agriculture*, 8(3): 397-406.

Onwumere J, Agu-Aguiyi F.N and Umeh,O.J(2017) "Determinants of Poverty Status among Poultry and Livestock Operators in Abia State" *Journal of Community and Communication Research,*2 (2): 41- 47

Oyekale, A, Adeoti, A.I. andOgunnupe, T.O. (2006). Measurement and sources of income inequality among rural and urban households in Nigeria, University of Ibadan. *PMMA Working Paper* No. 2006-20. Retrieved from http:// papers. ssrn. com/so13/cf_dev/absbyauth.cfm

Qureshi, A. (2007), ''Agriculture and Ghana's Economic Development''*Journal of Tropical Issues, 12(1):76 -80*

Sunday A. O., Okezie, C. A. and Onyenkazi, H. A (2014). Determinants of productivity among small holder rice farmers in Bende local government area of Abia state, Nigeria. *International journal of applied research and technology.* 3(6): 3-8.

World Bank (2002). Globalization, Growth, and Poverty. World Bank, Washington, DC.

Wuni B. M (2013) "Perceived Impact Of Rural-Urban Migration On Agricultural Productivity In Nanumba South District Of Northern Region" Thesis Submitted To The University Of Ghana, Legon.

Yunez-Naude, A, and Taylor, J.E. (2001). The determinants of non – farm activities and incomes of rural households in Mexico with emphasis on education. *Journal ofWorld Development,*29(3): 561 – 572.

Zhao, Y. (2003). "Rural-urban Migration in China-What do we know and what do we need to know?" China Center for Economic Research, Peking University.