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Research Article

Analysis of Poverty Status among Sesame Producers in Some Selected Local Government Areas of Katsina State, Nigeria

[1]A. L. Mustapha and [2]A. Suleiman
[1]Centre for Dryland Agriculture, Bayero University Kano
[2]Department of Agricultural Economics and Extension, Faculty of Agriculture, Bayero University Kano
*Corresponding author: almustapha.cda@buk.edu.ng, doi.org/10.55639/607.3242

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ABSTRACT

The study analyzed the poverty status among sesame producers in some selected Local Government Areas (LGAs) of Katsina State, Nigeria. Poverty status among farming households in Katsina State is high despite being a state suitable for sesame production. Sesame is a high value. Primary data were collected from 90 selected sesame producers using a multistage sampling technique across the LGAs of Katsina State prominent in sesame production and interviewed using a structured questionnaire. Descriptive statistics and the Foster, Greer and Thorbecke (FGT) poverty model were used for data analysis. The results on the socioeconomic characteristics of producers revealed a mean age of 43 years, an average household size of 8 persons and a mean year of experience in sesame production of 7 years. The average farm size was 2.42 ha with an average annual income of ₦272,596.16. The result of the analysis of the sesame producer's poverty status revealed a high poverty incidence of 86.67%. It was concluded that poverty incidence was very high among sesame producers in Katsina State. The study recommends that there should be more investment in the sesame production enterprise by the sesame farmers to increase output and profit and consequently improve their poverty status. Effective extension services should be put in place to educate sesame farmers to improve production techniques and management practices for increased output.

Corresponding author: A. L. Mustapha Email: almustapha.cda@buk.edu.ng
Centre for Dryland Agriculture, Bayero University Kano

INTRODUCTION

The agricultural sector employs more than 70% of the country's population as well as plays a vital role in the food security, poverty alleviation and human development chain in Nigeria. Agriculture also contributes over 40% to the country's GDP (CBN, 2014; World Bank, 2014). Sesame is an important component of Nigeria's agricultural export. Since its introduction to Nigeria, it has been regarded as a crop of significant importance (National Agricultural Extension and Research Liaison Services (NAERLS), 2010). Sesame benefits from a high price and a domestic/international market. Japan is the largest importer of sesame seeds while Nigeria is the largest exporter to Japan (Ray, 2011). About 300,000 tons of sesame seeds were produced from about 26 States with the largest producing States being Jigawa, Nasarawa, Benue and Taraba States. The other States producing sesame include; Kano, Kebbi, Bauchi, Kogi, Plateau, Adamawa, Kwara, Cross-River, Ebonyi, Niger, Gombe, Katsina, Yobe and Borno States (Agro-Nigeria, 2016). Regardless of these potentials, Nigeria's cash crop production subsector remained poor due to its dependence on small-scale farmers who use unimproved technologies that generate only small income (World Bank, 2014). However, despite their unique and pivotal position, the smallholder farmers belong to the poorest segment of the population and therefore, cannot invest much in their farms.

The survey report by NBS (2012) and World Bank (2014) showed that 69% of the population in Nigeria lives in relative poverty and 61.2% on less than One US dollar ($) per day. The survey also revealed that poverty is especially higher in rural areas where the majority of the population are residents and derive their livelihoods from agriculture. The World Bank poverty assessment of Nigeria has shown that the nature of those in poverty can be distinguished by some characteristics such as education, gender, employment status of the head of household, household size and the share of food in total expenditure. Thus, about 65% of the poor live in rural areas, indicating that poverty in Nigeria is largely a rural phenomenon.

However, Poverty manifest in a greater proportion of small-scale farmers in the form of low income and living standard, poor nutrition, poor housing and health (Oladimeji *et al.*, 2014). Omonona and Oyekale (2010), and Adepoju and Balogun (2012), reported that poverty in Nigeria is a rural and regional phenomenon. This shows that rural areas which are largely agrarian accounted for a higher percentage of poverty incidences in Nigeria. The poorest groups eke out a subsistence living but often go short of food, particularly during the pre-harvest period. The productivity of the rural population is also hindered by ill health, particularly HIV/AIDS, tuberculosis and malaria (IFAD, 2012; Ogwumike and Akinnibosun, 2013). Generally, the poor are deprived, depressed and diseased social groups. The international community's determination to overcome poverty has been highlighted by the sustainable activities of international development donors such as the United Nations (UN), the World Bank and the International Monetary Fund (IMF).

Consequently, a series of poverty alleviation programmes have been initiated by past governments in Nigeria but in vain (Imevbore, 2012). The federal government of Nigeria has recognized that there is an increasing level of poverty in the country, despite all the programmes implemented (Imevbore, 2012). However, poverty can be alleviated in Nigeria by improving sesame production due to its comparative advantage of production and high-

income generating potential. Poverty exerts a deleterious effect on people's lives and lives (Falola, 2017). Sesame being a high-value crop is suitable for production in Katsina State. The crop is widely cultivated and has an opportunity to boost rural incomes. It is given the importance of the crop that this study seeks to provide information on the poverty status of sesame producers in the Katsina State of Nigeria.

Unaddressed poverty and crushing economic hardship experienced by citizens will provoke reactions that can threaten social equilibrium and even disrupt democratic experimentation in the country at large. Poverty is complex and has corrosive effects on humanity (Schiller, 2000; Sen 1999; Harrison and Huntington, 2000). Also, the international community, the United Nation, the World Bank and the United States has set a target of reaching global zero poverty by the end of 2030 by alleviating poverty in every region of the world.

The poor are often trapped in a vicious cycle of poverty. Poverty alleviation/reduction vis-à-vis sesame production requires the adoption of a holistic approach involving all tiers of government, civil society organizations, non-governmental associations, development partners, philanthropists, sesame farmers' associations and the sesame farmers themselves for the achievement of a sustainable poverty reduction among sesame farmers in the State (Ravallion and Chen, 1997). This can be done by harnessing the potential of sesame as a high-value crop and the State as having a comparative advantage in sesame production. Government, NGOs, development partners, and philanthropists can help by providing all the necessary assistance for an enabling environment to produce a high quantity of sesame in the region while the civil society organizations and sesame farmers' associations can be helpful with performing their functions to boost production.

METHODOLOGY

The study was conducted in the Katsina State of Nigeria. Katsina State lies between latitudes 120 471to 130N and longitudes 80 41to 7041E. It covers a total land area of about 24,971.215 square kilometres with an estimated population of 5, 801,584 people as of the 2006 national census (the Federal Republic of Nigeria, 2012); with a projected population of 7,251,980 as of 2017 at an annual growth rate of 3.34%. The State is bordered by Kaduna State to the South, the Niger Republic to the North, Zamfara State to the West, and Kano and Jigawa States to the East. The climate of the State is the tropical continental climate. The mean maximum temperature ranges from 27oC in the rainy season to 37oC in April/May. August marks the peak of the rainy season while February for the dry season (KTARDA, 2007; Nigerian Meteorological Agency, 2012). The average annual rainfall ranges between 550 mm in the north to 1000 mm in the southern part of the State and the pattern of rainfall is highly variable (Abaje *et al.,* 2014). The soil is sandy in nature and the vegetation is the Sudan savanna type.

The State is currently made up of 34 Local Government Areas which were agriculturally classified into three zones by Katsina State Agricultural and Rural Development Authority (KTARDA, 2007). Agriculture is one of the major occupations in the area. Farming and petty trading are the main pre-occupation of the people where the major crops grown in the State includes millet, sorghum, soybean, cowpea, sesame, maize and rice.

Sampling Procedure

Based on the prevalence of sesame production enterprises, major producing locations were identified and three locations were selected purposively. Batagarawa, Batsari and Jibiawere selected purposively as locations for the study. The headcount of farmers reveals there were 302 sesame producers in Batagarawa, 305 in

Batsari and 301 in Jibia. Across all the locations, 30 sesame producers were randomly selected as respondents for the study using quota sampling making a total sample size of 90 sesame producers. This is because there is homogeneity in sesame production methods across the State. The main objective was to analyze the poverty status of sesame producers in the area. Primary data were obtained through the use of an interview schedule which was conducted with the help of trained enumerators. The data were analyzed using descriptive statistics and the FGT poverty model.

Foster, Greer and Thorbecke (FGT) Poverty Model

The analytical tools used for achieving the objectives of the study were descriptive statistics, Foster, Greer and Thorbecke (FGT) Poverty measures

The general formula for the FGT Model is expressed as follows:

$$P\alpha = \frac{1}{n}\sum_{i=1}^{q}\left(\frac{z-yi}{z}\right)\alpha \text{ ---------- (1)}$$

Where:

P = Poverty Index of sesame farmers.

n= Population under study.

q= Number of sesame farmers who are below the poverty line.

Z = Poverty line

yi= Income of sesame farmers

α = the parameter of poverty estimated which takes the value of 0, 1 and 2.

Poverty Gap Index

$$PG = \sum_{i=1}^{p}\left(\frac{z-yi}{pz}\right) = \frac{pz}{pz} - \frac{yp}{pz} = 1 - \frac{yp}{z} \text{ ----------(2)}$$

Where,

PG = Poverty Gap Index

Z = Poverty line (₦)

Y_i = Income of the sesame farmer (₦)

P = Number of poor sesame farmers (Number)

Y = Average income of the sesame farmers (₦)

However, a normalized version of the poverty gap index gives the amount of money that is necessary to eradicate poverty (Foster *et al.*, 1984). Thus,

$$PG = \sum_{i=1}^{p}\left(\frac{z-yi}{pz}\right) \text{ ---------- (3)}$$

RESULTS AND DISCUSSION

The results indicated that the mean age of the sesame producers in the studied locations was 41 years as shown in Table 1. The majority of the sesame producers were middle age which implies that sesame producers were in productive ages. This is because the ages of the sesame producers fall within the age bracket defined by FAO, (2003) as economically productive in society. This implies the sustainability of the enterprise as experience is passed on from generation to generation having the ability to carry out farming activities. This will have a positive impact on their productivity and poverty reduction. This agrees with the findings of Tiamiyu *et al.* (2013) who found the mean age of sesame producers in Katsina State to be 42 years indicating strong potential for the labour required for sesame production.

Results presented in Table 1 further revealed a mean household size of 8 which may have a positive effect on the sustainability of sesame production. On the other hand, large household size may reduce the economic strength of the household especially when the proportion of dependents is high, and the small size of their farm may limit productivity. The large household size of 8 found in this study was

relatively higher than the international standard of 1-5 persons per household. Tiamiyu *et al*. (2013) also found a large mean household size of 10 stating that the need for hired labour is minimized.

Table 1: Quantitative Socio-economic Characteristics of Sesame Producers in Katsina State

State	Variables	Min	Max	Mean	SE
Katsina					
	Age	22	75	41	1.23
	Household Size	2	34	8	0.62
	Farm Size	1	5	2.42	0.15
	Years of experience	1	21	7	0.46
	Total Annual Income from Sesame production (₦)	32,000.00	896,000.0	272,596.16	4.32

Source: Field Survey, 2015

From the results in Table 1, sesame farmers in Katsina State have mean farm sizes of 2.42 hectares implying that sesame production in the State was on small scale. Farm size plays a vital role in determining land utilization in the farming community. The result is in line with the findings of Tanko and Kpange, (2014), who also found that majority of sesame producers in Niger State had farm sizes ranging between 0.1-5.0 ha in scattered and different locations indicating that most of the sesame farmers are producing on a small-scale basis. This may be probably due to the limited access to land because land for farming was mostly acquired through inheritance.

The result presented in Table 1 showed that the mean years of experience was 7 years with some respondents having up to 21 years of experience. This indicates that the majority of the respondents have adequate years of experience in sesame production which implied the sustainability of the enterprise through the transfer of farming skills to the younger generation. This agrees with the findings of Abu *et al.* (2011), who found a high average year of experience of 13 years in Nasarawa State.

The results in Table 1 revealed that the mean total annual income of the producers from sesame production in Katsina was ₦272,596.16 which implies that production figures for sesame in terms of quantity were relatively low in the region which ultimately translates into the low-income obtained.

Table 2: Qualitative Socio-economic Characteristics of Sesame Producers in Katsina State

Variables	Frequency	Percentages
Sex		
Male	86	95.6
Female	4	4.4
Marital Status		
Married	88	97.8
Single	1	1.1
Sources of Finance		
Personal Savings	90	100.0
Relatives and Friends	43	47.8
Bank	2	2.2
Traditional Money Lenders	1	1.1
Cooperative	6	6.6
Membership of Association		
Member		
Non-Member	63	70.0
Educational Level	27	30.3
Quranic	60	66.7
Primary	12	13.3
Secondary	9	10.0
Tertiary	9	10.0
Major Occupation		
Farming as		
major occupation	77	85.6
Farming as other occupation	13	14.4
Land Ownership Structure		
Solely Owned	56	62.2
Inherited	6	6.6
Rented	28	31.1

Source: Field Survey, 2015
Percentages more than 100 due to multiple responses

Sesame production in the study area was found to be male-dominated as shown in Table 2. From the result, it was revealed that in Katsina State, 95.6% were males while only 4.4% were females. Traditionally, the farming enterprise is dominated by men all over the Sudan savanna probably due to the nature of the activities; involving moving out of the house to perform rigorous farming activities which is not suitable for women. Also, culture and tradition in the area usually restrict women from undertaking activities outside their homes of which sesame production is one. This also agrees with the findings of Tiamiyu *et al.* 2013 and Umar *et al.* 2011. Similarly, the results of the study presented in Table 2 revealed a high proportion of the respondents being married where about 97.8% of sesame producers were married. This indicates the importance of marriage in the study area and implies that the majority of the respondents were responsible men and women, who can take technical decisions on their own and put more effort to sustain family demands. This agrees with the findings of Abu *et al.* (2011) and Rahman *et al.* (2001). It was also found out the sources of finance for the

majority of the respondents were personal savings. From the results, it was shown in Table 2 that in Katsina State personal savings has been the source of finance for 100% of the sesame producers. This implies that personal savings were the predominant source of finance where access to finance from formal financial institutions like banks is very limited to the sesame producers. This agrees with the findings of Sidi *et al.* (2014) who stated that 70% of the farmers had no access to formal credit. Also, Oladimeji *et al.* (2014), report that access to formal credit is a major constraint for farmers in Nigeria. This situation ultimately results in a low level of sesame production in the area since capital was not adequate to enhance sesame production.

It was also revealed that the majority of the producers belong to the cooperative organization. From the results, 70% were members of cooperative organizations. This implies that the majority of the sesame producers belong to one agricultural cooperative organization or the other. Household heads who take farming as their primary occupation usually participate in indigenous savings and micro-credit financing to boost their farming. This agrees with the view of Sidi *et al.* (2014), who reported that despite belonging to cooperative organizations, the cooperatives are not strategized to assist farmers in input procurement and sales of output.

Table 2 also showed that the majority (66.7%) of the sesame producers had obtained Quranic education only, while 13.3% had obtained primary education, 10% had obtained a secondary education and 9(10%) had obtained tertiary education. This shows that there was some level of formal education among sesame producers in the State. This implies that although the level of formal education was low, sesame producers in Katsina State were literate and had obtained one form of education or the other. The low level of formal education is very common among rural farmers in the north due to inadequate awareness of the importance of formal education. On the other hand, poverty which is widely prevalent in the rural areas of northern Nigeria might have contributed to the poor educational status of rural inhabitants probably due to the inability to finance formal education. However, this low level of formal education in the State could influence the effective and efficient utilization of credit facilities, adoption of improved production technology and improved marketing system. This agrees with the findings of Nyiatagher and Ocholi (2015) who stated that the majority of farmers are educated in one way or the other but with a low level of formal education.

Major occupation refers to the dominant occupation engaged in by the respondents in the study area. From the results in Table 2, 66.7% of the sesame producers in Katsina State indicated farming as their major occupation while only 23.7% indicated farming as another occupation. This shows that farming is a very important enterprise in providing a source of livelihood to the majority of the sesame producers in the area. Other occupations were also undertaken to enable them to get additional income to sustain the family and serve as a means of diversifying income sources. This implies that sesame producers have other sources of income but rely mostly on farming as their major occupation. Diversification of income sources is, therefore, very important for sesame producers, especially during the period of the dry season when farming activities comes to a halt to cater for the large family demand.

From the results, it was shown that 62.2% solely owned their land, 31.1% rented their farmland and 6.7% inherited their farmland. This implies that although the farmland ownership structure was mostly sole ownership which was acquired through inheritance, the

purchase of farmland by sesame farmers was very limited probably due to inadequate capital by the resource-poor farmers. The phenomenon of land ownership by inheritance is prevalent in rural areas which lead to the fragmentation of land holdings thereby limiting the productivity of individual farmers. This agrees with the findings of Tanko and Kpange (2014), who found that the majority of farmers acquired their land through inheritance

Table 3: Poverty Status of Sesame Producers in Katsina State

Variable	Poor	Non-Poor
Poverty Incidence (P_0)	73	17
Percentage	81.11	18.89
Poverty Depth (P1)	0.577	0.957
Poverty Severity (P2	0.408	2.225
Poverty Gap	1,690.89	

Source: Field Survey, 2015

Table 3 indicated the poverty status of sesame producers in Katsina State which revealed that the incidence of poverty (P0) among the sesame producers was 81.11% in the state which implies that 81.11% of the sesame producers were having income below the poverty line. The poverty depth was 0.577 for those whose average income was below the poverty line in the State This depth represents the percentage of income required to bring poor households below the poverty line up to the poverty line. The poverty depth allows the analysis of the inequality among the poor sesame farmers whereby it shows when the poor are getting poorer or better off. The severity of the poverty index was 0.408 which represents the poorest among the poor farm households that require the attention of policymakers in the provision of health care services, clean water and income-generating activities. The result also showed that the aggregate poverty gap per household per day among the sesame producers in Katsina was ₦1,690.89. This is the amount of money required to get the poor sesame producers out of poverty in the studied locations which is also the percentage of income required to bring the poor sesame farmer below the poverty line up to the poverty line. This agrees with the geography of poverty reported by NBS (2012); whereby it was stated that most of the Nigerian poor live in the Northern part of the country.

Meanwhile, available national statistics put the poverty incidence in the North West in 2004 at 63.3% (NBS, 2008). Comparing these statistics shows that the poverty incidence obtained for sesame farmers sampled for this study was high (86.67%). The result also agrees with NBS's (2012) report which stated that poverty has risen in Nigeria with absolute poverty rising from 54.7% in 2004 to 60.9% in 2010 where the bureau predicted that this rising trend is likely to continue. Nigerian policymakers need to know what is happening so that policies and programmes for poverty alleviation can be tracked and targeted appropriately.

This can be done through the attention of policymakers on profitable income-generating activities and improvement in their sesame production enterprise to increase their income level which will enable them to acquire good standards of living indicators, such as health care services, education, good shelter, good nutrition, and clean water. Although the said amount of money can bring the sesame farmers to the poverty line and out of poverty, more would be needed to take them farther away from the poverty line so that any form of shock or disaster may not take them back to poverty. This is because being on the poverty line is not

just enough to fight poverty as any form of shock or disaster can easily take them back to poverty as poor people move in and out of poverty constantly depending on various situations.

However, sustainable sesame production in the State can have an impact on poverty reduction because sesame is a high-value crop contributing significantly to total household income and consequently reducing poverty. This finding is in agreement with that of Odion, (2009); Omonona (2010); Adekoya (2014) whom all reported high levels of incidence, depth and severity of poverty with poverty being more in rural areas. The result also agrees with other researchers who also reported high levels of prevalence, depth and severity of poverty in their studied locations (Odion, 2009; Adekoya, 2014).

CONCLUSION

There was a high level of poverty in Katsina State as indicated by the high poverty incidence and gap. The poverty incidence was 86.67% while the poverty gap which gives the aggregate amount of money needed to bring the poor sesame producers out of poverty per household per day was ₦1,690.89.32 in Katsina State. The study recommends that there should be more investment in the sesame production enterprise by the sesame farmers to increase output and profit and consequently improve their poverty status. Effective extension services should be put in place by KTARDA to educate sesame farmers on improved production techniques and management practices for increased output.

REFERENCES

Abaje, I. B., Sawa, B. A. and Ati, O. F. (2014). Climate Variability and Change; Impacts and Strategies in Dutsin-Ma Local Government of Katsina State, Nigeria. Journal of Geography and Geology. 6(2): 103-112.

Abu, G. A, Abah, D. and Opachu, S. A (2011). Analysis of Cost and return for sesame production in Nasarawa state, implication for sustainable development in Nigeria. *Journal of Sustainable Development in Africa* 13(3): 238 – 249.

Adekoya, (2014). Analysis of Farm Households Poverty Status in Ogun State. *Asian Economic and Financial Review* 4(3)3 325-340.

CBN, (2014). Central Bank of Nigeria (CBN) Publications 2013 *Annual Economic Report.* Pp 101-200.

Bolarin, O. (2010). Quantitative Analysis of Rural Poverty in Nigeria. International Food Policy Research in Nigeria (IFPRI), IFPRI-Abuja. Available at www.ifpri.org

Falola, J. A. (2017). The Poor We Have with Us Always. Professorial Inaugural Lecture, Bayero University Kano, Inaugural Lecture Series, No 22. October, 2017. Pp 1-13.

Federal Republic of Nigeria, (2012). Federal Republic of Nigeria, 2006 Population and Housing Census. Priority Table Vol. III, Abuja. National Population Commission.

IFAD, (2012). Enabling Rural Poor Overcome Poverty. Assessed 2016 from http://www.ruralpovertyportal.org.

Imevbore, A.M.A. (2012). Alleviating Poverty through Biodiversity Prospecting, in Poverty Alleviation from Biodiversity Management (Ed) Matt F.A. Ivbijaro. Book Builders publishers, Ibadan. Pp 11-47.

KTARDA, (2007). Katsina State Government Official Diary, Directorate of Information, Katsina, Nigeria Pp 1-21.

NAERLS, (2010). Benniseed Production and Utilization in Nigeria. Extension Bulleting No. 154. Horticulture Series No. 5. Available at www.naerls.gov.ng/extension/bulleting/Benniseed.pdf.

NBS, (2012). *Nigeria Poverty Profile Report for 2010.* National Bureau of Statistics (NBS). Pp 1-26.

Nigerian Meteorological Agency, (2012). Temperature 2012, Nigeria Climate Review; Nigerian Meteorological Agency (NIMET), Abuja. Pp 19-24.

Odion, W. E. (2009). Millennium Development Goals (MDGs) and the Poverty Questions in Nigeria. **In** Omotor, D. G. and Akpotor, A. S. (Eds) Millennium Development Goals and Challenges Abraka: Delsu Investment Ltd.

Ogwumike, F. O. and Akinnibosun, M. K. (2013). Determinants of Poverty among Farming Households in Nigeria. *Mediterranean Journal of Social Science.* 4(2): 374.

Oladimeji, Y. U., Damisa, M. A., Abdulsalam, Z. and Omokore, D. F. (2014). Determinants of Poverty among Rural Artisanal Fishing Household in Kwara State, Nigeria. *Ethiopian Journal of Sustainable Development in Africa.* 16 (3): 13-26.

Olofin, E. A. and Tanko, A. I. (2000). *Laboratory of Areal Differentiation: Metropolitan Kano in Geographical perspective*. Department of geography, field studies series I, Bayero University Kano. Adamu Joji Publishers, Kano. Pp 59.

Omonona B.T. (2010). Quantitative Analysis of Rural Poverty in Nigeria. International Food Policy Research Institute and IFPRI, Nigeria Strategy Support Programme Brief No: 17 Pp 1-5.

Rahman, S. A., Alamu J. F. and Haruna M.I. (2001). Comparative Economic Analysis of Maize production under organic and inorganic fertilizers: A case study of Daudawa village in Katsina State, Nigeria. *Nigerian Journal of Bio-Sciences.*1: 64-65.

Ravallion, M. and Chen, S. (1997). What Can New Survey Data Tell Us about Recent Changes in Distribution and Poverty? *World Bank Economic Review*, 11(2): 357-382.

Ray, H. (2011). Sesame Profile: Agricultural Marketing Research Centre, Iowa State University. Pp 34.

Schiller, B. R. (2000). The Economics of Poverty and Discrimination (8th edition). Prentice Hall College Div., June 6, 2000.

Sen, A. K. (1999). Development as Freedom (New York: Anchor Books, 1999). Pp. 87- 110

Sidi, A. G., Damisa, M. A., Yusuf, O. and Oladimeji, Y. U. (2014). Value Chain Analysis of Sesame in Bade and Jakusko Local Government Areas of Yobe State, Nigeria. *International Journal of Economic Development Research and Investment.* 5(3). December, 2014. Pp 39-51.

Tanko, L. and Kpange, I. (2014). Determinants of Sesame Productivity in Selected Local Government Areas of Niger State, Nigeria. *International Research Journal of Agricultural and Aquatic Sciences.* November, 2014. 1(1): 1-8.

Tiamiyu, S. A; Adagba, M. A; Ibrahim, P. A. and A. Shaahu (2013). Profitability of Sesame Production and Marketing in Nigeria. *Advanced Journal of Agricultural Research*Vol. 1(006). Pp. 088-094.

Umar, H. S., Okoye C. U. and Agwale A. O. (2011). Productivity Analysis of Sesame (*Sesamumindicum*l.) Production under Organic and Inorganic Fertilizers Applications in Doma Local Government Area, Nasarawa State, Nigeria. *Tropical and Subtropical agro ecosystems,* 14 (2011): 405-411.

World Bank, (2014). Nigeria Agriculture and Rural Poverty: A Policy Note. World Bank 2014 Report Number 78364NG. Pp 1-55.