Original Research Article

An'' assessment of Demographic Characteristics of Women Involvement on the Improved Methods of Groundnut Processing in Three (3) Local Government Areas of Niger State, Nigeria.

By

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ABSTRACT

1. There is gender division of women in farm labour in Niger State. The gender division of women in farm labour assigns women more works in the processing of groundnut as Agricultural food products and yet, women have no access to improved methods of groundnut processing and depend mainly on the traditional methods the purpose of this study therefore were to determine the demographic characteristics of women involvement on the improved methods of groundnut processing in there (3) Local Government Areas of Niger State. Two specific objectives that guided the study are. 1. Examine the demographic characteristics of women involvement on the improved methods of groundnut processing in the study areas.
2. Identify the constraints faced by women processors in the study area.

. A multi-stage sampling procedure were employed in the selection of the respondents. The first state was purposive selection of Agricultural zone one of the State AMDA because of the high concentration of the respondents in the zone. This was followed by random selection of there (3) Local Government Areas (LGAs) from the zone which is equivalent to three AMDA Extension blocks. The third stage was random selection of four (4) extension cells from each of the Extension blocks, from an existing list of registered women groundnut processors Association (314) with sate AMDA, a total population samples size of 180 respondents was randomly selected. A structured questionnaire was used to collect data pertinent to the study with the help of Enumerators. Data were descriptively analyzed. Demographically, majority of the respondents were between the age distribution of 21-50 years and married, majority of the respondents in the study area had their household size of between 6-10 people. About 50% of the respondents had no access to formal education and 57% had 1-6 years in schooling. The result also revealed that about 32% of the respondents had 15-20 years of groundnut processing experience and about 55% of the respondents had their major occupation has full time processor. The recommendation made include need for the government and interested non government organization (NGOs) to provide credit facilities for respondents to enable them involved into improved methods of groundnut processing technologies.

INTRODUCTION

In today's digital age, the latest technologies always reach the rural poor last in spite of recent advances in communication and information technologies, Technical Centre for Agricultural and Rural Cooperation (CTA, 2003). Rural women are much less likely to have access to new agricultural technologies because they are generally less educated and possess less economic and political power relative to their men folk. In Nigeria, reports indicated that women play more important roles in agricultural processing compared to men Hassan, H. Usman, Y. ; Ajayi, O. (2012). While records further show that the agricultural labour force is made up of about 60-80 percent women depending on the region, and two thirds of the foods crops is processed by the women, (World Bank, 2003). Despite these facts there still exists wide spread assumption that men and not women make the key management decisions Christiana, H.G ; Ken, L.B; Abe, G.C; Prefer T.H; Max, K.J, Donna, L.; Peter, N.K; and Deideche, W. (2007). As a result of this, most extension activities targeted at women emphasize their domestic roles with topics such as child care and family nutrition while excluding activities involving agricultural processing.

Basically, women are involved in the supply of labour, processing of food crops and livestock processing and transportation farm produce for effective storage and marketing Shannon, (2005). Okoronko and Emmanuel, (2013). Despite the high level of their involvement in agricultural processing activities such as groundnut processing, they are inadequately recognized and undervalued Ajayi, (2005); Henn, (2005); Nwachuku and Jibowo, (2007).

Women's role in groundnut processing is not a new phenomena. Their role is fundamental to agricultural growth/ development especially via Agricultural food processing. They account for 100 percent for those who process agricultural food stuff (UN, 2004). In Nigeria, women take part actively in the groundnut processing activities in addition to their domestic household responsibilities. According to Abba, A; Ndanitsa, M.A; Umar, I.S Ibrahim M and Abubakar, B. (2011). Women are said to be involved in over 95 percent of groundnut milling activists in "Zone A" agro ecological area (Bida of Niger State).

Problem Statement

The declaration of 1975-1985 as decades for women by member countries of the United Nations (UN) marked the beginning of recognition of gender issues in development circle worldwide. This resulted in active discussion among researchers policy makers, educationists and developmental partners on roles of women vis- a vis those of men Yahaya, (2007). This led to the creation of Women In Agriculture (WIA) programme within the existing state Agricultural Development Projects (ADPs) and the conversion of women home economists to female Agricultural processors, all in an attempt to correct the gender related deficiencies and recognition of the role play in extension and processing of agricultural commodities. There is gender division of women in farm labour in Nigeria, Nkoh, and Domenico, (2005). The gender division of women in farm labour assigns women more works in the processing of groundnut as agricultural food products and yet, women have no access to improved methods of groundnut processing and depend mainly on the traditional methods, due to the constraints that are responsible for it, such as poor electricity supply, lack of credit facilities, high purchasing price of technologies increase in price of petrol, poor processing equipments poor quality of groundnut and absence of sustainable policy for groundnut processing activities. All this constraints affect women processors involvement of improved groundnut processing technologies.

PURPOSE AND OBJECTIVES

The purpose of the study was to determine the demographic characteristics of women involvement on the improved methods of groundnut processing in three (3) Local Government Areas of Niger State.

Specific objectives were to:

3. Examine the demographic characteristics of women involvement on the improved methods of groundnut processing in the study areas.
4. Identify the constraints faced by women processors in the study area.

METHODOLOGY

Study area

The study was conducted in *Mokwa , Lavun and edati* LGAs of Niger state. Niger state occupies also north-central part of Nigeria, and shares common boundaries with North by *Zanfara* state, to the north east by *kebbi* state and north east and federal capital territory(FCT) bordered the state to north east and south east. The state also shares a common international boundary with the republic of Benin along *Newbussa, Aguara* and *Wushishi* local government Areas. The state is located in the north central savannah of the vegetation zones between latitudes 8^{o} and 11^{o}N and longitudes 3^{o}E and 7^{o}E of the prime meridian.(Niger state Bureau of statistics year Book, 2013).

Population of Niger state is the largest in Nigeria with a total land mass representing about 9.3 percent of the total land mass of the country. The population of the state was 3,950,429 in 2006(National population commission, 2006). The bureau of statistics has maintained an approximate population growth rate of 2.5% geometrically. Based on that, the projected population in 2012 was estimated to be 4,883,036. The state occupies on area of about 58,676.2 square kilometers (National population commission, 2006). the state is made up to 25 LGAs namely *Agaie, Agwara, Bida, Borgu, Bosso chanchaga, Edati, Gurara, Katch, Kontagora, Lapai, Lavun, Magama, Mariga, Mashegu, Mokwa,Munya, Paikoro, Rafi, Shiroro, Suleja, Tafa,* and *Wushishi* local government Areas.

Niger state is divided in to three Agricultural zones namely I, II and III for better Administration of agricultural activities each of these Agricultural zones has their headquarters at *Bida, Kuta* and Kontagora respectively. The Climate and Ecological conditions of the state is favored with mean annual rain fall of 782-1250mm and temperature is about 82ºc or 27.7ºc (Tsado, 2013). The state has abundant wild vegetation of Shea trees and dominated by small scale farmers. The major crops cultivated are millet, rice, maize, guinea corn, beans, cassava, groundnuts and sweet potatoes. Majority of the famers keep livestock like poultry, goat and sheep. Other engaged in crafts such as sculptures, weaving and blacksmith (Tsado, 2013). About 85% of the population of the state are farmers, while 15% are involved in other vocation such as white collar jobs, businesses, crafts and arts (Tsado 2013).

Method of Data collection and sampling procedure.

The data used were obtained mainly from primary sources, through the use of structure questionnaires. With the help of enumerators. The sampling method adopted for the study were

multi-stage sampling procedure techniques. The first stage was purposive selections of Agricultural zone one of the state AMDA. This was followed by random selection of three (3) Local Government Areas (LGAs) from the zone which is equivalent to three AMDA extension blocks.
The third stage was random selection of four (4) extension cells from each of the extension blocks, giving a total sampling size of 180 women processors used in the study area.

ANALYTICAL TECHNIQUE
Analysis of the data was done using descriptive statistics which include measure of central tendency such as means, percentage, table and frequency distribution.

$Y = f(X_1\ X_2\ X_3 \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots + X_7$ Explicit

Explicit form (Linear)

$$\frac{Ypi}{I-pi} = bo + b_1X_1+b_2X_2+b_3X_3+b_4X_4+b_5X_5+b_6X_7 + e$$

Where:

Ypi = (Probability of high involvement)
I-pi = (Probability of low involvement)
Logy = dischotomous variable high = 1, otherwise = 0
X_1 = Age (years)
X_2 = Education level (years)
X_3 = Marital Status (Number)
X_4 = Household size (Number)
X_5 = Years of processing experience (Years)
X_6 = Year of Schooling (Years)
X7 = Major Occupation

RESULTS AND DISCUSSION
Demographic characteristics
Demographic characteristics of the respondents in the study area were examined and described with respect to their Age, marital status, Household size, educational level, year of schooling, year of processing experiences and major occupation.

Age
The age distribution of the respondents in the study area were between 21-50 years (81.1%). This implies that they were young and energetic within the productive age which could increase their groundnut processing activities. This was in agreement with finding of Musa (2006) in indigenous resources managements among communities in North West Zone of Nigeria which revealed that the women processors are of the middle age category of 40-50 years of age. This implies that, the productive age groups of women processor in the study area were actively involved in groundnut processing activities and still have energy to cope with rigors of groundnut processing.

Marital Status

About 67% of the respondents in the study area were married. The implication is that respondents that were married are more involved in the improved groundnut processing technologies in the study area.

This was in line with study by Maigida (2012). Which revealed that marital status of women processors play a significant role, in groundnut processing activities where improved technologies are involved for instance married women processors with large family size may have large involvement and readily supply of labour, which reduces the cost of hired.

Household Sizes

About 48% of the respondents has household size of between 6 and 10 people. The implication is that the higher the number of household size the lower the cost of labour this was in agreement with Adepoju and Umar (2007) which revealed that In agricultural food processing, household size determines the availability of labour. The additional labour to be hired depends on the amount of family labour available and reduce the cost of hiring more hand for such activities.

Educational Level

About 50% of respondents in the study area have no access to formal education. The implication of this result implies that the low level of formal education is obviously a disadvantage to the respondents, due to the fact that improved technologies would have to be communicated to these respondents in native dialects. This view was in line with findings of Adepoju and Umar (2007). which revealed that education enables every individual to gain knowledge and skills and this increase their power of understanding.

Years of Schooling

About 57% of the respondents had 1-6 years in school which implies that majority of the respondents had primary school qualification. The implication of this result is that 1-6 years may not be enough for the respondent to have more knowledge about improved technologies.

Years of Processing Experience

About 32% of the respondents had 15-20 years of processing experience. This result was in line with finding of Johnson (2009). The study revealed that high experience in agricultural processing can raise productivity

The mean years of experience of the respondents were 15.57 years. The high mean years of processing experience suggests that the respondents would not have many problems in involving and effective use of improved technologies.

Major Occupation

About 55% of the respondents in the study area are full time processors as their major occupation. The implication of this result is that respondents will involved and adopt improved technologies. This view was in line with the study by Yahaya (2007), which revealed that major occupation determine the level of involvement and adoption of improved technologies.

Table 1: Distribution of respondents based on demographic Information (n=180)

Demographic information	Frequency	Percentage	Mean
Age (years)			
21-30 years	19	10.6	
31-40 years	42	23.3	42.99
41-50 years	85	47.2	
Above 50	34	18.9	
Marital status			
Married	121	67.2	
Single	18	10.0	
Divorce	18	10.0	
Widowed	23	12.8	
Household size(Number)			
1-5	56	31.1	
6-10	86	47.8	6.76
11-15	35	19.4	
16-20	3	1.7	
Educational Level			
Primary	19	10.6	
Post Primary	9	5.0	
Secondary	13	7.2	
Post Secondary	7	3.9	2.67
Adult Education	4	2.2	
Qur'anic Education	38	21.1	
None	90	50.0	
Years of schooling			
1-6 Primary	102	56.7	
7-12 Secondary	75	41.7	
13-18 Tertiary	3	1.7	
Years of processing experiences			
1-5	12	6.7	
6-10	42	23.3	
11-15	33	18.3	15.57
15-20	57	31.7	
above 20	36	20.0	
Major occupation			
Processors	99	55.0	
Self employed	39	21.7	
Company employed	5	2.8	
Processor	37	20.6	

Source: Field survey, 2013

Respondents Constraints

About 92% of the respondents in the study area reported that poor electricity constraints were among of their problems faced. about 80% of the respondents also indicated that lack of credit facilities were also their problems such as loan, condition attached to loan disbursement, interest rate, collateral and several trips to the bank before loan is granted. This finding was in agreement with Saito (2009) which revealed that women face a number of barriers to obtained credit from lending institutions because most of them have no collateral. The implication of this is that, without loan to facilitate the involvement and adoption of improved groundnut technologies, the respondents will not expand the scope of processing women processor will continue to queue for long at the extraction point. Another problem experienced by the respondents were increase in price of Petrol.

About 95% the respondents reported that petrol engine is used for processing when there is no electricity supply, and the women tend to spend more as the cost of kneading is high which is not economical for the respondents. The constraints increase in price of petrol has negative influence on involvement and adoption. It can be concluded here that, if prices of petroleum products are not reduced some of the women processors might revert to the use of the traditional methods of groundnut processing.

About 94% of the respondents reported that they still faced with constraints of poor processing equipment because these technologies are expensive to acquired and then emphasized in traditional methods of groundnut processing.

Table 2: Distribution of respondents based on Constraints (n=180)

Constraints	Frequency	Percentage %
Poor Electricity	165	91.7
Lack of Credit Facility	144	80.0
High purchasing Price of Technologies	170	94.4
Increase in price of petrol	171	95.0
Risk Associated with Technologies	165	90.0
Price flotuation	164	91.1
Poor Processing Equipment	170	94.4
Poor Quantity of G/Nut	167	92.8
Poor Capacity Building	162	90.0
Lack of viable commercial practice	163	90.6
Need for organization producer	164	91.1
Absence of Sustainable policy	144	80.0

Source: Field survey, 2013

* Multiple Responses

CONCLUSION AND RECOMMENDATION

The study has provided information on demographic characteristics of women involvement on the improved methods of groundnut processing in three Local Government Areas of Niger State, Nigeria. Majority of the respondents do not have access to formal education and this can affect disseminations of information (printed materials) on any new technologies to the respondents.

The constraints such as poor electricity high cost of petrol supply, lack of credit facilities, high purchasing price of technologies poor and lack of operational facilities for processing groundnuts affect the level of women involvement on the improved of groundnut processing technologies in the study area. Base on the findings in the study the following recommendations are made

1. In view of the high cost of petroleum products and irregular electricity supply, which are required for groundnut processing activities. It was recommended that provision of solar powered electricity by interested NGOs to address the irregular power supply should be made a priority intervention in the study area.
2. It was found that majority of the respondents in the study area lack access to credit facilities. It is recommended that credit facilities should be provided by the government and interested non Government organization to increase the scope of groundnut processing business and improved their level of living.
3. The study revealed that respondents faced with high purchasing price of technologies. Constraints it is recommended that improved groundnut technologies should be made available for the respondents at the subsidies rate. This can be done though appeal to interested Non Governmental Organizations (NGOs) private volunteers and other organized bodies to assist government in complementing the present high purchasing price of technologies to the respondents.

References

Abba, A; Ndanitsa, M.A; Umar, I.S Ibrahim M. and Abubakar, B. Pilot report for the preparation of One Local Government one Product (OLOP) Programme in Niger State. *JICA-OLOP Technical cooperation in Nigeria*. 2011, pp1-89.

Adepoju, S.O Umar, A.G and Agun, J.O . An Appraisal of women in Kano Agricultural and Rural Development Authority (KNARDA) Extension Delivery programmes. *Journal of Agricultural Extension*, 2007, Vol. 10:22.

Ajayi, A.R. Training needs of village Extension workers in Osun State Agricultural Development Projects. *Nigerian Journal of Agriculture and Teacher's Education*. 2005 Vol (2): 1-10.

Centre for Agricultural Cooperation (CTA). The roles of a women in agricultural food processing evidence from women right place in groundnut processing, *spore bi-monthly bulletin* (CTA) Netherlands. 2003 No. 44

Christiana, H.G ; Ken, L.B; Abe, G.C; Prefer T.H; Max, L. K.J, Donna, N.K; et al, Gender and soil fertility in Africa. *Soil science society of America special publication* 2007, N0. 51. P 220.

Henn, J.K.. Feeding the cities and feeding the peasants. What roles for Africa's Women Farmers; in: A Sessay and A. Odebiyi (eds). *Women in society and Development* 11 (12) Ibadan : Dokun publishing House 2005, pp 5-12

Ironkwe, A.G. and K.C. Ekwe, Women's participation in Agricultural processing in Abia state, *proceeding of the 33rd Annual conference of the agricultural society of Nigeria, held at Cereal Research Institute, Badeggi*, Niger State. 2008, pp16-22, pp 147-157.

Johnson, D.T.. "*The Business of Processing, a Guide to processing Business*" Macmillian Education ltd, London, England: 2009, pp174-190.

Maigida, D.N.. Challenges Affecting the Involvement of Women Groundnut Processor: in Women Agricultural Programme (WIA) in Kano State. *Journal of Agricultural Extension* 2 (7).: 2012, pp43-51

Musa, M.W.. Indegenous Resource Management System among Communities in North West Zone of Nigeria and their Relevance for Poverty Reduction. *Ph.D Thesis* Submitted to the Department & Agricultural Economics And Rural Sociology, Ahmadu Bello University, Zaria. 2006, ("in press").

Niger State Bureau of Statistics year book 2013, pp1-130.

National Population Commission 2006, pp365

Niger State Agricultural and Mechanization Development Authority (NAMDA) *Respondents/Cooperative Group Report*, Department of Women in Agriculture (WIA) 2012, pp1-73.

Nwachukwu, I. And A.A. Jibowo,. Evaluation of the Utilization of Rice Processing Technology among Women Farmers in the Central Zone, Nigeria. *Journal of Agricultural Extension*: (4). 2000, pp 63.

Nkoh, N. E. and Domenico, C.M.. Enhancing the Roles of Women in Food Processing. A Case Study of Igbo Women In Nigeria. *World Development Publications Elservier Science Ltd. Great Britain*, 2005, 23 (10) 1731-1744.

Ogunbameru, B.O. *Practical Agricultural Communication.* Daily Graphics Publishers, Ibadan, Nigeria.: 2002, pp1-72.

Shannon, S.B. Female Agricultural Workers wages, female wages Differentials, and Agricultural growth in a Developing Country. *Indian Economic Development and cultural changes.* India, 2005, Vol. 40: 46-98.

Saito, K.A.. Agricultural Extension For Women Farmer in Nigeria. *World Bank Discussion Paper*, Washington DC. USA 2009, No 103-57.

Tsado, P.B. Futures and prospects of Women Farmers in Niger State Agricultural Zone 1 *Paper Presentation* at Women in Agricultural Programme (WIA) Conference at Niger State 1st March, 2013, pp1-34.

Hassan, H. Usman, Y. ; Ajayi, O.. Factors influencing the Level of Women Participation In Agricultural Processing Activities. *Paper Presented At The Conference Of Agricultural and green revolution in Africa (AGRA)Togo*. September, 2012, pp1-98.

Okonko D.O, Emmanuel, J.E. Involvement of Improved Technologies for groundnut Production by Farmers in Kebbi State of Nigeria. Samaru *Journal of Agricultural Research*. (8): 2013, pp23-31.

United Nations,. *United Nations Surveying Nigerian Women Processors Discussion Paper*. at Nico-Nogan 13th March 2004.

World Bank, Oil *Processing Intermediate Technology Publication.* London No 4: 2003, pp 1-26.

Yahaya, M.K. Gender and Communication Variable In Agricultural Information Dissemination In Two Agro-Ecological Zones Of Nigeria. *Research Monograph University Of Ibadan* 2007, Pp. 68.