

ANALYSIS OF GENDER ROLE IN MAIZE PRODUCTION IN IBARAPA EAST LOCAL GOVERNMENT AREA OF OYO STATE

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ABSTRACT

The study determined the analysis of gender roles in maize production in Ibarapa East Local Government Area, Oyo State, Nigeria. Primary data obtained using structured questionnaire were collected from a sample of 120 farm families, five wards out of ten existing wards in the Local government area were selected. Data were sampled through multistage sampling techniques. Descriptive statistics such as percentage, mean scores and standard deviation were used for data analysis. The study revealed average age 44 years for female farmers and 40 years for the male farmers. Above average female respondents (66.7%) and male (65.0%) farmers were married. Female farmers had average household size of about 7 members while the male counterpart had household size of 6 members. Male farmers had more farming experience 13 years and cultivate more farmland 8 acres than the female farmers 5 acres. Women carried out most of the maize production activities and undertook general maize processing (92.3%) except for land clearing (70.1%), ridge making (58.7%), earthen in gup (83.7%), and storing of maize (79.2%). The study recommended that female maize farmers' associations should develop a high level of consciousness on policy issues or difference that affect them. Both male and female farmers should be encouraged to form and join farming organizations or cooperatives. This will enable them serve as pressure group to ensure implementation of some strategies and policies by the government.

Keywords: Gender Analysis, Maize farmers production

INTRODUCTION

Agriculture is a prestigious, noble, and lucrative profession that should not be left in the hands of novices and the elderly using crude implements. Traditionally, farming has relied heavily on manual labor, with farmers using their physical strength and expending considerable energy (). However, with the advancement of agricultural technology, it is crucial for the government to invest in farm mechanization, provide access to credit, and establish modern storage facilities, among other improvements.

The topic of empowering in rural communities through increased incomes has garnered scholarly attention due to its vital role in enhancing and sustaining livelihoods, especially for women in agriculture (Yidana JA, Osei Kwarleng, 2013). Women represent a significant portion of the work force in many developing countries, comprising 43% of the global agricultural labor force (Creswell J, 2003).

Various studies indicated that women's involvement in agriculture is driven by numerous factors, including the potential for income generation, secure employment, and

meeting the livelihood needs of those engaged in agriculture.

The contributions of women significantly impact agricultural output and processing. The Food and Agricultural Organization (FAO) estimates that women produce 60–80% of the food consumed in most Sub-Saharan African nations and contribute to half of the world's total food supply today. Family food security is largely dependent on the work and creativity of women who grow, process, and prepared the food. In many developing nations, rural women work up to 16 hours a day to ensure food security and production while handling all domestic tasks.

Gender issues are increasingly important in Nigeria's agriculture sector. There is overwhelming evidence that women play a crucial role in agriculture, household maintenance, stability, and food security, even amid economic hardship. Nigeria's primary agricultural challenge is increasing food production and generating income from agricultural products. The role of women farmers in agricultural development cannot be overstated. Women are essential in planting, farming, harvesting, processing, and preparing agricultural products (Ajani, 2008; Tripp, 2004).

In Nigeria, the role of women in agriculture is largely influenced by geographic region, culture, and religion. Gender differentiated cropping patterns often persist among certain groups, such as the Igbo and Yoruba. For example, yams, considered a "prestige crop," are traditionally regarded as a male crop, while "ephemeral crops" like cassavas, melons, beans, maize, and cocoyam are seen as female crops (Achebe and Teboh, 2007; Ajani, 2008).

Maize is a significant food crop for both humans and livestock, providing energy, vitamins, and a small amount of protein (Hengsholtetal., 2018). In Nigeria, (Sadiq *et al.*, 2013), likely due to its adaptability to different environmental conditions, leading to widespread cultivation across the country. Evidence shows a consistent production rate of maize in Nigeria (FAO, 2017). Both men and women make substantial contributions to maize-based farming systems and livelihoods, though gender roles in maize cultivation vary greatly across regions. On average, women constitute 43% of the agricultural labor force in developing countries, ranging from 20% in Latin America to 50% in East Asia and Sub-Saharan Africa (Quisumbing *et al.*, 2014; FAO, 2011).

Interestingly, women and men manage complex post-harvest systems differently due to cultural contexts, social status, and other factors, leading to varying impacts. These differences can obscure the effects of development interventions on men and women. However, when gender is explicitly considered in studies, the effects become clear, revealing previously hidden implications (World Bank, 2010).

Since the 1970s, extensive literature has explored whether there are differences in male and female agricultural productivity or technical efficiency and whether women could be as productive as men with equal access to resources (Doss, 2015). While findings have been mixed, studies applying production or profit functions generally find no significant differences in productivity or technical efficiency between men and women after accounting for access to inputs and the characteristics of plots, households, and farmers (Adeleke *et al.*, 2008).

This study aims to address the gap in understanding gender roles in maize production in the Iseyin local government area of Oyo

State. To achieve this goal, the study has outlined the following specific objectives:

- i. describe socio-economic characteristics of the respondents
- ii. identify gender roles in maize production
- iii. identify the factors militating against gender roles in maize production

Hypothesis of the study:

Ho: Their no significant difference between male and female farmer's role in maize production practice in the study area.

Research Methodology

Description of the study area

The study was carried out in Ibarapa East Local Government Area of Oyo State, It is located in the southern part of Oyo state. It has its headquarters at Eruwa town, it is bounded in the north by Iseyin, in the east by Ido, in the west by Ibarapa central LGA and in the south by Ogun state. It has an area of 838km² and a population of 118,226 at the (2006) census. It is more or less a rural local government area with tremendous potentials for growth. The major farming activities carried out in this area are cassava, maize, coco-yam, vegetables, plantain, rice, groundnut, beans out of which maize, cassava, and cocoyam. The sales or prices of agricultural produce in this area are based on the season and market and the location of the individual farm. The area is also located a longitude 7°32'N and longitude 3°26' East of Greenwich meridian. The town is situated in a distance of 57km, west of Ibadan, Oyo state capital.

A multistage sampling technique was used to select five wards out of the ten wards due to the predominant effect of climate on maize production in the local government, four villages were selected randomly from each ward and this gave rise to twenty villages and then six respondents farmers from each of the four villages making a total of one hundred twenty respondents. Data were collected by means of questionnaire. Descriptive statistics such as percentage, mean scores and standard deviation were used for data analysis, while inferential statistics such as independent t-test was use for comparison.

RESULTS AND DISCUSSION

Socio-Economic Characteristics of the Respondents

Result in Table 1 revealed that female farmers (51.8%) were slightly larger in population than the male farmers (48.2%). This suggests that maize production in the study area is a female dominated activity. This result contrasts many findings that always specify agricultural activities as male dominated profession (Zulkuni, 2010; Olagunju et al., 2012). The result on age showed that the mean age of female farmers was 44 years while that of male farmers was 40 years indicating that the respondents were in their youthful and active age, thus could actively participate in maize production as this age bracket is high productive in agricultural activities and accordingly, can put in their best for optimal production. Youthfulness could be an asset for innovativeness and assertiveness as it could endure the drudgery inherent in maize production.

This age range according to Aguillar, Carranza, Goldstein, Kilic and Oseni (2014) is characterized with energy which is required for maize production. More than half population of both male farmers (65.0%) and female farmers (66.7%) in the study area were married. This maybe informed by the need for families' income to provide food, education, healthcare and housing as the case maybe. Marital status demonstrates stability among farming families and tendency to adopt economic activities to raise income to finance family demand. Being married is a responsibility which requires income thus, married people often engage in different forms of economic developing activities. Higher proportion of married population construes a stable farming population in the study area with reduced chances of migration. This result agrees with the finding of James et al. (2013) who acclaimed that marriage confers some level of responsibilities and commitment on individuals who are married. The preponderance of married people in maize production in the study area could be ascribed to harmonizing proficiency of farm labor provision at household level.

The farm family pools her physical resources together to upkeep the production. The mean household size for male farmers and female

farmers were 6 and 7 members respectively which were relatively large. A relatively large farm family is an indication for readily available of farm labour in a traditional farming setting which reduces labour cost in agricultural production. Large household size minimizes hired labour, lessens overall cost of production and ensures availability of labour. Large household size is needed in traditional farm family as it governs availability and amount of family labour for maize production. The larger the household size, the faster and more proficient the work is done and the many mouths to feed as well. This result concurs with Ndiritu et al. (2014) who concluded that households of 1-8 are mostly involved in maize farming in the study area. The average farm size cultivated by the male farmers was 8 acres while that of the female farmers was 5 acres. This indicates that the respondents cultivate less than 1 hectares, unchangeably could be smallscale farmers on subsistent production with family labour. This result described the respondents as small scale maize farmers. This situation could be indicative of increased land fragmentation, population pressure or non-use of machineries in production in the study area. The mean farming experience as shown in Table 1 revealed that the male farmers had 13 years of farming experience while that of the female farmers had 10 years of farming experience. This infers that the respondents were experienced in maize production and may be skillful and well-maintained in accessing agro based technologies, inputs and information due to previous experiences. Experience is a valuable asset, it could enable the farmer understand times and seasons easy access to input procurement, risk management, easy processing strategies among others. This result is in line with Oyelade and Anwanane (2013) who suggested that experience is a product of skillfulness; it contributes positively to efficiency of any business.

Gender roles in Maize Production

Farm activities performed by male and female maize farmers were presented in Table 2. The result revealed that male farmers were more involved in farm activities such as earthen ingup (83.0%), storing of maize (79.2%), landclearing (70.1%) and ridge making (58.2%); these activities are tedious or energy demanding.

However, female farmers were mostly involved in planting (68.6%), manual weeding (59.3%), supplying (72.8%), thinning (74.5%), manual harvesting (71.2%), winnowing (94.0%), threshing (78.0%) and general maize processing (92.3%); indicating that female farmers partook more in less tedious and more painstaking activities involved in maize production. Female farmers also underwent the drudgery of general maize processing in the study area. This result implies that women put up with disproportionate burden of the work load in farm activities. This finding agrees with FAO (2006) which reported that in Nigeria, women play dominant role in agricultural production and make up 60-80% of agricultural labour force depending on the region. The finding also supports the affirmation of Ajani (2008) who repeated that in most societies, food processing is the responsibility of women. Jamesetal.,(2013) affirmed that women are heavily involved in food processing by way of threshing, shelling and milling of grains.

Factors Militating against gender roles in Maize production

Findings in table 3 show that lack of extension services ($\chi=1.80$), lack of access to technology ($\chi=1.60$) and inadequate facilities ($\chi=1.57$) were the factors militating against male roles in maize production while illiteracy ($\chi=0.82$) is the least factor, on the contrary, inadequate extension service ($\chi=1.57$), lack of access to technology ($\chi=1.55$) and inadequate credit facilities ($\chi=1.45$) were factors militating against female roles in maize production. However, inadequate training ($\chi=0.47$) was least factors militating against female roles in maize production. This implies that there is variance in their both gender militating maize production in both male and female gender as stated by Aderinto (2007), which stated that inadequate extension service performance and low annual contact are very few.

Analysis showing the significant difference between male and female farmer's role in maize production practice

Results of test of hypothesis in table 4 shows that there is no significant difference between male and female farmers' involvement in production practices.

This implies that male and female farmers in the study are engaged in similar roles for maize cultivation.

CONCLUSION AND RECOMMENDATION

Results revealed that respondents were young, married and had relatively large household size which is advantageous for maize production. The finding showed that women formed larger proportion of maize farmers in the study area. They mostly engage in time consuming and painstaking activities carried out in maize production which includes general maize processing, weeding, supplying, and fertilizer application while the men partook in energy consuming activities involved such as land clearing, ridgemaking, maize storage and marketing. It was recommended that female maize farmers associations should develop a high level of consciousness and sophistication on policy issues or difference that affect them. Both male and female farmers should be encouraged to form and join farming organizations or cooperatives. This will enable them serve as pleasure group to ensure implementation of some strategies and policies. It will also help them in cheap procurement of some productive inputs and other activities which will be of help for them.

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Table 1: Socio-Economic Characteristics of the Respondents

Variables	Malen=60		Mean	Femalen=60		Mean
	Freque ncy	Percentag e		Frequenc y	Percentage	
Age(years)						
30-40	23	38.3	40years	23	38.3	44years
41-50	22	36.7		25	41.7	
51-60	15	25.0		12	20.0	
Maritalstatus						
Single	9	15.0		13	21.7	
Married	39	65.0		40	66.7	
Divorced	10	16.7		6	10.0	
Widowed	2	3.3		1	1.7	
Yearsspentoneducation						
1-6	6	5.0	13years	6	10.0	12years
7-12	33	55.0		33	55.0	
13-18	21	23.3		21	35.0	
Householdsize						
1-4	13	21.7	6members	6	10.0	7members
5-8	33	55.0		33	55.0	
≥9	14	23.3		21	35.0	
Farmsize(acres)						
1-5	7	11.7	8acres	48	80.0	5acres
6-10	51	85.0		12	20.0	
≥11	2	3.3		-	-	
Sourcesofland						
Inherited	14	23.3		15	25.0	
Rent	18	30.0		3	5.0	
Gift	8	13.3		10	16.7	
Purchased	20	33.3		6	10.0	
Farmingexperince(years)						
1-10	17	28.3	13years	48	80.0	10years
11-20	39	65.0		11	18.3	
≥21	4	6.7		1	1.7	
Secondaryoccupation						
Civilservant	19	31.7		20	33.3	
Trader	18	30.0		25	41.7	
Artisan	23	38.3		15	25.0	
AccesstoCredit						
Yes	15	25.0		27	45.0	
No	45	75.0		33	55.0	
Sourceoflabour						
Family	22	36.7		14	23.3	
Hired	35	58.3		43	71.7	
Communal	3	5.0		3	5.0	

Source: Field survey, 2023

Table 2: Gender roles Performed by Men and Women in Maize Production

FarmActivities	Malen=60				Femalen =60			
	Frequenc y	Percentag e	Mean	Standard Deviation	Frequenc y	Percentag e	Mea n	StandardDev iation
Landclearing	57	70.1	3.09	0.871	41	43.2	1.74	0.916
Ridgemaking	44	58.2	2.87	0.920	44	54.2	2.16	0.892
Plantingoperations	37	42.8	1.89	0.850	51	68.5	2.32	0.911
Manualweeding	38	52.8	2.66	0.938	50	59.3	2.25	0.870
FertilizerApplication	38	43.7	1.96	0.728	60	67.8	2.55	1.079
Earthening	52	83.7	2.97	1.063	30	25.5	1.27	0.549
Supplying	32	38.2	1.74	0.516	56	72.8	2.66	0.928
Thinning	45	50.1	2.37	0.823	48	74.5	2.75	0.728
Manualharvesting	44	40.0	1.68	0.651	64	71.2	2.49	1.063
Threshing	36	32.2	1.59	0.833	52	78.0	2.86	0.761
Winnowing	27	36.4	1.03	1.079	59	84.0	3.04	0.982
Marketing	33	30.0	1.38	0.762	55	72.5	2.66	0.865
Storingofmaize	57	79.2	3.16	1.080	35	38.3	1.21	0.870
Generalmaizeprocessi ng	49	58.2	1.09	0.860	56	82.3	2.93	0.938

Source: Field survey 2023

Table 3: Factors militating against gender roles in maize production

Factors	Male						Female				
	VS	S	NS	Mean	Rank	VS	S	NS	Mean	Rank	
Inadequatecreditfacilities	24(40.0)	30(50.0)	6(10.0)	1.30	5	32(53.3)	23(38.3)	5(8.3)	1.45	3	
Climate	22(36.7)	20(33.3)	18(30.0)	1.07	7	15(25.0)	27(45.0)	18(30.0)	0.95	7	
Lackofacesstoinfrastructalfacilities	36(60.0)	22(36.7)	2(3.3)	1.57	3	25(41.7)	29(48.3)	6(10.0)	1.32	5	
Illitracy	9(15.0)	31(51.7)	20(33.3)	0.82	10	8(13.3)	29(48.3)	23(38.3)	0.75	9	
Inadequateaccesstoproductioninformation	33(55.0)	19(31.7)	8(13.3)	1.42	4	29(48.3)	22(36.7)	9(15.0)	1.33	4	
Inadequateaccesstoextensionservice	48(80.0)	12(20.0)	0(0.0)	1.80	1	38(63.3)	18(30.0)	4(6.7)	1.57	1	
Landconstraints	11(18.3)	33(55.0)	16(26.7)	0.92	8	18(30.0)	31(51.7)	11(18.3)	1.12	6	
Inadequatetrainingonmaizeproduction	9(15.0)	32(53.3)	19(31.7)	0.83	9	7(11.7)	23(38.3)	30(50.0)	0.62	10	
Labourshortage	25(41.7)	22(36.7)	13(21.7)	1.20	6	9(15.0)	32(53.3)	19(31.7)	0.83	8	
Lackofacesstotechnology	37(61.7)	22(36.7)	1(1.7)	1.60	2	39(65.0)	15(25.0)	6(10.0)	1.55	2	

Table4: Analysis showing the significant difference between male and female farmer's role in maize production practice

Variables	t-test	Df	P-value	Decision
Male roles-Female roles	0.647	10	0.520	NS

Source: Fieldsurvey, 2023