

## GENDER ANALYSIS OF FARM OWNERSHIP BY SMALL SCALE FARMERS IN EDO STATE, NIGERIA

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### Abstract

The study was carried out to analyze farm ownership by small scale farmers along gender lines in Edo State. The objectives of the study were to ascertain the ownership pattern of agricultural enterprises, determine the factors influencing ownership pattern and examine the problems inherent in the ownership pattern along gender line. Ten farmers of both male and female each were randomly selected from five communities making a total of one hundred (100) respondents. The data were then analyzed using descriptive statistics such as frequency distribution, tables percentages. Regression analysis was used to determine the factors influencing farm ownership pattern along gender line. The results show that men dominated in the production and ownership of food crops, cash crops and livestock production. The degree of gender involvement and ownership of agricultural enterprises was 67.7% for male in food crop as compared to 32.3% for female, 89.7% male in tree crop and 32.6% for female but women dominated in cassava (60.0%) and vegetable (46.0%) production

It was concluded that men and women have important role to play in agricultural production. However, women was found to trailed behind men in the production and ownership of farm enterprises. It was therefore recommended that light implement/machines for women to use should be designed. Furthermore, training of women as extension workers who can work freely work with women farmers should be encouraged.

**Key Words:** Gender, Ownership, Small Scale, Regression and Socio – Economical Analyses.

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## Introduction

Gender relates to socially assigned roles and behaviors attributed to men and women. Gender roles are roles that are played by both men and women which are not determined by biological factors but by the socio-economic and cultural environment or situation (Mollel et al, 2000). Gender affects the distribution of resources, wealth, work, decision making, political power as well as the enjoyment of right and entitlements within the family and in public life (Welch *et al*, 2000). Women from poor households engage in a variety of income generating and expenditure savings activities. In some cases, these activities supplement the contribution by males while in others they are the primary or the sole source of household livelihoods (Kabeer, 2003). Women are twice as likely as men to be more involved in agriculture related activities (Odame *et al*, 2002). Gender differences in resource control, assets ownership, income earning, consumption and expenditure have been identified as important factors in household food security (Owotoki, 2003). Despite improvement in building women's capacities, gender gap in entitlements, the resources which women and men can command through available legal means, continue to persist (Akinsanmi et al, 2005).

Although the Nigeria constitution guarantees equal opportunities to both men and women in reality however, this is not so, worldwide, women face limited access to resources and are locked into relatively low productive work (World Bank, 2002). In addition to performing household tasks and child bearing duties women work longer hour for lower pay than most men. Both men and women are subject to macro economic factor relating to income earning and distribution, the importance of women however has attained world attention.

Ogundele et al (2002) assert that, female farmers are highly discriminated against in the use of critical input such as land, family labour and fertilizer but favoured in the use of agro-chemical and seeds. Apart from inequalities in access to employment, gender bias in access to technology may hamper the ability of women to increase the productivity of their agricultural, domestic entrepreneurial activities and thus reduce economic growth.

In Nigeria, women play a major role in production of food crops and they also undertake processing, marketing and livestock husbandry. A distribution of women in staple food crops production among the “Ibos” of Abia State in Nigeria showed that women contributed most of the labour in planting maize, cassava, cowpea, melon and rice. They are completely in charge of planting and harvesting of cowpea and melon. Apart from land preparations women contribute more than 80% of the labour for planting, weeding, harvesting and storage of cassava in the study area. Despite the bias against women, empirical studies have shown that there would be an increase agricultural productivity, improved nutrition and health for children as well as reduction in food security when gender discrimination against women is eliminated in terms of access to productive resources (Blackden et al, 2006).

Women in many Africa societies use their farm income to meet a variety of household and personal expenses. They paid for production inputs, hired labour or give for the household, particularly food, clothes and machine for themselves and their children. In spite of the foregoing contribution of women to the welfare of their families, men farmers still have greater control over land resources than woman farmers. Women typically work more number of hours than men when producing food on the average they work 13hours than men each weak in Africa ( World Bank, 2002).

## **Methodology**

The study was carried out on Ovia South west Local Government of Edo State. The Local government is surrounded by Ovia North in the South, Agor in the East, Orchonwon in the west and Owan in the North. The local government is situated in tropical rainforest with rainfall of about 1500mm annually. The major occupation of the people are farming and trading. The farmers produce food crops like cassava, yam, cocoyam plantain, maize and cash crops like cocoa, oil palm, rubber together with few livestock.



**Figure 1: Map of Edo State showing Study Area.**

Ten farmers of both male and female each were randomly selected from five communities making a total of one hundred (100) respondents. The data used for the study were from primary source and were obtained with the use of structured questionnaire. The questionnaire elicited information on demographic characteristics of the farmers such as age, gender, level of education, marital status, family size, and non-demographic characteristics based on ownership pattern, their level of involvement in farm activities and farm ownership, and constraints facing the farmers.

The data were then analyzed using descriptive statistics such as frequency distribution, tables, percentages. Regression analysis was used to determine the factors influencing farm ownership pattern along gender lines. The regression model is specified below:

$$Y = b_0 + b_1X_1 + b_2X_2 + b_3X_3 + b_4X_4 + b_5X_5 + b_6X_6 + b_7X_7 + e_i$$

Y = Gender

$X_1$  = Age

$X_2$  = Community

$X_3$  = Marital status

$X_4$  = Level of education

$X_5$  = Experience

$X_6$  = Access to credit

$X_7$  = Type of labour used

$e_i$  = Error term

## Results and Discussion

### Socio – Economic Characteristics of Respondents

Table 1 shows that 70% of the male respondents and 60% of the females are less than 35 years of age. This may imply that both male and female are still young and strong enough to engage in different agricultural enterprises to improve their income. The Table also shows that 80% males and 76% females are married. This could be because their farm enterprise(s) can generate enough cash flow to sustain their families.

Table 1 further shows that 93.7% of male respondents had formal education as compared to 90% for female. This may imply that both gender could readily adopt innovation in order to enhance their family livelihoods. Furthermore, the result shows that 71.7% of male respondents have at least 20 years experience as compared to 77% for females. This shows that females are more entrenched in farming business earlier in their lives than males. Table 1 shows that 43.7% of male respondents finance their farming enterprise through personal savings as compared to 38% for females. This could be an indication that males had slight edge over females in terms of access to production inputs.

Table 1: Socio – economic Characteristics Of Respondents

	MALE		FEMALE	
Characteristics	Frequency	Percentages	Frequency	Percentages
<b>Age (years)</b>				
Less than 25 years	5	10.0	10	20.0
26-35 years	30	60.0	20.	40.0
36-45 years	10	20.0	15	30.0
46-55 years	5	10.0	5	10.0
<b>Total</b>	<b>50</b>	<b>100.0</b>	<b>50</b>	<b>100.0</b>
<b>Marital Status</b>				
Single	10	80.0	38	76.0
AMarried	40	20.0	9	18
Divorced	-	-	1	2.0
Widowed	-	-	2	4.0
<b>Total</b>	<b>50</b>	<b>100.0</b>	<b>50</b>	<b>100.0</b>
<b>Educational level</b>				
No Formal Education	3	6.25	5	10.0
Primary Education	8	16.6	22	44.0
Secondary Education	24	50.0	18	36.0
Post secondary	13	27.0	5	10.0
<b>Total</b>	<b>48</b>	<b>100.0</b>	<b>50</b>	<b>100.0</b>
<b>Level of experience</b>				
Less than 10 years				
20-30 years	14	30.4	19	39.5
30-40 years	19	41.3	18	37.5
40-50 years	9	19.5	7	14.5
	4	8.6	4	8.5
<b>Total</b>	<b>46</b>	<b>100.0</b>	<b>48</b>	<b>100.0</b>

<b>Access to credit</b>				
Bank	8	16.7	10	20.0
cooperative	14	29.1	15	30.0
Esusu	5	10.4	8	16.0
Personal savings	21	43.7	17	34.0
<b>Total</b>	<b>48</b>	<b>100.0</b>	<b>50</b>	<b>100.0</b>

Source: Field survey, 2011.

### Sources of Farm Implements and Labour

Table 2 shows that 57.1% of the 47 males and 52% of the 50 females respondents indicated that acquisition of their equipments were by purchase. Where as 54.70% of the females acquired their equipment through rent, gift and inheritance. Also in Table 2, 62% of the (18) male and 66% of the 50 female respondents. Indicated family labour as their major source of their labour while 48% of the female indicated hired and communal labour as the sources of labour for their enterprise. The implication of this is that formally the labour is the major source of labour in farm ownership by Small Farmer in Edo State.

### Ownership of Farm Enterprises

Table 3 shows that 72% of male respondents revealed that males dominated in livestock rearing as compared to 32.6% for female. This may imply that male in the study area domesticate in the major income spinning enterprise than female farmers .

Table 3 also shows that 60% of female respondents revealed that females dominated in cassava production as compared to 33.3% for male while . 46.0% of female respondents revealed that females dominated in vegetable production as compared to 35.7% for male. This implies that women dominate in cassava and vegetable production in the study area.

Table 2: Ownership of farm enterprise

Enterprise	Male		Female	
	Frequency	Percentages	Frequency	Percentages
<b>Farm implement/ Machine acquisition</b>				
Purchase	24	57.1	26	52.0
Rent	9	21.4	13	24.1
Gift	5	11.9	3	5.6
Inherited	9	21.4	8	14.8
<b>Total</b>	<b>47</b>	<b>100</b>	<b>50</b>	<b>100</b>
<b>Source of labour</b>				
Family labour	30	62	33	66
Hire labour	14	29	15	30
Communal labour	4	9	2	4
<b>Total</b>	<b>48</b>	<b>100</b>	<b>50</b>	<b>100</b>

Source: Field survey, 2011

Table 3 shows that 88.1% of male respondents as compared to 80% female indicated that ownership of these enterprises could help in improving the living standard of the rural people. This may imply that liberalizing access to production inputs and ownership of farm enterprise will enhance food security. Table 3 shows that 56% of male respondents and 60% female affirmed that there is greater discrimination in farm enterprise ownership. This may serve as a setback to the attainment of food security in the country. Table 3, Shows that poultry, sheep goat and rabbit were the major livestock enterprises with the male reported to have 76%, 70.5%, 60% and 80% participation respectively while the female participation revealed 21.4%, 26.2%, 46.7% and 55.7% poultry sheep, goat and rabbit in that order. The degree of gender involvement revealed 71% for male and 29% for females. The implication of this is that male gender were the major actors in the ownership of livestock enterprises farm ownership by Small Scale Farmers in the study area.



Table 3: Ownership of Farm Enterprises and Standard of Living

	Male		Female	
Enterprise	Frequency	Percentage	Frequency	Percentages
<b>Ownership of food crop enterprises</b>				
Yam	35	83.3	10	20.0
Cassava	14	33.3	30	60.0
Cocoyam	23	54.8	18	36.0
Maize	25	59.5	16	32.0
Rice	29	69.0	12	24.0
Plantain	34	81.0	6	12.0
Vegetable	15	35.7	23	46.0
<b>Degree of gender involvement</b>	<b>67.7</b>			<b>31.4</b>
<b>Tree crop enterprises</b>				
Oil palm				
Rubber	38	90.3	4	8
Cocoa	38	90.5	3	6.0
Mango	35	83.3	7	14.0
Cashew	37	88.1	5	10.0
Kola	38	90.5	3	6.0
<b>Degree of gender involvement</b>	<b>40</b>	<b>95.2</b>	<b>10</b>	<b>20.0</b>
	<b>89.7</b>			<b>10.3</b>
<b>Ownership of Livestock Enterprises</b>				
Poultry	38	76.0	9	21.4
Sheep	35	70.5	11	26.2
Goat	30	60.0	21	46.7
Rabbit	40	80.0	15	55.7
<b>Degree of gender involvement</b>	<b>143</b>	<b>71</b>	<b>56</b>	<b>29</b>

<b>Ownership of farm enterprise and standard of living.</b>				
Yes	37	88.1	40	80.0
No	5	11.9	10	20.0
<b>Total</b>	<b>45</b>	<b>100.0</b>	<b>50</b>	<b>100.0</b>

Source: Field survey, 2011.

### Standard of Living And Gender Discrimination

Table 4 shows that 41.6% of male and 44% of female indicated that financial achievement is a major indicator standard of living while 37.5% of male and 31.5% of female indicated physical wellbeing as the major indicator of the standard of living. The implication is that with financial wellbeing, the Small Scale Farmers Owners in Edo State believe that they could take care of the physical being and thus their standard of living for improvement.

Table 4 also shows that 56% each of the male and female indicated that there is discrimination in gender ownership of farm enterprise in the ownership of Small Scale Farmers in Edo State.

**Table 4: Improvement of Standard of Living and Gender Discrimination**

Enterprise	Male		Female	
	Frequency	Percentage	Frequency	Percentage
<b>Improvement of standard of living.</b>				
Physical well being	18	37.5	17	31.5
Financial achievement	20	41.6	24	44.4
Acquiring more skill	10	20.8	9	18.0
<b>Total</b>	<b>48</b>	<b>100.0</b>	<b>50</b>	<b>100.0</b>
<b>Gender discrimination in ownership of farm enterprise.</b>				
	28	56.0	28	56.0
Yes	20	44.0	20	44.0
No	<b>48</b>	<b>100.0</b>	<b>48</b>	<b>100.0</b>
<b>Total</b>				

## Result of the regression analysis

### Male

$$Y = 3.623 - 0.120x_1 - 0.278x_2^* + 0.165x_3 - 0.133x_4 + 0.27x_5^* - 0.014x_6^* + 0.057x_7$$

(0.564) (0.139) (0.067) (0.196) (0.101) (0.015) (0.082) (0.070)

$$R^2 = 0.512$$

$$R^{-2} = 0.456$$

$$F = 9.345$$

Value significant at 5% level.

### Female

$$Y = 3.475 - 0.048x_1 - 0.244x_2^* + 0.057x_3 - 0.230x_4^* + 0.012x_5^* - 0.260x_6 + 0.022x_7$$

(1.006) (0.230) (0.123) (0.149) (0.083) (0.007) (0.263) (0.109)

$$R^2 = 0.506$$

$$R^{-2} = 0.47$$

$$F = 8.42$$

Value significant at 5% level.

The results of the regression analysis show that the coefficient of multiple determination ( $R^2$ ) is 0.512 and 0.506 for male and female respectively. This implies that 51.2% and 50.6% variabilities in male and female respectively are being accounted for by the independent variables specified in the models. From the male model, community ( $X_2$ ), experience ( $X_5$ ) and access to credit ( $X_6$ ) are significant variables while for female model, community ( $X_2$ ), level of education ( $X_4$ ) and experience ( $X_5$ ) are variables that have important implications on gender ownership of farm enterprise in the study area.

## Conclusion

Men and women have important role to play in agricultural production. Women trailed behind men in their participation, production and ownership of the farm enterprises. Men dominated in tree crop, food crop production and livestock rearing. However, women were found to dominate in cassava and vegetable production.

## Recommendations

The following recommendations are made from the study:

- i. Small implements that women can use to carry out hard tasks like land clearing, ridging and cultivation should be designed and constructed so that more women can participate in these activities.
- ii. Training of women as extension workers who can work freely with women farmers should be encouraged.
- iii. Women farmers should be given equal access to credit and farm inputs as male farmers.
- iv. More women should be encouraged to grow more food and tree crops so that they can contribute to the livelihoods of their households.

## References

Akinsanmi, A. and W. Doppler, (2005): Gender inequalities and their implication for living standard and for security among male and female households in Imo State. Nigeria , Deutscher Tropentag University of Hohehei, Stuttgart, Germany, P46

Blackdern, C.M. and Wodon, Q. (2006): Gender, time use and poverty in sub Saharan Africa, Wold Bank, Washington DC. P.73

Kabeer, N. (2003): Gender mainstreaming in poverty eradication and the development to Goals: A handbook for policy makers and other stakeholders. Oftawa: International Development Research Centre. P 16.

Molle, I H .M., Mtenga, N.A. (2000): Gender roles in the household and farm in systems of techenzema, morogoro Tanzania South Africa *Journal of Agricultural Extension*, 29: 73-88.

Odeme, H .H., Halkin, N. Wesseler, G., Boto, I. (2002): Gender and Agricultural in the Information Society. International service for National Agricultural Research Briefing paper No.55. The Huguc. The Netherlands: ISNAR.

Owotoki, G.M. (2005): Gender difference in households Resource Allocation and its impact on food security: A case study of Kwara State, Nigeria. Unpublished M.Sc. Thesis, University of Hohenherim Stuttgart, Germany. P75.

Ogundele, S.A. and Yusuf, A. (2002): Gender and farm Technical Efficiency in Rive Production “(A comparative analysis of male and female owned farm)” paper presented at National Rural Sociological Association Congress. P21.

Welch, C.I., Alemu, B., Msaki .T., Segendo, M. , Kigutha , H. and Wolff, A.(2000) : Improving household food security: Institutions, Gender and Integrated Approaches. U.S.

World Bank (2002) : World Development Report : Agriculture for Development Washington D. C