FROM FARM TO TABLE; ASSESSMENT OF THE ROLE OF WOMEN IN AGRICULTURE TOWARDS NATIONAL DEVELOPMENT AND SELF RELIANCE (A CASE STUDY OF AFIJIO LOCAL GOVERNMENT AREA OF OYO STATE)

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Abstract

The study assessed the critical roles of women in agriculture in Afijio Local Government area of Oyo State. Specifically, the study determined the effect of women's participation in agriculture on food security; examined the impacts of women's participation in agriculture towards self-reliance; evaluated the influence of women's participation in agriculture on economic recovery; and compared women's involvement in agricultural activities with their men counterparts.
Purposive and simple random sampling techniques were used to select a sample of 100farmers in Afijio Local Government area. Data were collected with the aid of questionnaire. Data analysis and hypotheses testing were carried out using frequency distribution tables, simple percentages and chi-square. The findings revealed that women's participation in agriculture boosted food security in Afijio Local Government (with $X^2cal = 43.1 > X^2tab = 21.026$, at $P<0.05$). The study also indicated that women's participation in agriculture led to self-reliance (with $X^2cal = 29.02 > X^2tab = 7.815$, at $P<0.05$). Furthermore, the study revealed that women's engagement in agriculture led to economic improvement and recovery in the study area (with $X^2cal = 76.63 > X^2tab = 16.919$, at $P<0.05$).However, the study showed that women's involvement in agriculture was not as much as men did (with $X^2tab = 12.15 < X^2cal = 16.919$, at $P<0.05$ significant level). It was concluded that women's involvement in agriculture led to food sufficiency, self-reliance and economic recovery in Afijio Local Government of Oyo State. However, women's participation in agriculture was not as significant as that of men.\It was recommended that government should encourage women to participate more in farming activities.

Keywords: Assessment, Women, Agriculture, National development, Role.

Introduction

Agriculture is the back bone of many developing countries. Agriculture helps to meet the basic needs of human and their civilization by providing food, clothing, shelters, medicine and recreation. It is a productive sector of economy that brings peace, prosperity, harmony, health and wealth to individuals of a nation by driving away poverty, hunger, distrust, discord and anarchy. It helps to elevate the community consisting of different castes and clauses, thus it leads to a better social, cultural, political and economic life. However, women account for more than half of the work force by participating in different activities, either directly or indirectly. The gender division of labor varies from one society and culture to another, and within each culture, external circumstances influence their level of activity (Nigist, 2004). However, except in few

developed countries, women's efforts are not yet realized by society. Rural development in Africa cannot be imagined without the active participation of women. Women form an integral part of farming Household. They are involved in over half of the farm activities in many developing countries, bear most of responsibilities for household food security and contribute to household well-being through their income generating activities and active participation in agriculture production (Etenesh, 2005). In order to improve the capacity of African countries to meet their food demand, women's roles have to be recognized and they should be given equitable access to and control over the land, credit facilities, extension services and improved tools as well as membership in cooperatives and other rural benefits. Rural women particularly in the developing countries experience hardship by undertaking triple roles, that is, productive role, reproductive role and community participation role in their day to day life. They also live in an environment where little or no social services, lack of infrastructural facilities and no exposure to information and technologies (Coontz, 1996).

Statement of the problem

The study aims to look into the participation of women in agriculture towards a sustainable economic recovery and self-dependence. Women usually have limited accesses to resources and opportunities and their productivity remains low relative to their potential. Due to lack of awareness in our society women's role has not been recognized, as we live in a society where there is substantial level of gender inequality. The inequality in the provision of education reflects the deep rooted tradition and values within the ideological, political, economic and socio-cultural structure of societies. In terms of ownership of property, the women in this country have no equal right as men. In addition, the dominance of men in various income generating activities adversely affects the economic empowerment of women. Therefore, the purpose of this study was therefore to assess the activities of rural women and their participation in agricultural production to fulfill the food security, self-reliance and economic recovery of their family. This study addressed the following research questions;

Objectives of the study

The general objective of this study was to assess the role of women on agricultural activities in Afijio Local Government while the specific objectives were to;

1. Determine the effects of women's participation in agriculture on food security.
2. Examine the impacts of women's participation in agriculture towards self-reliance.
3. Evaluate the influence of women's participation in agriculture on economic recovery.
4. Compare women's involvement in agricultural activities with their men counterparts.

Research questions

i. What are the effects of women's participation in agriculture on food security?
ii. What were the impacts of women's participation in agriculture towards self-reliance?
iii. To what extent has women's participation in agriculture influenced economic recovery in Afijio local government?
iv. To what extent do women participate in agricultural activities when compared with their male counterparts?

Research hypotheses

Ho_1: Women's participation in agriculture does not boost food security.
Ho_2: Women's participation in agriculture does not lead to self-reliance.

Ho_3: Women's participation in agriculture does not lead to national development.
Ho_4: Women do not participate more than men in agricultural activities.

Research Methodology

Research design

The experimental design for this study was a survey design.

Population of the study

The target population of this study consists of rural dwellers in 5 selected villages in Afijio local government area of Oyo State. The villages were; Ilora, Imini, Obanako, Oluwatedo and Ilu-Aje.

Sample and sampling techniques

The simple random sampling technique was used to select villages. While purposive sampling techniques was used to select respondents. Five (5) villages were selected in the local government area. The total sampled for the study was 100 respondents. Comprising twenty (20) respondents from each village.

Research instrument

The instrument that was used for this study was structured questionnaire and observation. The questionnaire consists of two sections. Section A consists of demographic variables of the respondents. While section B contains (20) twenty items on assessment of the role of women in agriculture towards economic recovery and self-reliance. The responses were elicited using 4-point scale of degree of agreement or disagreement. The researcher visited some farms in Afijio Local Government to observe their various farms' operations.

Validity and Reliability of research instrument

The research instrument was thoroughly scrutinized and validated by experts and the researcher. Necessary corrections were made to ensure the validity of the instrument that was used. The reliability of the research instrument was ensured through test re-test method. The responses were corrected using Pearson Product Moment Co-efficient (P.P.M.C).

Method of data collection

The instrument was administered by the researcher to the respondents of the study. Villages were visited and respondents were given a copy of the questionnaire with adequate supervision and explanation. Instructions on how to fill the questionnaire were given to avoid errors.

Methods of data analysis

Descriptive statistics such as frequency counting and simple percentage were used to analyze the data collected. Chi-square was employed to test hypotheses formulated and to establish the relationship between the independent variables and dependent variables.

Presentation and Discussion of Data

The analysis of data collected were based on seventy five (75) i.e. 75% questionnaires that were correctly completed and returned out of the total of one hundred (100) questionnaires administered to the farmers in Afijio Local Government area in Oyo State.

Table 1: Distribution of Respondents by Demographic factors

Demographic Factors	Frequency	Percentage
Sex		
(i) Male	40	53.3
(ii) Female	35	46.7
Age(years)		
(i) 18 – 35	22	29.3
(ii) 36 – 50	35	46.7
(iii) above 50	18	24.0
Marital status		
(i) Single	45	60.0
(ii) Married	30	40.0
(iii) Divorced	-	-
(iv) Widow	-	-
Family size		
(i) 1 - 4	45	60.0
(ii) 5 - 9	22	29.3
(iii) above 9	8	10.7

Source: Field Survey, 2023.

Demographic Characteristics of Respondents (Owner/managers)

From table 1 above, it was revealed that (40)53.3% of the respondents were males while (35) 46.7% were females. This implies that there were relatively more men participating in agricultural activities than women in the study area, this is in line with submission of Etenesh (2005),which stated that more men are actively involved in farming activities than women in western part of Africa. Also the table showed that 29.3% of respondents fell within the age of 18-35 years, 46.7% fell between 36-50 years and 24% of ages were above 50 years. The highest percentage of 76% was in active ages. This implies that more people of the younger generation were participating in farming activities, which is contrary to assertion of Mbanefoh (1988) which stated that aged people are more involved in food production. Furthermore, the percentage of farmers that were married constituted 60% of the respondents while single had 40%. This implies that most of the farmers in the study area were married. From the table also, the family size of the respondents was revealed. 60% had between 2 to 4 members, 29.3%had between 5 to 9 members while 10.7% had above 9 members in the family. This implies that the average number of members in a family was 5.

Table 2: Distribution of Perception of Respondent on the role of women in agriculture towards economic recovery and self-reliance.

S/N	SA	A	D	SD	TOTAL
1	20(26.7)	35(46.7)	10(13.3)	10(13.3)	75(100)
2	5(6.7)	10(13.3)	20(26.7)	40(53.3)	75(100)
3.	17(22.7)	32(42.7)	12(16.0)	14(18.7)	75(100)
4.	20(26.7)	35(46.7)	5(6.7)	15(20.0)	75(100)
5.	30(40.0)	20(26.7)	15(20.0)	10(13.3)	75(100)
6.	15(20.0)	33(44.0)	13(17.3)	14(18.7)	75(100)
7.	18(24.0)	22(29.3)	14(18.7)	21(28.0)	75(100)
8.	15(20.0)	36(48.0)	10(13.3)	14(18.7)	75(100)
9.	23(30.7)	31(41.3)	16(21.3)	5(6.7)	75(100)
10.	10(13.3)	10(13.3)	25(33.3)	30(40.0)	75(100)
11.	15(20.0)	19(25.3)	20(26.7)	21(28.0)	75(100)
12.	27(36.0)	28(37.3)	10(13.3)	10(13.3)	75(100)
13.	15(20.0)	32(42.7)	16(21.3)	12(16.0)	75(100)
14.	27(36.0)	28(37.3)	14(18.7)	6(8.0)	75(100)
15.	13(17.3)	35(46.7)	10(13.3)	17(22.7)	75(100)
16.	22(29.3)	28(37.3)	18(24.0)	7(9.3)	75(100)
17.	16(21.3)	30(40.0)	9(12.0)	20(26.7)	75(100)
18.	21(28.0)	23(30.7)	15(20.0)	16(21.3)	75(100)
19.	17(22.7)	15(20.0)	20(26.7)	23(30.7)	75(100)
20.	12(16.0)	30(40.0)	15(20.0)	18(24.0)	75(100)

Source: Field Survey, 2023.

Note: The bracket figures indicate the percentage and figures not bracket indicate frequency.

Interpretation of Results

Analysis from the above table 2 shows that the respondents strongly agreed that women were actively involved in practical agricultural activities to sustain family food demand and economic well being which was indicated by 26.7%. 46.7% also agreed to it. However, 13.3% strongly disagreed and disagreed. This implies that women sustain family food demand and

economic well-being through their participation in practical agricultural activities. On the statement that women's role has not been recognised by the environment, community and government:6.7% of the respondents strongly agreed to it;13.3% of them agreed to it;26.7% strongly disagreed; and 53.3 agreed. This implies that women's role has been recognised by the environment, community and government.It was revealed in the table that 22.7% strongly agreed and 42.7% agreed that women participate in agricultural production to fulfil the food security and self-reliance. Meanwhile, 16% strongly disagreed and 18.6% disagreed. This implies that women participate in agricultural production to fulfil the food security and self-reliance, this is in line with the assertion of Nigist (2004), which submitted that women play a significant role in food production. Likewise, the table revealed that 26.7% of the respondents strongly agreed and 46.7% agreed while6.6% and 20% strongly disagreed and disagreed respectively that women boost agricultural production by assisting men. This implies that women boost agricultural production, this is in line with assertion of Ocho (2009) which stated that women are the major partaker in the food production chain and they actively involved in marketing processes. The table also showed that women provide solutions to some food crises in their immediate family: 40% of the respondents strongly agreed, 26.7% agreed. However, 20% strongly disagreed and 13.3% agreed. This implies that women provide solutions to some food crises in their immediate family, this in line with Ukpongson et al. (2000) which argued that the contribution of women to food security is enormous which cannot be over- emphasised. Information presented in the table showed that majority of respondents which represented by 20% and 44% strongly agreed and agreed that women involvement in agricultural activities reduces economic pressure on their husband. 17.3% and 18.76% strongly disagreed and disagreed with it respectively. This implies that women involvement in agricultural activities reduces economic pressure on their husband.

Investigation also indicated that 24% of the respondents strongly agreed that social vices among youths are declining as a result of women in agriculture. 29.3% also agreed, while 18.7% and 28% strongly disagreed and disagreed respectively. This implies that social vices among youths are relatively declining as a result of women in agriculture. 20% of the respondents strongly agreed that women play important roles to help their family in particular and their community in general in meeting their food demand. 48% also agreed while 13.3% strongly disagreed and 18.7% disagreed. This implies that women play important roles to help their family in particular and their community in general in meeting their food demand. The table reveals that 30.7% of the respondents strongly agreed that rresourceful rural women contribute in a multitude of ways through different livelihood strategies to lifting their families and communities out of poverty. 41.3% agreed to it. However, 21.3% and 6.7% strongly disagreed and disagreed respectively. This implies that resourceful rural women contribute in a multitude of ways through different livelihood strategies to lifting their families and communities out of poverty, this is in line with Ogbene (2006) which stated women are the bedrock of sustainable livelihood of every household and community. The table showed that 13.3% of the respondents strongly agreed and agreed that the contribution of women was much greater than men in agriculture. Meanwhile, 33.3% and 40% strongly disagreed and disagreed respectively. This implies that the contribution of women was not greater than that of men to agriculture.

More so, the table revealed that the respondents which constituted 20% strongly agreed and 25.3% agreed that women always involve in actual agricultural productionwhile 26.7% strongly disagreed and 28% disagreed. It implies that women rarely involve in actual agricultural production. It was shown in the table 2 that 36% of the respondents strongly agreed and 37.3% agreed that farmland is usually acquired/registered and certified in husband's name.13.3%

strongly disagreed and 13.3% disagreed. It implies that farmland is usually acquired/registered and certified in husband's name. 20% of the respondents strongly agreed and 42.7% agreed that women participation in village and farm decision making is of great importance.21.3% and 16% strongly disagreed and disagreed to it respectively. This implies that women participation in village and farm decision making is of great importance, this is in line with assertion of Nwogu (2009) which explained that women involvement in decision making goes a long way in reducing social vices among youths.

Information in the table also shows that 6% of the respondents strongly agreed, 37.7% agreed, 18.7% strongly disagreed and 8% disagreed that women only get information only when decision has been made. It implies that women are not always involved in decision making, this is in line with Okunmadewa (1997) which revealed that, most of decisions were made without the input of women in agriculture and this trampled on right of women. The study revealed that 17.3% of the study participants strongly agreed and 46.7% agreed while 13.3 strongly disagreed and 22.7 disagreed that hardworking women increase agricultural production. The table shows that 29.3% strongly agreed, 37.3% agreed, 24% strongly disagreed and 9.3% disagreed that malnutrition and other food related diseases are being controlled through women participation in agribusiness. It implies that women prevent malnutrition and other food related diseases by making sufficient food available for their family through their involvement in agribusiness, this is in line with Nkwedimma (2010) which asserted that women are the key player in curtailing malnutrition, social vices and hunger in a nation as they spend most times with their children and wards.

The table further reveals that 21.3% of the respondents strongly agreed, 40% agreed, while 12% strongly disagreed and 26.7% strongly disagreed that women are usually the major marketers of agricultural products. It implies that women are usually the major marketers of agricultural products. Opinions of the respondents also indicated that 28% strongly agreed and 30.7% agreed to the statement that children prefer to accompany their mothers to farm to perform farm operation. 20% strongly disagreed and 21.3% disagreed. It is therefore implies that children prefer to accompany their mothers to farm to perform farm operation.

The responses of the study participants revealed 22.7% of the respondents strongly agreed, 20% agreed, while 26.7% strongly disagreed and 30.7% disagreed that women have a way of stimulating their children interest in agriculture.The table finally shows that 16% of the respondents strongly agreed, 40% agreed while 24% disagreed and 20% strongly disagreed that processing of raw farm produce is usually done by women. This implies thatprocessing of raw farm produce is usually done by women.

Testing of Research Hypothesis

A non-parametric statistic testing tool chi-square is used to test hypothesis about the difference between means of the groups. For the purpose of this research, four hypothesis were formulated in Chapter one of the work. The hypothesis shall be tested using the chi-square test at 5% level of significance.

$$X^2\text{- calculated} = \frac{\sum (O-E)^2}{E}$$

Where, $\sum$= Summation

O= Observation

E = Expected or theoretical frequency

X^2= Chi-square

Decision Rule

If the X^2 calculated from observation in each of test is greater than the critical value of 0.05 (95%) level of significance, the null hypothesis (Ho) will be rejected while alternative hypothesis (Hi) will be accepted. If otherwise, alternative hypothesis will be rejected and null hypothesis (Ho) will be accepted.

Items of the Questionnaire used in testing the Hypothesis

Items 1, 4, 5, 8 and 16 were used to test first hypothesis;3 and 9 for the second;1, 4, 6 and 15 the third and 10, 11, 17 and 20 for the fourth.

Hypothesis I

Ho: Women's participation in agriculture does not boost food security.
Hi: Women's participation in agriculture does boost food security.

Table 3.A: Item 1, 4, 5, 8 and 16Table

Item	SA	A	D	SD
1	20	35	10	10
4	20	35	5	15
5	30	20	15	10
8	15	36	10	14
16	22	28	18	7
Total	**107**	**154**	**58**	**114**

Table 3.B: Chi-Square Table

O	**E**	**O – E**	**$(O – E)^2$**	**$(O – E)^2/E$**
107	108.25	-1.25	1.56	0.14
154	108.25	45.75	2093.06	19.33
58	108.25	-50.25	2525.06	23.33
114	108.25	5.75	33.06	0.30
				43.10

Degree of freedom = (r – 1)(c – 1)
Where r = row total, c = column total
Level of significance = 0.05

r = 5, c = 4

Degree of freedom = (5 – 1)(4 – 1) = 12

Tabulated chi-square = 21.026
From table 3B, calculated chi-square= 43.1

Since, the X^2 calculated (43.1) is greater than the critical value of X^2 tabulated (21.026). Null hypothesis (H0) is rejected which states that women's participation in agriculture does not boost food security. The alternative hypothesis (H1) is accepted which states that women's participation in agriculture does boost food security.

Hypothesis II

Ho: Women's participation in agriculture does not lead to self-reliance.
Hi: Women's participation in agriculture leads to self-reliance.

Table 3C: Item 3 and 9Table

Item	SA	A	D	SD
3	17	32	12	14
9	23	31	16	5
Total	**40**	**63**	**28**	**19**

Table 3D: Chi-Square Table

O	E	(O – E	$(O - E)^2$	$(O - E)^2/E$
40	37.5	2.5	6.25	0.16
63	37.5	25.5	650.25	17.34
28	37.5	-9.5	90.25	2.40
19	37.5	-18.5	342.25	9.12
			29.02	

Degree of freedom = (r – 1)(c – 1)
Where r = row total, c = column total
Level of significance= 0.05
r = 2, c = 4

Degree of freedom = (2 – 1)(4 – 1) = 3

Tabulated chi-square = 7.815
From table 3D, calculated chi-square= 29.02

Since, the X^2 calculated (29.02) was greater than the critical value of X^2 tabulated (7.815). Null hypothesis (H0) was rejected which states that women's participation in agriculture does not lead to self-reliance. The alternative hypothesis (H1) was accepted which states that women's participation in agriculture leads to self-reliance.

Hypothesis III

Ho: Women's participation in agriculture does not lead to economic recovery.
Hi: Women's participation in agriculture leads to economic recovery.

Table 3.E: Item 1, 4, 6 and 15Table

Item	SA	A	D	SD
1	20	35	10	10
4	20	35	5	15
6	15	33	13	14
15	13	35	10	17
Total	**68**	**138**	**38**	**56**

Table 3F: Chi-Square Table

O	**E**	**O – E**	**$(O - E)^2$**	**$(O - E)^2/E$**
68	75	-7	49	0.65
138	75	63	3969	52.92
38	75	-37	1369	18.25
56	75	-19	361	4.81
				76.63

Degree of freedom = (r – 1)(c – 1)

Where r = row total, c = column total
Level of significance = 0.05

r = 4, c = 4

Degree of freedom = (4 – 1)(4 – 1) = 9

Tabulated chi-square = 16.919
From table 3C, calculated chi-square= 76.63

Since, the X^2 calculated (76.63) was greater than the critical value of X^2 tabular (16.919). Null hypothesis (H0) is rejected which states that women's participation in agriculture does not lead to economic recovery. The alternative hypothesis (H1) was accepted which states that Women's participation in agriculture leads to economic recovery.

Hypothesis IV

Ho: Women do not participate more than men in agricultural activities.
Hi: Women do participate more than men in agricultural activities.

Table 3G: Item 10, 11, 17 and 20Table

Item	SA	A	D	SD
10	10	10	25	30
11	15	19	20	21
17	16	30	9	20
20	12	30	15	18
Total	**53**	**89**	**69**	**89**

Table 3H: Chi-Square Table

O	E	O – E	$(O – E)^2$	$(O – E)^2/E$
53	75	-22	484	6.45
89	75	14	196	2.61
69	75	-6	36	0.48
89	75	14	196	2.61

12.15

Degree of freedom = (r – 1)(c – 1)
Where r = row total, c = column total
Level of significance= 0.05

r = 4, c = 4

Degree of freedom = (4 – 1)(4 – 1) = 9

Tabulated chi-square = 16.919
From table 3 E, calculated chi-square=12.15

Since, the X^2 calculated (12.15) was less than the critical value of X^2 tabular (16.919). Null hypothesis (H0) is accepted which states that women do not participate more than men in agricultural activities. The alternative hypothesis (Hi) was rejected which states that women participated more than men in agricultural activities.

Conclusion

Based on the findings of this study, it was concluded that women's involvement in agriculture led to food sufficiency, self-reliance and economic recovery in Afijio Local Government of Oyo State. However, women's participation in agriculture was not as significant as that of men.

Recommendations

Based on the findings of the study, the following recommendations were made:

- To sustain women's contribution to food sufficiency, they should be encouraged to participate more in farming activities by way of easy access to finance, farmland allocation and inputs among others. In this regards, the government should play a leading role.
- Formation of women farmers association should be initiated and encouraged in Afijio Local Government. This would provide an ample opportunity for women farmers meeting to discuss issues affecting them and to access information on various agricultural activities.
- One of the viable means to empower women is through agricultural intervention programme. In this regard, women should be exposed to agricultural extension education. This would enable women to acquire necessary skills to carry out farms' operation such as agricultural production and processing.
- Government should make farming an attractive and a lucrative business. This can be done by making ready market available for farms' produce both at home and abroad and ensuring price stability of the produce.

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