



GENDER AND AGRICULTURAL DEVELOPMENT IN DELTA STATE, NIGERIA: AN ANALYSIS OF RURAL WOMEN'S CONTRIBUTIONS AND CHALLENGES

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ABSTRACT

The study examined Gender and Agricultural Development In Delta State, Nigeria: An Analysis of Rural Women's Contributions and Challenges. Multi-stage sampling procedure was used in selecting 128 respondents. Data were collected using structured questionnaire and analyzed using descriptive statistics such as mean, percentages and likert scale. The results revealed that the mean age of the respondents was 28years with mean household size of 7persons. Majority of the respondents were married with many of them having primary school level of education as their highest level of education and with mean years of farming experience being 6.2years. Agricultural activities performed by the respondents that helped in agricultural development included sourcing for seeds from ADP, use of family labor on the farm, practicing soil conservation tillage. The respondents perception about agricultural development showed that it was a profitable enterprise for women farmers to venture in, they also believed that women farmers participating in agriculture positively impacted their productivity and output and women farmers have the potential to significantly contribute to the sustainable development of the agricultural sector in the study area. Women farmers faced constraints like lack of safety in rural areas, lack of capital, lack of training, and no gender based programs. It is recommended to increase the awareness of the important role that women farmers play in agricultural development and to lessen constraints by enacting laws providing safety, credit, trainings and gender based programs, cheap labor and protecting land rights so women can function better in the study area.

Keywords: Women, Farmers, Agricultural, Development, Constraints

INTRODUCTION

In Nigeria, traditionally, women are regarded as homemakers, who oversee and coordinate the affairs and activities of the home while their husbands and children go out to do farm work, but at home however, they are not idle as they engage in manual processing of food crops, and other farm produce in addition to their housekeeping (Lawanson, 2008). Women are also saddled with most of the tasks in agricultural production but the benefit gained by them are not commensurate with their man-hours, they are hardly given attention in the area of training and visiting by extension agents with improved technologies. Banks hardly grant them loans and they are hardly reached with improved seeds, fertilizer and other inputs (Damisa, 2007). Lawanson (2008) stated that Nigerian women have worked side by side with men in agricultural production with some marked division of labor between them. The men perform the tedious tasks of felling trees, gathering and burning of bushes and making ridges while women are involved in planting of seeds particularly food crops, harvesting, transportation, processing and selling of farm products. Damisa (2007) pointed out that various researchers have conducted studies on the contribution of women to agricultural production in the country; he suggested that women's contribution to farm work is as high as between 60 and 90 percent of the total farm tasks performed. The contribution of the women ranges from such tasks as land cleaning, land-tilling, planting, weeding, fertilizer/manure application to harvesting, food processing, threshing, winnowing, milling, transportation and marketing as well as the management of livestock. Sharon (2008) viewed that both women and men plays critical roles in agricultural production throughout the world, producing, processing and providing the food we eat. Women make up half the rural population and they constitute more than half of the agricultural labor force. Rural women in particular are responsible for half of the world's food production and produce between 60 –



80 percent of the food in most developing countries, yet despite their contributions to global food security, women farmers are frequently underestimated and overlooked in developing countries (World Bank, 2008).

METHODOLOGY

The Study Area

The study was conducted in Delta State, Nigeria, which is largely an agricultural based State. The State is located at longitude 5°00 and 6°00 East of the Greenwich Meridian and latitude 5° 00' and 6°30' North of the Equator. Delta State has twenty-five (25) LGAs, with a population of 7.8million people as at 2024. It is bordered on the North by Edo State, the East by Anambra and Rivers States and the South by Bayelsa State while to the West by bright of Benin which covers about 160 kilometers of the State's coastline. Crops grown in the State are oil palm, yams, and cassava, while fishing and heliculture are also practiced in the State.

Sampling Technique and Sampling Size

Multi-stage sampling procedure was employed for this research with four Local Government Areas being purposively selected namely; Ukwuani, Bomadi, Aniocha South and Isoko North LGAs due to the high prevalence of women farmers. In each LGA, four communities were randomly selected, in each community eight (8) respondents were also randomly selected to make a sample size of a hundred and twenty eight (128) respondents for the study.

Method of Data Collection

To accomplish the stated objectives of this study, a well-structured questionnaire was administered to the rural women in the study area to fill with an interview schedule which was used to extract both primary and secondary data from the respondents. Rural women were questioned pertinently about their involvement in agriculture and economic growth in order to gather data.

Method of Data Analysis

Descriptive statistics such as mean, frequency distribution, percentages and likert scale were used to analyze the objectives of this study; to describe the socio-economic characteristics of the respondents and identify the constraints encountered by the respondents on agricultural development, frequency distribution and percentages were employed, to determine the agricultural activities performed by the respondents and examine the perception of the respondents on agricultural development likert scale was employed. A five point likert scale was used to determine the agricultural activities performed by the respondents, and to examine the perception of the respondents on agricultural development. To obtain the mean cut off point, the scored responses were multiplied by each weight and divided by the responses pooled together with the decision being $(5+4+3+2+1=15/5=3)$. Implying that any agricultural activity and perception of the respondents with mean score of 3.0 and above was a major agricultural activity and perception of the respondents on agricultural development while any mean score of less than 3.0 was not a major agricultural activity and perception on agricultural development in the study area.

RESULTS AND DISCUSSION

Socio-economic Characteristics of the Respondents

According to the findings in Table 1, about 29.7% of respondents in the study area were between the ages of 31 and 40 years, closely followed by those between the ages of 21 and 30 years with 28.1%. Those between the ages of 41 and 50 years were just 17.2%, while those over 51 years made up just 15.6% of the respondents. According to this result, women farmers in the study area are still comparatively active, gaining more production and management experiences and skills, and so being able to adjust to more demanding production tasks. This result is in line with Anugwo and Egwue, (2024) who asserted that younger women participate in more tedious farm operations than older ones in the rural areas.

According to Table 1 results, 25.0% of respondents in the study area were unmarried, 40.6% were married, 16.4 % were divorced the remaining 18.0% were made up of widows and the separated. This implies that since most of the respondents were married, they would contribute more labor to all



of their farming activities. This result is inline with findings by Yokying and Lambrecht (2020) who posited that farmers being married creates room for fairly enough hands on labour. Table 1 also reveals that 25.8% of respondents had a household of 1 to 5 people, 39.1% had a family size of 6 to 10 people, and 19.5% had a household size of 11 to 15 persons while just 15.7% had household size of 16 persons and above. Given that most of them had a good number of persons in their households, the result implies that the farmers might not need to hire additional workers in order to function efficiently and the finding conforms to the work of Ankrah *et al*, (2020) and Abdisa *et al*, (2024). The result in Table 1 further revealed that 12.5% of respondents had no formal education, about 39.8% had only completed primary school, with another 25.8% having completed secondary school, while 21.9% had tertiary level of education. These findings suggest that the respondents' high literacy levels made them more capable managers. The result is consistent with the findings of Amusa *et al*. (2022), who claimed that education is essential for growth management. Additionally, Table 1 revealed that 25.0% of the respondents had 1–5 years of experience in their agricultural fields, 39.1% had 6–10 years of farming experience, and 19.5% of the women farmers had 11–15 years level of experience on the farm, and just 16.4% had been on the farm for above 16 years in the study area.

Table 1: Distribution of the Respondents based on the Socio-economic Characteristics in the Study Area

Socioeconomic characteristics	Frequency	Percentage %	Mean
Age			
<20	12	9.4	
21-30	36	28.1	
31-40	38	29.7	
41-50	22	17.2	
>51	20	15.6	28years
Marital status			
Single	32	25.0	
Married	52	40.6	
Divorced	21	16.4	
Others	23	18.0	
Household Size			
1-5	33	25.8	
6-10	50	39.1	
11-15	25	19.5	
>16	20	15.6	7persons
Level of Education			
No Formal Education	16	12.5	
Primary	51	39.8	
Secondary	33	25.8	
Tertiary	28	21.9	
Farming experience			
1-5	32	25.0	
6-10	50	39.1	
11-15	25	19.5	
>16	21	16.4	6.2years
Total	128	100	

Source: Field Survey, 2025

Agricultural Activities Performed by the Respondents

From Table 2, the majority of the respondents strongly agreed that they obtained seeds from the ADP as agricultural inputs in the study area and was ranked first-place with a mean score of (3.695). The results also indicated that respondents also used family labor on their farms and was



ranked second-place with a mean score of (3.484). With a mean score of (3.414) and ranked third-place, respondents indicated that they practiced soil conservation tillage on their farms. Control of pests and diseases on the farm using chemical method was ranked fourth-place with a mean score of (3.320), indicating that it was a good farm activity adopted by the respondents. With a mean score of (3.304) and ranked fifth-place, the respondents also showed they used irrigation systems on the farm. Similarly, with a mean score of (3.281) and ranked sixth-place, crop rotation was practiced by the respondents as an agricultural activity and with a mean score of (3.140), the respondents made more use of organic fertilizers more than inorganic fertilizers in the study area and ranked seventh-place in the study area. Implying that all the agricultural activities performed by the respondents were major activities as they all had a mean score of above 3.0 in the study area, this result is consistent with the findings of Ankrah *et al*, (2020) who worked on Gender Access to Productive Resources, Evidence from Smallholder Farmers in Awutu Senya West District of Ghana.

Table 2: Agricultural Practices Performed by the Respondents

Agricultural practices by respondents	SA	A	N	D	SD	Mean	Ranking
Practice of crop rotation on the farm as farm technique	30	32	25	26	15	3.281	6 th
Practice of soil conservation tillage on the farm as agricultural technique	35	31	28	20	14	3.414	3 rd
Usage of organic fertilizer more than inorganic fertilizer	29	27	26	25	21	3.140	7 th
Use of irrigation systems on the farm	37	28	16	31	16	3.304	5 th
Use of chemical methods to control pest and diseases on the farm	40	21	28	18	21	3.320	4 th
Use of family labor on the farm	49	14	30	20	15	3.484	2 nd
Sourcing seeds from ADP	50	31	21	10	16	3.695	1 st

Source: Field Survey, 2025. *SA-Strongly Agreed, A-Agreed, N-Neutral, D-Disagree, SD-Strongly Disagree

Perception of the Respondents about Agricultural Development

With a mean score of (3.420) and ranked first-place, Table 3 shows that the majority of respondents indicated that agriculture was profitable and as such viewed as a venture, women can participate in. Furthermore, as indicated in the second-place rank and with mean score of (3.390), respondents strongly believed that women farmers participating in agriculture positively impacts their productivity and output in the study area. Additionally, with a mean score of (3.359) and ranked third-place, rural women had the potential to contribute to sustainable agricultural development in the study area. The respondents believed the government should provide targeted support and incentives to encourage the participation of rural women farmers in agriculture and it had a mean score of (3.289) and was ranked fourth-place. With a mean score of (3.234) and ranked fifth-place, the respondents recommended that the government should offer the necessary incentives and support to promote rural women's involvement in agriculture so as to overcome the challenges and barriers in accessing resources and opportunities in agriculture. With a mean score of (2.945) and ranked eleventh-place, the results suggested the society should recognize and appreciate the valuable contributions of rural women in agriculture. Furthermore, with a mean score of (2.875) and with the lowest ranking of twelfth-place, efforts should be made to involve rural women farmers in decision making processes related to agricultural development in the study area, this result is consistent with the findings of Bello *et al*, (2021), who worked on Gender Decomposition in Smallholder Agricultural Performance in Rural Nigeria.

Table 3: Perception of the Respondents on Agricultural Development

Perception questions on agricultural development	SA	A	N	D	SD	Mean	Ranking
Do you think agriculture is profitable for women farmers	34	32	33	13	16	3.420	1 st
Do you think agriculture has a place for women farmers	31	30	27	14	26	3.203	6 th
Do rural women farmers play a crucial role in the agricultural development	25	35	25	18	25	3.132	9 th
Does the involvement of rural women farmers in agricultural activities positively impact the overall productivity of the agricultural sector in the study area	35	30	30	16	17	3.390	2 nd
Do rural women farmers face significant challenges and barriers in accessing resources and opportunities in agriculture	30	30	28	20	20	3.234	5 th
Does providing education and training opportunities specifically tailored for rural women farmers enhance their contribution to agricultural development	30	20	29	19	30	3.007	10 th
Should the society recognize and appreciate the valuable contributions of rural women in agriculture	25	28	20	25	30	2.945	11 th
Is access to financial resources and credit a key factor in empowering rural women to engage in agricultural activities	30	38	16	16	28	3.203	6 th
Should the government provide targeted support and incentives to encourage the participation of rural women farmers in agriculture	34	31	17	30	16	3.289	4 th
Is policies and programs that promote gender equality in agriculture essential for the development of rural women	30	28	20	31	19	3.148	8 th
Should efforts be made to involve rural women farmers in decision making processes related to agricultural development	28	16	16	48	20	2.875	12 th
Do rural women farmers have the potential to significantly contribute to the sustainable development of the agricultural sector	40	20	30	22	16	3.359	3 rd

Source: Field Survey, 2025. *SA-Strongly Agreed, A-Agreed, N-Neutral, D-Disagree, SD-Strongly Disagree

Constraints Rural Women Faced in Agricultural Development

Findings in Table 4 illustrate the overall issue that rural women in the study area face when working in the field of agriculture. Given the current status of the economy in the study area, it was not surprising that one of the main restraints was capital, 54.7% of the respondents believed capital was a major constraint. Every development program needs funding, but because commercial or even agricultural specialized banks charge exorbitant interest rates and require substantial collateral, it has become more and more difficult for farmers to obtain credits from these institutions, also 45.3% of the respondents didn't believe capital was a barrier.

Safety in rural areas is another major concern with 59.4% affirming to this as a barrier in agricultural development. The atmosphere is unsafe for people, particularly farmers, because of the murders committed by gunmen and herdsman while 40.6% didn't affirm it as a major constraint. The research found out that 56.3% of the respondents affirmed, that there are currently no gender based programs about agricultural development in the study area, and there is the need for more of these programs to be held on a regular basis, also 43.7% of the respondents didn't agree there should be regular gender based programs in the study area. Lack of training, lack of access to agricultural inputs, lack of access to land, no access to agricultural inputs and lack of available labor were all viewed as major constraints to agricultural development in the study area and if women farmers could in one way or the other overcome all of them their roles in agricultural development in the study area will be of very high impact. This result conforms to the findings of Tufa *et al.*, (2022), who worked on Gender Differences in Technology Adoption and Agricultural Productivity: Evidence from Malawi



Table 4: Constraints Encountered by the Respondents in the Study Area

Constraints		Frequency	Percentage %
Lack of capital	Yes	70	54.7
	No	58	45.3
Lack of safety of rural areas	Yes	76	59.4
	No	52	40.6
Lack of good roads	Yes	69	54.0
	No	59	46.0
No Gender based programs	Yes	72	56.3
	No	56	43.7
Lack of training	Yes	73	57.0
	No	55	43.0
Access to agricultural inputs	Yes	65	50.8
	No	63	49.2
Access to land	Yes	67	52.3
	No	61	47.7
No Access to agricultural information	Yes	68	53.1
	No	60	46.9
Lack of available labor	Yes	78	61.0
	No	50	39.0
Total		128	100

Source: Field Survey, 2025.

CONCLUSION AND RECOMMENDATIONS

Educated and married with a family size of 1 to 5 persons and a very good level of agricultural experience predominate among the rural women involved in agricultural development in the study area. Just a few women lacked formal schooling. Rural women were essential to the production, processing, winnowing, milling, storage, marketing, and distribution of food, but they confront a number of obstacles, including lack of funds that forces them to borrow from relatives and cooperatives. Insecurity-related safety issues were a major issue, especially on the farms. Urbanization also made it more difficult to access agricultural land, which reduced the amount of land available for cultivation. If provided sufficient incentives and gender equality, women generally will have considerable capacity to sustain agricultural productivity and family income despite all the constraints and according to the women respondents, agriculture is seen as a profitable enterprise in the study area. It is advised to host seminars for women farmers to engage with researchers and subject matter experts while discussing their unique technical difficulties. It is crucial to encourage women to pursue large-scale farming beyond subsistence, as this will help them generate a lot of capital after every harvesting season. It is crucial to increase awareness of the important role that women farmers play in the production of food and to lessen constraints by enacting laws protecting land rights, acknowledging unpaid work, and improving access to credit. Women can manage their finances for their entrepreneurial endeavors more efficiently if training programs and initiatives are carried out in rural areas. It would be advantageous to provide easily accessible venues, such as drop-in sessions, for women to get guidance on farming methods and company administration. It is recommended that rural women form cooperative groups, pool resources for mutual support, and provide marketing services, loans, agricultural inputs and build rural storage facilities together which would successfully stop their agricultural produce from spoiling and wasting in the study area.

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