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ADVOCACY OF RURAL WOMEN PARTICIPATION IN COMMUNITY ORGANIZATIONS: A STRATEGY TO INCREASED ECONOMIC EMPOWERMENT AMONGST WOMEN IN SOUTH-SOUTH STATES, NIGERIA

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Abstract

A study was carried out to advocate and examine participation of rural women in community organization in south - south states, Nigeria. The study consisted 295 respondents drawn through the use of multi-stage random sampling technique. Descriptive and inferential statistics were respectively used to analyse the objectives and hypotheses of the study. Results showed that the averages of farming experience, household size, years of membership in groups, farm size to be 6.71 years, 6 persons, 6.07 years and 2.48ha. respectively. Most (45.76%) of them are effective in their groups and are willing to continue their participation in FLOs. Financial and material benefits, rural women farmers' empowerment and educating the women were some of the factors enabling participation in FLOs. Average income earned before and during rural women participation in their various community groups was ₦275, 810.79 and ₦213, 266.54 respectively. Impliedly, participation in community groups have resulted to an average increase of ₦62, 544.25. Economic characteristics such as farming experience, farm status, household size, period of membership of FLOs, credit provision and access to extension services were found to significantly influence rural women farmers' level of effectiveness in FLOs. The study thus recommended that there is a need to empower the women beyond all limits through provision of training skills and needed materials so that they can be encouraged to participate in FLOs even more than the extent they were doing in the past.

Keywords: Rural women farmers, farmer's local organizations, economic empowerment, farm production, farm income, participation

Introduction

The role of women both at local and international level cannot not be overemphasized. Nnadi *et al.* (2021) stated that women make essential contributions to the agricultural and rural economies and this applies to both developed and developing nations. In the Nigerian scenario, Izekor and Ilavbarhe (2021) stated that Nigerian women form an indispensable part of human resources for development and the reason adduced for this was that without their contributions, the economy may not be able to advance to the next level. Izekor and Ilavbarhe (2021) further stated that in the African context, women form the majority (52%) of the total population, form as large as 75% of the farming population and also produce and market about 60 – 80% of the food meant for the people. In summary, Izekor and Ilavbarhe (2021) concluded that through the activities carried out by women in the farm, they have been able to make significant contribution to economic development and that such have been achieved through job creation and economic growth.

Despite the lofty role of women in our society, their importance to food production and rural development has still not been appreciated or valued hence Ugboaja (2021) narrated that the participation of rural women in the rural development has been less encouraging when compared to their number and strength. The performance of women and their capabilities have been under

check or constrained by their male counterparts (Ugboaja, 2021). The author however stated that women have no direct control over their family's resources and are made to take permission from their husbands before being allowed to make use of same resources. These conditions they found themselves have to a large extent affected the development of their capacities in particular and their communities in general. Ilori (2022) stressed the need for women empowerment in order to overcome the many challenges confronting them, and such can be achieved through their participation in community organizations.

Kuponiyi (2019) emphasized that the organizations execute community development programmes that help enhance members wellbeing, improve on their economic, social, environmental and cultural welfare. The community development organizations are made up of persons who are either young, women or men and the groups could either be described as cooperative societies, community based organizations, farmers organizations, thrift societies, community based extension organizations, and in addition most of these groups share common goals which are not unconnected to with empowerment of their members (Okwuokenye *et al.*, 2023). Okwuokenye *et al.* (2023) claimed that farmers participation in community organizations would allow and encourage members, using their own resources in their own way address their needs and interests and consequently result increased productivity and income.

One of the most reliable ways of overcoming challenges limiting women from participating in social groups is their genuine participation in the group they belong and such enables them to break away from the limiting factors and then permit them to participate and function well in their groups while meeting up with their expectations. It is against this background, the study advocates for rural women participation in community organizations so that they can be necessarily be empowered and be able to meet up with their numerous roles both at the family and community level. It is on this note that the study was carried out to; describe the economic characteristics of the women in the study area, determine the effectiveness of rural women participation in the local groups they belong, assess the rural women farming income before and during their participation in community groups, determine the women that are willing and those not willing to continue participating in community groups and identify the enabling factors to women's participation in community organizations.

Hypothesis of the study

Hoi: Rural women economic characteristics have no significant relationship with their level of effectiveness in the farmers local organizations they belong.

Hoi: There is no significant difference between rural women farmers that are willing and those not willing to continue participating in farmers local organizations.

Methodology

Area of Study

The study was carried out in Edo and Delta States. They are both among the South-South States (Edo, Delta, Bayelsa, Cross River, Delta, Edo and Rivers States) of Nigeria.

Edo State

Edo State was carved out of defunct Bendel State in August 1991 and it belongs to South-South States of Nigeria. It is made up of 18 local government areas (LGAs) with Benin City in Oredo LGA as its capital. The estimated population size as at 2022 according to NPC (2022) was 4,777,000 people spread over about 19,639.7 square kilometers (Edo State, Nigeria - Population). The major towns that are well known in the State include: Benin, Auchi, Ekpoma, Uromi, Irrua, Okpella, Agenegbode, etc. The use of pigeon language is common, though the official language is English, with Edo language as their native language. The people of Edo State

are popular in Arts and crafts and also rich in culture. The main occupation of most of the people is farming and they are also rich in agricultural production. Edo State is blessed with several mineral resources like quartzite, marble, limestone, lignite, gold. Petroleum is found in Ovia and Orhionmwon areas of the State (Okwuokenye and Akintoye, 2015).

Delta State

Delta State, one of the six States in the South–South geopolitical zone of Nigeria is the remnant of the defunct Bendel State and it was created on 27th August, 1991. The State has 25 LGAs with the capital seat at Asaba in Oshimili South LGA. The state occupies a land size of 17,698 Km² and the estimated population size as at 2022 been 5,636,100 people (Delta State, Nigeria - Population). Most of the inhabitants are farmers and are good in agricultural production activities like production of crops, fish and livestock production. Some of them are into oil prospecting and civil service jobs (Okwuokenye and Akintoye, 2015). Ethnic and tribal groups of the State are mostly the: Isoko, Ika, Urhobo, Itshekiri, Izon, Ukwuani and Aniocha speaking people. The area is known to have two distinct seasons which are the dry and the rainy seasons. The state is described to have a monsoon climate with a yearly temperature of 28.64⁰C (83.55⁰F), its average rainfall is 241.52mm (Delta Climate Summary, 2022).

Validation of Research Instrument

The research instrument (questionnaire and interview schedule) was validated using the jury method. This involved the presentation of the research instrument to experts in the field of Agricultural Economics and Extension for corrections and criticisms to suit the purpose vis-à-vis the stated objectives of the study.

Sampling Techniques

The study employed multi-stage random sampling technique which was used in selecting the sample of the study. The first stage had to do with the purposive selection of Edo and Delta States This purposive selection was due to the fact that they are contiguous States with similarities in their cultural, traditional and socio-economic characteristics. The second stage involved the random selection of two (2) agricultural zones from each of the States, thus making it four zones that were used for the study. Stage 3 involved the random selection of two (2) Local Government Areas (LGAs) from each agricultural zone and this resulted to making a total of eight (8) LGAs selected for the study. Next was the random selection of three (3) communities / villages from each of the LGAs and this made the communities used to be twenty-four (24) (Stage four). It was from each of these villages that thirteen (13) farmers were randomly selected (stage 5). The researcher ensured that the women used for the study were farmers and are members of any farmers organization's that is still functional in their community where they live. The total number of farmers then became three hundred and twelve (312) and they were the ones administered with the question instrument. From the returned instruments, two-hundred and ninety-five (295) of them suitable for analysis provided the primary data of the study.

Data Analytical Techniques

The study adopted the use of descriptive and inferential statistics. Descriptive statistics involved the use of frequency, percentage and mean. They were used to analyze respondents' economic characteristics, effectiveness of members in their groups, assess respondent's farm income before and during membership of community groups and willingness to continue participating in community groups. Enabling factors to respondents' participation in community groups were analyzed using a five – point Likert type scale, coded 5, 4, 3, 2 and 1 for Strongly Agree, Agree,

Undecided, Disagree and Strongly Disagree respectively. The weighted mean score of 3.0 (which was obtained as follows: $[5 + 4 + 3 + 2 + 1] / 5$) was used to determine if the farmers agreed to the enabling factors or not. Factors whose value are equal to 3.0 and above were considered as enabling factors to women participation in community groups. On the contrary, the factors that have values of less than 3.0 were regarded as non-enabling factors.

Inferential statistics involved the use of Logit regression and Binomial test statistics. Hypothesis 1 (rural women economic characteristics have no significant relationship with their level of effectiveness in the community groups they belong.) was analyze with the use of Logit regression. Logit analysis was used to position and predict rural women farmers level of effectiveness with their economic characteristics. The variables in the model were measured as and thus expressed below as:

Y = Level of effectiveness (dummy: high = 1; low = 0)

X₁ = Farm size (measured in hectares)

X₂ = Farming experience (years)

X₃ = Period of membership of farmers local organization (measured in years)

X₄ = Farm income (measured in naira, ₦; high = 1; low = 0)

X₅ = Household size (number of people living and feeding together)

X₆ = Farming status (full time = 1; part time = 0)

X₇ = Rating of farmers output (dummy: high = 1; low = 0)

X₈ = Credit provision (Dummy: credit provision = 1; non-credit provision = 0)

X₉ = Access to extension services (Dummy: access = 1; non-access = 0)

The level of effectiveness was grouped into two mutually exclusive and exhaustive categories by means of a probability distribution. The model can be represented explicitly by taking it as a probability, p, and making its logarithm depend linearly on the independent variables:

$$\text{Log } P = a + b_1X_1 + b_2X_2 + b_3X_3 + b_4X_4 + b_5X_5 + b_6X_6 + b_7X_7 + e. \text{-----(1)}$$

This is a situation where P approaches 0.

Similarly, at the high end of the scale where Y approaches 1, Log depends linearly on the independent variables. When both ends of the scale are combined with the model, we get;

$$\text{Log } P. \text{ log } (1+P) = a + b_1X_1 + b_2X_2 + b_3X_3 + b_4X_4 + b_5X_5 + b_6X_6 + b_7X_7 + e. \text{----- (1)}$$

That is $\log \left\{ \frac{P}{1-P} \right\} - a + b_1X_1 + b_2X_2 + b_3X_3 + b_4X_4 + b_5X_5 + b_6X_6 + b_7X_7 + e$ is called the odds.

Thus, $\log \left\{ \frac{P}{1-P} \right\}$ is called the log odds or logit. The classification procedure is as follows if

$\log \left\{ \frac{P}{1-P} \right\}$ tends to zero, we classify the individual farmer as belonging to group 1 (low

effective), and if $\log \left\{ \frac{P}{1-P} \right\}$ tends to one, we classify the individual farmers as belonging to

group II (high effective). The classification boundary will then be the locus of points where $a + b_1X_1 + b_2X_2 + b_3X_3 + b_4X_4 + b_5X_5 + b_6X_6 + b_7X_7 = 0.5$.

The logit score, $\log \left\{ \frac{P}{1-P} \right\}$ is estimated by the use of Maximum Likelihood Estimate (MLE)

procedure. The logit coefficient b's are estimated by solving simultaneous equations using algebraic matrix form.

Binomial test statistics was used to analyze hypothesis two (there is no significant difference between rural women farmers that are willing and those not willing to continue participating in farmers local organizations). The Binomial test statistics was used to determine the significant difference in proportion of respondents' willingness and non-willingness to participate in community organizations. The formula for binomial distribution is given as follows:

$$B(x;n,p) = nC_x * p^x * (1-p)^{n-x} \text{ -----(3)}$$

Where:

b = binomial probability; x = total number of successes (livelihood status before and during their membership); p = probability of success on an individual trial; n = number of trials

Results and Discussion

The economic characteristics of the rural women farmers is shown in Table 1. Results revealed that the respondents were into various occupations which they considered primary to them. The primary occupation most (55.59%) of the respondents were into was crop farming. The result implies that, though the respondents derived economic livelihood from various sources, but there was dominance in crop farming and this may be connected to the fertile soil found in the area and the less risk associated with crop farming. This result is supported by findings of Vabi and Ibrahim (2022) who claimed that rural residents are into crop farming as their prime source of income generation. Results also revealed that most (57.28%) of the respondents were into full-time farming. This may be adduced to the non-availability of employment opportunities in the rural areas coupled with the fact that the women have people whose economic responsibilities are theirs.

Majority (45.42%) of the rural women farmers had household size of between 4 – 6 persons. The average household size of the respondents was about 6 persons in their households. About 24.07% of them had less than 4 while about 30.50% had more than 6 persons in their households. The result implies that the respondents are responsible since they have people who depend on them for their economic livelihood. This result is in consonance with Nwandu (2022) who observed similar household size amongst majority of farmers in Delta State. Farming experience of the rural women farmers showed that their average period of experience in farming was 6.71 years. Majority (36.27%) of them had between 7 – 9 years' experience with about 46.78% and 16.95% respectively having less than 7 and more than 9 years farming experience. The result implies that the women are experienced in their farming operations. This result compares favourably with findings of Nwandu (2022) that revealed similar farm experience amongst women in same area. Results on farm size revealed that most (53.22%) of them had between 1 – 3ha. the average was 2.48ha. with about 26.78% having less than 1 ha. while about 20% had more than 3ha. Impliedly, the farmers are described as small-scale farmers since they farm on land that is less than 4 ha. The result is in agreement with that of Zakari, *et al.* (2021) which described our local farmers as small-scale farmers. The average years of membership of social society/club by the respondents was 6.07 years and most (41.02%) of them had been members for a period of between 7 – 9 years. A larger fraction (50.51%) had less than 7 years while 8.47% had more than 9 years membership experience. Going by the result, the respondents could be described to have spent good period of time as membership of the social society/club. Such experience is sufficient to function and operate well in the groups they belong. Similar finding was observed by Akpomedaye (2023) who stated that rural farmers participate well and have experience in the groups they belong.

Most (85.76%) of the women farmers indicated that they have been provided with credit at one point in time or the other. This implies that the groups they belong are meeting up with one of the main aim or functions they were established to achieved. The result could be explained that

rural women farmers in the study area participate in groups mainly for the purpose to access credit. This assertion is in consonance with the study of Akpomedaye (2023) and that of Nwandu (2022) who stressed that women farmers majorly get their credit from cooperative societies. Result on access to extension services showed that most (74.92%) of the rural women farmers had no access to extension services. This may be as a result of the inaccessibility of some of the areas where the farmers are or the few numbers of extension agents which has really resulted to a wider gap in farmers-extension agent ratio. The implication of this scenario is that the output of the farmers is likely to be in shortfall compared to if the reverse was the case. Poor accessibility of women to extension services was reported by Aliyu *et al.* (2022) which makes it align with this result. On respondents rating of their output, most (39.66%) of the women farmers rated their output to be high. About 11.53%, 28.14%, 10.61% and 4.07% (table?) of the respondents rated their output to be very high, average, low and poor. Since a larger fraction (about 85.33%) of the respondents rated their output to be of average and above, it therefore implies that the farmers output is encouraging to them and that may be ascribed to the ability of the groups in meeting up with their roles or responsibilities.

Table 1: Economic characteristics of respondents. N = 295

Economic characteristics	Category	Freq.	Percentage	Mode / Mean
Primary occupation	Crop farming	164	55.59	
	Fishing	22	7.46	
	Trading	39	13.22	
	Civil service	37	12.54	
	Company workers	25	8.48	
	Self-employed	8	2.71	Crop farming
Farming status	Part-time	126	42.71	
	Full-time	169	57.28	Full-time
Household size	1 – 3	71	24.07	
	4 – 6	134	45.42	
	7 – 9	49	16.61	
	10 – 12	25	8.47	
	> 12	16	5.42	5.72 persons
Farming experience	1 – 3	51	17.29	
	4 – 6	87	29.49	
	7 – 9	107	36.27	
	10 – 12	32	10.85	
	> 12	18	6.10	6.71 years
Farm size (ha)	< 1	69	26.78	
	1 – 3	157	53.22	
	4 – 6	56	17.29	
	7 & above	13	2.71	2.48 ha
Years of membership of society/club	1 – 3	66	22.37	
	4 – 6	83	28.14	
	7 – 9	121	41.02	
	10 & above	25	8.47	6.07 years
Credit provision	Yes	253	85.76	
	No	42	14.24	Yes
Access to extension services	Yes	74	25.08	

Rating of output	No	221	74.92	No
	Very high	34	11.53	
	High	117	39.66	
	Average	83	28.14	
	Low	49	16.61	
	Poor	12	4.07	High

Source: Field survey, 2023

Effectiveness of Rural Farmers Participation in Community Groups

The level of effectiveness of the rural women farmers participation in the different groups they belonged was determined and the result is shown in Table 2. Level of effectiveness was described as to the extent the participants were meeting up with their respondents in terms of paying their dues, abiding to the group's rules, attendance to meetings, contribution in group's discussion and participating in groups activeness. The result revealed that most (45.76%) of the respondents indicated that they were just effective in their group's activities. On a general consideration, a larger fraction (91.19%) of the respondents indicated that their level of participation in their groups was effective, while very few (8.81%) indicated that their level of participation was not effective (see Table 3). Impliedly, the respondents are effective in their various groups and this perhaps is linked to the functionality and roles played by the groups to their members. This result bears striking semblance to the assertion of Usman *et al.* (2022) that cooperative societies are planned to cater for varying needs of her members engaged in agricultural activities.

Table 2: Effectiveness of rural women farmers in their groups

Effectiveness level	Frequency	Percentage	Mode
Very effective	62	21.02	
Just effective	135	45.76	
Averagely effective	72	24.41	
Low effective	18	6.10	
Poorly effective	8	2.71	
Total	295	100.00	Just effective

Source: Field survey, 2023

Table 3: Effectiveness of rural women farmers in their groups

Effective level of participation	Frequency	Percentage	Mode
- Effective participation	269	91.19	
- Not effective participation	26	8.81	
Total	295	100.00	Effective participation

Source: Field survey, 2023

Relationship between farm production output & group performance

The relationship between rural women farmers output and the performance of the group is shown in Table 4. The performance was assessed according to the effectiveness of the farmers local organizations (FLOs) in line with meeting up with their responsibilities to members. Results show that majority (81.02%) of the respondents agreed that there is relationship between their farm production output and the performance of the group they belong. Table 4 also shows that about 13.90% and 8.48% of the respondents respectively disagreed and undecided that there is relationship between their farm production output and the performance of the group they belong. Impliedly, the farmers local organization are effective and meeting up with their responsibilities

to members. This result corroborates that of Usman *et al.* (2022) who noted that members of social groups experience increase in production output, yield and income. The authors also ascribed the difference to some of the benefits derived by members from their participation in the groups they belong.

Table 4: Relationship between rural women farmers farm production output & group performance

Economic characteristics	Category	Freq.	Percentage	Mode / Mean
Relationship between farm production output and group performance	Yes	239	81.02	
	No	41	13.90	
	Undecided	25	8.48	
	Total	437	100.00	Yes

Source: Field survey, 2023

Assessment of Rural Women Farmers Farm Income

An assessment of the rural women farmers farm income was carried out. Table 4 shows the income of the members of the various groups and this was determined by ascertaining their income level in naira (₦) before and during membership of the groups they belong. The result on impact of rural women farmers participation in community groups revealed that the income earned by the farmers before their participation in community groups was lower than the income earned by them during their participation in groups. The result showed that, before the respondents’ participation, most (31.19%) of the farmers earned between ₦200,001 – ₦300,000 while most (32.20%) of them earned between ₦300,001 – ₦400,000 during their participation in their various community group. About 31.52% of the farmers earned less than ₦200,001 while about 37.29% earned above ₦300,000 before participating in community groups. On the other hand, about 39.97% and 27.80% of the farmers respectively earned less than ₦300,001 and more than ₦400,000 during their participation in their various community groups. The average income earned before and during rural women participation in their various community groups was ₦275,810.79 and ₦213,266.54 respectively. The result simply implies that participation in community groups have resulted to an average increase of ₦62,544.25 in income earned by the farmers. The result implies that rural women participation in various community groups has enhanced farming activities of the farmers by bring about increased production and income. The result on enhancement of farmers production and income as a result of participating in community social groups is confirmed by Usman *et al.* (2022) who identified increase in yield, income, easy access to extension services and encouragement of self-help and cooperation as some of the benefits derived from being members of cooperative societies.

Table 4: Distribution of the Assessment of Rural Women Farmers Farm Income

Farm income (₦)	Before membership of social group			During membership of social group		
	Frequency	Percentage	Mean	Frequency	Percentage	Mean
≤ 100,000	28	9.49		17	5.76	
100,001 - 200,000	65	22.03		30	10.17	
200,001 - 300,000	92	31.19		71	24.07	
300,001 - 400,000	81	27.46		95	32.20	
400,001 - 500,000	22	7.46		62	21.02	
> 500,001	7	2.37		20	6.78	
Total	295	100.00	₦213,266.54	295	100.00	₦275,810.79

Source: Field survey, 2023; Difference before and during membership of FLOs = ₦275,810.79 – ₦213,266.54 = ₦62,544.25

Rural Women Farmers Willingness to Continue Participating In Farmers Local Organizations

Results on rural women farmers willingness to continue participating in farmers local organizations is showed in Table 5. It revealed that most (35.25%) of the respondent’s willingness to continue participating was just high. The other rural women farmers willingness to continue participating in FLOs was very high (26.10%), average (23.05%), low (11.86%) and poor (3.73%). On general note, a very high fraction (about 84.4%) of them were willing to continue participating in FLOs while about 15.59% of them were below average in their willingness to continue participating in FLOs. The result implies that most of the farmers are willing to continue participating in rural women farmers organizations. The reason may not be unconnected to the various benefits they are deriving from their high level of participation, which would have eluded them if they were non-participants. Similar results on high level of participation and farmers willingness to participate and continue participating in social group was observed Okwuokenye and Iduseri (2021) and attributed it to impact on the economic development of the members. Usman *et al.* (2022) work also agreed with this result on willingness of rural farmers to participate in social groups since they benefit several

Table 5: Categorization of the Respondents on Their Willingness to Continue Participating In Flos

Levels of willingness to participate in FLOs	Frequency	Percentage	Mode
Very high	77	26.10	
Just high	104	35.25	
Average	68	23.05	
Low	35	11.86	
Poor	11	3.73	
Total	295	100.00	Just high

Source: Field survey, 2023

Enabling Factors of Rural Women Farmers Participation in Farmers Local Organizations.

Table 6 shows the enabling factors that are capable of encouraging or enhancing rural women farmers participation in FLOs. The factors are arranged in the order of the size of their means. Those factors that were agreed as enabling factors to rural women farmers participation in FLOs are however as follows: financial and material benefits (mean = 4.03), empowering women politically and allowing them some level of social exposure (mean = 3.42), educating the women (mean = 3.41) and breaking the barriers of socio-economic issues (mean = 3.32). Other agreed factors include: breaking the barriers of socio-cultural issues (mean = 3.05), leadership status (mean = 3.05), leadership training (mean = 3.05), motivating women by providing them with incentives (mean = 3.01) and issues of organizational change (mean = 3.01)

Financial and material benefits was a major factor enabling the participation of women farmers in FLOs. This factor kind of give the women some kind of economic empowerment that encourages them to participate in groups. The result is supported by Waweru (2015) that financial and material benefits were important to encouraging ruralites in group participation. The issue of empowering women politically will afford them the opportunity to speak on issues that constraint them in where they are and possibly proffer solutions which will go a long way in enabling their participation in groups. Educating the women was observed as an enabling factor because education is seen as a tool that helps to broaden farmers horizon and reasoning and it as well help the farmers to develop skills and instill confidence in them. Breaking the barriers of socio-economic issues which help the farmers to overcome certain constraints and, to broaden the groups and enhance efficiency and production. Organizational changes involve structural and

institutional changes which are needed to promote the enableness of the women in participating actively in the groups they belong. The issues on women empowerment of women, educating the women, socio-economic factors and organizational changes were all supported by findings of Mutongu (2012) who concurred with these results and assertions. Socio-cultural issues may include factors that have to do with the norms, values, interactions, customs, etc. of the community. So, breaking the socio-cultural barrier will enable women who tend to be very traditional, conservative and show strong affinity with their customs and traditions to participate in social groups more. This assertion is in line with that of Asante *et al.* (2017). Leadership status is in line with the fact that those who hold leadership positions associate and participate more in community organizations. Leadership training is another factor that has enabled people to become more aware of how to pilot the affairs of their group, handle the members and derive the benefits that could be reaped in the various groups that exists and thus enable them to participate more in their groups. Leadership status and leadership training was supported by the findings of Derkyi (2021). Motivating women and providing them with incentives is another way of empowering them and it goes a long way in enabling them to participate effectively in their group, reason being that motivating the rural women will arouse their interest and get them more interested and carried along in the group they belong.

Table 6: Enabling Factors to Respondents' Participation in Farmers Local Organizations.

Enabling factors encouraging participation in FLOs	Mean	Standard Dev.	Remark
- Financial and material benefits	4.03*	0.56	Agreed
- Empowering women politically and allowing them some level of social exposure	3.42*	0.52	Agreed
- Educating the women	3.41*	0.57	Agreed
- Breaking the barriers of socio-economic issues	3.32*	0.62	Agreed
- Breaking the barriers of socio-cultural issues	3.05*	0.65	Agreed
- Leadership status	3.05*	0.62	Agreed
- Leadership training	3.05*	0.70	Agreed
- Motivating women by providing them with Incentives	3.01*	0.77	Agreed
- Issues of organization change	3.10*	0.75	Disagreed
- Domestic and family responsibility	2.47	0.78	Disagreed
- Membership experience	1.96	0.77	Disagreed

*Agreed (Mean \geq 3.0); Source: Field survey, 2023

Relationship between Farmers Economic Characteristics and Their Level of Effectiveness in Farmers Local Organizations

Rural women farmers characteristics were considered in determining the level of effectiveness in farmers local organizations. Table 7 shows that the Ordered Logit Model (OLM) was used to analyse the economic characteristics and it revealed that the Chi-Squared value was 62.18 and this shows a high level of significant likelihood ratio statistics ($P < 0.01$) and this indicates a large variation in the economic characteristics of rural women farmers on their level of effectiveness in farmers local organization. The pseudo- R^2 was 65.1% explains the variation in the rural women farmers economic characteristics on their level of effectiveness in farmers local organization they belong. Out of the nine economic characteristics, namely: farm size, farming experience, farm income, farm status, household size, period of membership of FLOs, rating of farmer's output, credit provision and access to extension services, six of them, namely: farming experience, farm

status, household size, period of membership of FLOs, credit provision and access to extension services were significant variables to rural women farmers level of effectiveness in farmers local organization. Farm experience of the respondents had a beta coefficient of 1.461, standard error of 0.033 and a t-ratio of 1.967. The relationship was positive and significant at the 5% level. The result implies that rural women farmers with more years of experience are likely to be more effective to group's activities they belonged. The result is in consonance with those of Okwuokenye and Iduseri (2021) which stated that respondents with more farming experience tend to be more effective in their social groups and this results to them having higher levels of economic empowerment. Respondents farm status had a beta coefficient of 2.280. The standard error was 0.813 while the t-ratio was 1.873. The relationship with level of effectiveness of the rural women in their groups was positive and significant at the 5% level. Since most (57.28%) of the rural women farmers were into full-time farming, it therefore implies that an involvement of more full-time farmers in social groups will lead to more effective participation of the participants in their groups.

The respondent's household size was significant at 1% level and positively related to level of their effectiveness in farmers local organizations. The b-coefficient, standard error and t-ratio was 3.601, 0.178 and 2.911 respectively. The positive relationship is an indication that rural women farmers with larger household size are probably likely to be more effective in the FLOs they belong. This result underscores the findings of Lawal *et al.* (2021) which revealed positive relationship between household size and level of participation which depicts effectiveness in similar social group. Period of membership of FLOs was observed to have beta coefficient of 2.357 with standard error of 0.916 and t-value of 2.614. It has a positive and significant (at the 5% level) relationship. What this implies is that rural women farmers with more years of membership in FLO are expected to have higher level of effectiveness in FLOs. The result is in consonance with that of Ugboaja (2021) who found that increase in the number of years of members in social organization leads to increase in probability and intensity of their participation in their groups. Results on provision of credit (b-coefficient = 0.968, standard error = 1 and t-value = 3.174) shows a positively signed and significant relationship at the 1% level with the level of effectiveness of members in their social groups. The implication of the result is that rural women farmers with more access to credit provision participate more effectively in their social groups. Findings of Okwuokenye and Iduseri (2021) agreed with this result as they did not only state that provision of credit is a main responsibility of social organizations but that it is made available to members who show a high level of effectiveness in the group they belong. The relationship of rural women access to extension services and level of members effectiveness in FLOs was positively signed and significant at the 5% level. The positive sign indicates that farmers rural women farmers with access to extension services are likely to participate more effectively in their group's activities. Assertion of Ngango and Hong (2021) underscores this result as they acknowledged the fact that community group members who are more effective in their groups are those who have more access to extension services.

Table 7: Relationship of Farmers Economic Characteristics and Their Level of Effectiveness in Farmers Local Organizations

Economic variables	B – Coefficient	Standard Error	t-ratio	Prob. level
Constant	48.731	5.623	3.72	
Farm size	0.368	0.221	1.830	2.002
Farm experience	1.461*	0.033	1.967	0.001
Farm income	2.467	1.471	1.001	1.043
Farm status	2.280*	0.813	1.873	0.018
Household size	3.601**	0.178	2.911	0.000
Period of membership of FLOs	2.357*	0.916	2.614	0.003
Rating of farmers output	0.714	0.560	1.374	0.327
Credit provision	0.968**	0.108	3.174	0.011
Access to extension service	2.249*	0.385	1.376	0.006
R ²	0.651			
Chi-square	62.18			
DF	9			
P < 0.05				

*Significant at the 5% level; ** Significant at the 1% level

Source: Field survey, 2023

Test of Difference in Rural Women Farmers Willingness to Continue Participating in Farmers Local Organizations

The relationship of rural women farmers willingness to participate in farmers local organizations is shown on Table 8. The relationship was analyzed using binomial test and the results revealed that a larger proportion (89.83%) of the respondents were willing to continue participating in farmers local organizations. Few (10.17%) of them were unwilling to continue to continue in their social farmers organizations. Result shows that most of the rural women farmers are willing to continue participating in their social groups. The unwillingness stand point of the few respondents may be traced to unpleasant past experience that perhaps relate to the social groups not meeting their needs. In line with the proportion of rural women farmers that are willing (89.83%), it indicated that the rural women farmers that are willing to continue participating in FLOs is significantly high. This implies that the groups are up and doing in line with meeting up with their responsibilities to members. Against this background, the alternative hypothesis (there is significant difference between rural women farmers that are willing and those not willing to continue participating in farmers local organizations) was adopted. This result is in conformity with findings of Okwuokenye and Iduseri (2021) who revealed farmers willingness to participate in social group and attributed it to social group's economic impact on members via increase in farm output, income and access to credit.

Table 8: Categorization of Respondents' willingness to continue Participating in FLOs

Categorization of willingness to continue participating in FLOs	Frequency	Proportion	Prob. level
- Willing to continue participating in FLOs	265	89.83	0.001
- Unwilling to continue participating in FLOs	30	10.17	
Total	295	100.00	

Source: Field survey, 2023

Conclusion and Recommendations

The study advocated and examined rural women farmers in farmers local organizations in South-South States with a focus in Edo and Delta States, Nigeria. It found that most of the rural women

are effective by way of committing their time and resources in their community organizations they belong and this was connected to the several benefits they are deriving from their participation in the groups they belong. The derived benefits were evident in their production output and income earned from their farming activities. The average income earned before and during rural women participation in their various community groups was ₦275,810.79 and ₦213,266.54 respectively and this implies that participation in community groups have resulted to an average increase of ₦62,544.25 in income earned by the farmers. The result implies that rural women participation in various community groups has enhanced farming activities of the farmers which brought about an increased production and income. This accounts for why a very large fraction of the rural women are being willing to continue participating in FLOs. Rural women farmers economic characteristics such as farming experience, farm status, household size, period of membership of FLOs, credit provision and access to extension services were found to significantly influence rural women farmers level of effectiveness in farmers local organization.

Based on findings, the study recommends that:

There is a need to empower the women beyond all limits through provision of training skills and needed materials so that they can be encouraged to participate in FLOs even more than the extent they were doing in the past. Rural women farmers also need to be encouraged to get themselves educated. This can be achieved through free education or adult education programme so that they can inculcate the interest and seen the potential need of what they can benefit from participating in FLOs, and; The socio-economic and cultural barriers limiting the rural women farmers participating in FLOs need to be addressed in friendly manner and see those variables that can to be broken without causing more issues. Believing that doing this will encourage more of their participation in FLOs.

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