SOCIOECONOMIC FACTORS INFLUENCING RURAL WOMEN ACCESSIBILITY TO EMPOWERMENT PROGRAMS IN KOGI STATE, NIGERIA

Ajoke Oluwatoyin Kayode[1], Sijuwade Adebukola Adebayo[2], Stella Ojone Adejoh[3], Adeseye Oluwasikemi Awoyemi[4]

Abstract

The goal of empowerment programs is to promote initiatives aimed at uplifting society's impoverished and disenfranchised citizens, who are typically women and youth. This paper, therefore, examined the socioeconomic features influencing rural women accessibility to empowerment programs in Kogi state, Nigeria. The research is specifically looking at socioeconomic characteristics of respondents, ascertaining the level of effectiveness of empowerment programs on agricultural activities, describe the level of accessibility to empowerment programs and identifying the constraints of empowerment programs. Random and snow ball sampling methods have been combined to gather information from 125 respondents. Descriptive statistics and multiple linear regression were used to analyze data. Average farm size was 2.82 ha, with annual income of 466,000 NGN. Empowerment programs such as Kogi APPEAL and Farmer moni were mostly accessible among women farmers. Marital status, household size, education were significant factors in accessing empowerment programs among women in Kogi state. Therefore, it is recommended that policies and programs that address women farmers' access to empowerment programs assets should be more inclusive.

1 Ajoke Oluwatoyin Kayode, Ph.D., Department of Agricultural Extension and Rural Development, University of Ilorin, PMB 1515, Ilorin, Nigeria, Phone: +234 806 730 93 97, E-mail: kayode.ao@unilorin.edu.ng, ORCID: https://orcid.org/0000-0002-9437-1552

2 Sijuwade Adebukola Adebayo, Ph.D., Department of Agricultural Extension and Rural Development, University of Ilorin, PMB 1515, Ilorin, Nigeria, Phone: +234 816 517 43 09, E-mail: adebayo.sa@unilorin.edu.ng, ORCID: https://orcid.org/0000-0001-9842-2137

3 Stella Ojone Adejoh, Ph.D., Department of Agricultural Economics and Extension, Federal University Lafia, Nasarawa, Nigeria, Phone: +234 803 597 25 30, E-mail: stelloken@yahoo.com, ORCID: https://orcid.org/0000-0002-3692-020X

4 Adeseye Oluwasikemi Awoyemi, Ph.D., Department of Agricultural Extension and Rural Development, University of Ilorin, PMB 1515, Ilorin, Nigeria, Phone: +234 806 592 4120, E-mail: awoyemi.oa@unilorin.edu.ng, ORCID: https://orcid.org/0000-0002-5940-2528

5 Article info: Original Article, Received: 17th November 2023, Accepted: 30th January 2024.

Introduction

Women's empowerment, politically, socially, economically, and health-wise, has been globally recognized as critical in bridging the gender gaps and achieving the 2030 Agenda for Sustainable Development. Hence, sustainable development and empowering of women are directly related. Rural women empowerment is increasing and improving social, economic, political, legal, and environmental prowess of rural women to guarantee their equality, give them the self-assurance to assert their rights, and enable them to actively participate in decision-making processes (Ojukwu, 2013).

According to Rathnachandra and Malkanthi (2020), women's empowerment is the process of gaining more control over family decision-making, access to resources, social participation, freedom of movement, and financial capability. However, empowerment could be in the form of cash, grants, equipment, and tools. The purpose of empowerment programs is to support interventions aimed at uplifting the underprivileged and marginalized members of society which normally include women and youths (Obetta, 2009). These programs are done throughout the various interventions, dependent on the beneficiary's developmental needs (Imonikebe, 2010; Ejumudo, 2013).

Women have key role in sustainable growth of economy by contributing to household and agricultural operations such as crop production, livestock rearing, horticultural, post-harvest activities, agroforestry, fisheries, etc., oftenly together with men (Umar, 2019; Kayode, Okunade, 2019). Mahmud et al. (2017) affirm that women empowerment in agriculture is an important dimensions of empowerment for rural women.

Over the years, government has been introducing several poverty alleviation programs supposedly targeted to rural women empowerment in Nigeria, such as, Better Life for Rural Women, Family Economic Advancement Programme, Family Support Program, or many microcredit schemes for women. Unfortunately, empowerment programs have not been able to transform rural development for rural women to benefit from. This manifest itself in failure of development and poverty alleviation strategies to create synergy between rural poverty and rural agricultural development (Kelvin Iloafu et al., 2019; Mukoro, 2020). Many researches (Ering et al., 2014; Akpomuvie, 2018; Ohowofasa et al., 2013, Natukunda et al., 2021) have revealed empowerment programs among rural women, but there is weak focus on the effects of these programs on women farmers' agricultural activities. So, it is pertinent to analyze if empowerment programs accessed by the women affects their agricultural activities, or not. Performed research will be looking at the following objectives: describing socioeconomic characteristics of respondents in the study

area, determining level of accessibility to empowerment programs, ascertaining level of effectiveness of empowerment programs on agricultural activities among the respondents, identifying constraints of empowerment programs for women farmers in the study area, and testing the hypothesis, which state that there is no significant relationship between women socio-economic characteristics and level of effectiveness of accessed empowerment programs. The performed research contributes to the existing empowerment studies by identifying socioeconomic value influencing empowerment programs in Nigeria.

Methodology

Study Area

The research was performed in Kogi state, Nigeria. It is located between latitudes 7 45'N and longitudes 6 45'E, covering in total area of about 28,312.64 km² (Adah et al., 2022). Kogi state has a projected population of 1,996,700 at 2016. (WPR, 2020). The climate condition of the area is favorable for growing the wide variety of staples like yam, cassava, beans, maize, sorghum, rice, cotton, fruits, and vegetables.

Sampling Techniques

Three-stage sampling procedure has been used to select respondents for the research. The first stage involved random selection of 25% of the 21 Local Government Areas (LGA) in the state, arriving at 5 LGAs which are Ijummu, Mopa-muro, Kabba-bunnu, Yagba-east, and Yagba-west. In the second stage, 5 communities were randomly selected from each LGA, given a total of twenty-five communities. Third stage involved used of snow ball technique to select five women farmers who have accessed empowerment programs. A total of 125 respondents were used for the research work. Snow-ball technique was used because there is no association of women empowerment within the Local Government Areas (LGA) which could form the sampling frame. The selection was done with the aid of extension workers in 25 communities and it was done in four days during 2022.

Limitations of the Research

This research has a few limitations. Out of the six empowerment programs accessible to the women farmers only two were initiated at the state level while four were at the national level. Hence women have more access to the empowerment programs at grassroot levels than national level. Also, there was no registered list or association of women farmers who were empowered for agricultural purposes in the LGA which could form the sampling frame. That was why the snow-ball sampling procedure was used. Also, the empowerment programs were not

designed for agricultural purposes, so it could be easy for beneficiaries to divert the empowerment opportunities to another business out of agriculture. More so, there was dearth of empirical evidence about effects of empowerment programs on agricultural activities in the Kogi state. It was also noted that most rural women farmers were in disadvantaged position, mainly related to being empowered for agricultural production because of the strict conditions attached to the programs (Adeleke, Akinbile, 2019).

Data Analysis

Descriptive statistics used in data analysis involves frequency, percentages, mean, and standard deviation, while multiple regression analysis (Ordinary Least Square Method) has been performed to test the predefined hypothesis.

The used regression model is expressed by next formula:

$$Y = \beta 0 + \beta 1X1 + \beta 2X2 + \beta 3X3 + \dots + \beta 6X6 + \beta 7D1 + ei$$

Where,

$\beta 0$ = intercept,

$\beta 1 - \beta 8$ = coefficients,

Y = level of effectiveness of empowerment programs,

X_1 = age (years),

X_2 = household size (number of people feeding from the same pot),

X_3 = highest level of education (years of schooling),

X_4 = average annual farm income (amount in NGN),

X_5 = farm size (in ha),

X_6 = frequency of extension contact,

D_1 = marital status (1 = married, 0 = otherwise),

ei = error term.

Level of effectiveness of empowerment program on agricultural activities of rural women in the study area was measured on a three-point Likert type scale: Very effective (1), Effective (2), Not effective (3). The level of accessibility to empowerment programs was measured on a four-point Likert-type scale: Highly accessible (4), Moderately accessible (3), Low accessible (2), Not accessible (1), while constraints to empowerment programs among rural women was measured on the level of these constraints which was based on three-point Likert-type scale: Very serious (3), Serious (2), Not serious (1).

Results and Discussion

Socioeconomic Characteristics of the Respondents

Table 1. revealed that mean age of the rural women is 47.1 years, what implies that majority are within their economic age, being actively engaged in agricultural operations.

Table 1. Socio-economic Characteristics (N = 125)

Variables	Frequency	Percentage	Mean	SD
Age 18-25 26-35 36-45 > 45	6 24 51 44	4.8 19.2 40.8 35.2	**47.1**	**6.11**
Marital Status Married Other wise	115 10	92.0 8.0		
Household size (persons) ≤ 2 3-5 > 5	25 85 15	20.0 68.0 12.0	**3.67**	**1.37**
Years of Schooling 0 1-6 7-12 > 12	22 23 66 14	17.6 18.4 52.8 11.2	**12.0**	**2.86**
Annual Income (NGN) ≤200,000 200,001-300,000 300,001-400,000 400,001-500,000 ≥500,000	21 19 21 18 46	16.8 15.2 16.8 14.4 36.8	**466,000.00**	**223992.37**
Farm Size (ha) ≤ 2.00 3.00-4.00 > 4.00	52 68 5	41.6 54.4 4.0	**2.82**	**1.10**
Extension contact in the last six month ≤ 2 3-6 7-10 >10	64 48 11 2	51.2 38.4 8.8 1.6	**1.97**	**0.49**

Source: Kayode et al., 2022.

Women farmers have average 12 years of schooling, which contradicts findings of, Ayebuomwan et al. (2016) who state that most rural women are non-literate. Previous is in line with the findings of Kayode et al. (2017) that Kogi state women farmers are usually within the age categories of 41-50. The mean annual income of farmers was 466,000 NGN, setting their daily income at about 1,309 NGN, while average of 6 persons lives at one household, it implies that respondents are living below the poverty line of 1 USD/day/person. Mentioned is in line with results of Falola et al. (2020) who states that the mean income earned by women was 15,344.65 NGN monthly. Farm size available to respondents show that over the half of farmers (54.4%) have at disposal a farmland in range 3-4 ha with 1.97 mean of frequency of extension contact.

Accessibility of Women Farmers to Empowerment Programs

Results presented in next table (Table 2.) are focused to accessibility to several empowerment programs active in Nigeria. Its shown that Kogi Appeals (MS = 3.77) is the most accessible. This may likely be because, the program is sponsored by the World Bank, offering to its beneficiaries many valuable benefits. Program also empowers women, youth and people with disabilities to take the lead role in farming by providing farm inputs, incentives, and training for the farmers. Kogi Appeals is followed by Farmer moni program (MS = 3.46), Women and Youth Empowerment Program (WYEP), (MS=3.10), Trader moni (MS = 2.09), Kogi Women and Youth Empowerment Foundation (MS = 1.56), while the least accessible is Aliko Dangote Foundation (MS = 1.15). Previously mentioned implies that women access the empowerment programs at different levels, what is contradict to the findings of Adeleke and Akinbile (2019).

Table 2. Level of accessibility to the Empowerment Programs

Empowerment program available	Not accessible	Low accessible	Moderate accessible	Very accessible	Mean
Kogi appeals	1(0.8)	3(2.4)	20(16.0)	101(80.8)	3.77
Farmer moni	7(5.6)	11(8.8)	24(19.2)	83(66.4)	3.46
Women and Youth Empowerment Program (WYEP)	12(9.6)	20(16.0)	37(29.6)	56(44.8)	3.10
Trader moni	67(53.6)	9(7.2)	20(16.0)	29(23.2)	2.09
Kogi Women and Youth Empowerment Foundation (KOWYEF)	72(57.6)	40(32.0)	9(7.2)	4(3.2)	1.56
Aliko Dangote Foundation (ADF)	114(91.2)	5(4.0)	4(3.2)	2(1.6)	1.15

Source: Kayode et al., 2022.

It is worth noting that while Kogi appeals is funded by the World Bank while trader moni, farmer moni, women and youth empowerment programs were funded by the Federal government and Aliko Dangote foundation is been funded by a non-governmental organization.

Effectiveness of Empowerment Programs on Agricultural Activities

Results in Table 3. show the level of positive influence of empowerment programs on agricultural activities within the study area (positive effects such are increase in farm output (primarily gained yields) by providing adequate farm input, giving farmers' loans with little or without collateral, providing extension services, etc.). The result shows that the Kogi appeals empowerment program had the highest effect (MS = 2.83) on agricultural activities within the study area, followed by Farmer moni, (MS = 2.50), Women and Youth Empowerment Program (MS = 2.28), Trader moni (MS = 1.68), Kogi Women and Youth Empowerment Foundation (MS = 1.32), while the least impactful was Aliko Dangote Foundation (MS = 1.10). This indicates that the Kogi appeals empowerment program has more expressed effects on rural women's agricultural activities, since it is more accessible than another empowerment programs. Reason of this is because the Kogi appeals program focuses on women just within the Kogi state, while the rest of empowerment programs are nationwide, having more beneficiaries to cater to.

Table 3. Level of effectiveness of empowerment programs on agricultural activities

Empowerment program available	Not effective	Effective	Very effective	Mean
Kogi appeals	2(1.6)	17(13.6)	106(84.8)	2.83
Farmer moni	14(11.2)	34(27.2)	77(61.6)	2.50
Women and Youth Empowerment Program (WYEP)	23(18.4)	44(35.2)	58(46.4)	2.28
Trader moni	70(56.0)	25(20.0)	30(24.0)	1.68
Kogi Women and Youth Empowerment Foundation (KOWYEF)	96(76.8)	18(14.4)	11(8.8)	1.32
Aliko Dangote Foundation (ADF)	114(91.2)	9(7.2)	2(1.6)	1.10

Source: Kayode et al., 2022.

Categorization of Respondents Based on Level of Effectiveness

In Table 4. was showed the categorization of respondents based on level of effectiveness of empowerment programs among women farmers. The high effect level (>1.50) has the highest share, 97.6%, followed by the low effect level (≤ 1.50) with 2.4%. The mean score for the effectiveness level is 1.95, indicating that the empowerment programs in general have helped to ease the challenges associated with agricultural activities within the study area. Effectiveness of Kogi appeals comes from the fact that it could be well and easily monitored to ensure proper usage of agricultural tools and input provided to women. Mentioned is in line to statement of Goel and Sah (2015) and Akpomuvie (2018), believing that rural women empowerment facilitates rural and agricultural development process.

Table 4. Categorization of the level of effectiveness of empowerment programs on agricultural activities

Level	Frequency	Percentage	Mean
Low (≤ 1.50)	3	2.4	1.95
High (>1.50)	122	97.6	

Source: Kayode et al., 2022.

Constraints of Empowerment Programs for Rural Women Farmers

Results presented in Table 5. show that inadequate training on how to effectively use the farm technologies is ranked as the first among the constraints of empowerment programs for rural women farmers with a mean score 2.54.

Table 5. Constraints of empowerment programs for rural women farmers

Constraints	Not serious F (%)	Serious F (%)	Very serious F (%)	Not a constraint F (%)	Mean	Rank
Inadequate training on how to effectively use farm technologies	4(3.2)	41(32.8)	76(60.8)	4(3.2)	2.54	1st
Inappropriate information about the empowerment Program	7(5.6)	56(44.8)	60(48.0)	2(1.6)	2.41	2nd
Level of education	6(4.8)	43(34.4)	63(50.4)	4(3.2)	2.35	3rd
Corruption on the part of implementers	10(8.0)	61(48.8)	54(43.2)	0(0)	2.35	3rd
Excess household burden on women	4(3.2)	45(36.0)	61(48.8)	15(12.0)	2.34	5th
Influence of spouse	21(16.8)	66(52.8)	27(21.6)	11(8.8)	1.96	6th
Women's non-chalant attitude	10(8.0)	74(59.2)	21(16.8)	20(16.0)	1.93	7th
Membership of association and co-operative societies	22(17.6)	43(34.4)	20(16.0)	40(32.0)	1.66	8th
Cultural background	75(60.0)	34(27.2)	16(12.8)	0(0)	1.53	10th
Gender	72(57.6)	32(25.6)	16(12.8)	5(4.0)	1.51	11th
Number of farming years	70(56.0)	35(28.0)	13(10.4)	7(5.6)	1.49	12th
Political affinity	96(76.8)	16(12.8)	6(4.8)	29(23.2)	1.22	14th

Source: Kayode et al., 2022.

Mentioned indicates that inadequate training towards the use of new farm technologies is the highest form of constraint for the proper implementation of empowerment programs, followed by the inappropriate information related to empowerment programs with mean score of 2.41. These results show that there is need for adequate organization of extension services within the study area, that will properly educate the women to appropriate use the available farm technologies, and also create awareness on the empowerment programs. Political affinity is the least constraint. It means that the political affinity of the women does not affect the implementation of the empowerment program.

The Result of Tested Hypothesis

In Table 6. is shown the multiple regression analysis between some selected socioeconomic variables and accessibility of empowerment programs among the women farmers. It shows that at $p < 0.05$, marital status ($\beta = 0.063$), size of household ($\beta = 0.067$) and level of education ($\beta = 0.061$) were the main determinants of accessibility of empowerment program among the women in Kogi state. The positive coefficients of the variables indicate that increase in each factor initiate the increase in level of accessibility to empowerment program. Educational level ($\beta = 0.061$) may increase sophistication, knowledge, and attitude, altering the level of accessibility to empowerment programs. It may also imply that women with higher level of education are involved more to household expenditure contrary to those with lower one. Mentioned could be explained that education level supports innovation. So, educated women are likely to be more oriented to innovatios and entrepreneurial activities, contributing more to households' consumption expenditure. As observed by Falola et al. (2020), Olomukoro (2015) and Aromolaran (2010), globally, countries tend to invest in education, as it facilitates personal and social development.

Table 6. Result of Multiple Linear Regression of Determinants of Accessibility of Empowerment Programs

Variables	Unstandardized Coefficients		T	Sig.
	B	Std. Error		
(Constant)	1.908	0.186	10.234	0.000
Age	0.007	0.030	0.237	0.813
Marital Status	0.063*	0.024	2.681	0.008
Household size	0.067*	0.029	2.292	0.024
Level of education	0.061*	0.030	1.999	0.048
Income	3.436E-7	0.000	1.788	0.076
Farm Size	-0.011	0.038	-0.286	0.775

Source: Kayode et al., 2022.

Note: * *Significant at $p < 0.05$, $R^2 = 0.391$.*

Conclusion and Recommendations

Despite constraints faced by women farmers in accessing empowerment programs in rural areas, they represent the great mean of support for alleviating the level of poverty within the rural areas. It is clear that women are largely involved in farming activities and fully willing and ready to use in best way any empowerment program that could advance their livelihood. The role and impact of empowerment programs for women cannot be undermined, as they play significant role in improving the lives of women. Factors as marital status, household size and level of education were determinant of empowerment programs in the study area. Therefore, it is advised that empowerment programs focused to improving the technical knowledge of women should be organized to increase the technical know-how of rural women on farm modern technologies, while extension agents and relevant stakeholders should create more awareness on women empowerment programs through the mass media channels accessible to rural women farmers.

Future studies should explore gender inclusion in empowerment programs among farmers and the effect on agricultural activities. Also, this study can be replicate outside the study area.

References

1. Adah, O., Akor, J., Ademu, A. (2022). Socio-Economic Factors Influencing the Adoption of Improved Oil Palm Fruits Processing Technology in Kogi State, Nigeria. *African Journal of Educational Management, Teaching and Entrepreneurship Studies,* 6(1):162-167.

2. Adeleke, O., Akinbile, L. (2019). Implications of Empowerment Status in Agricultural Production Capabilities of Rural Women in Selected States of Nigeria. *Journal of Agricultural Extension,* 23(1):37-53.

3. Akpomuvie, O. (2018). The challenges of rural women participation in development in Delta State. *International Journal of Gender and Women's Studies*, 6(1):185-189.

4. Aromolaran, O. (2010). *Influence of indigenous vocational education programmes on socio - economic empowerment of women in south - western Nigeria.* Unpublished Ph.D. thesis, Department of Adult Education, University of Ibadan, Nigeria.

5. Ayebuomwan, O., Popoola, O., Adoti, A. (2016). Analysis of women empowerment in rural Nigeria: A multidimensional approach. *Global Journal of Human Social Science*, 16(6):35-48.

6. Ejumudo, K. (2013). Gender equality and women empowerment in Nigeria: The desirability and inevitability of a pragmatic approach. *Developing Country Studies,* 3(4):59-66.

7. Ering, S., Out, J., Archibong, E. (2014). Rural development policies in Nigeria: A critical appraisal. *International Journal of Education and Research*, 2(9):307-320.

8. Falola, A., Fakayode, S., Kayode, A., Amusa, M. (2020). Rural Women in Kwara State (Nigeria) and their Contributions to the Welfare of their Households. *Journal of International Women's Studies*, 21(6):167-180.

9. Goel, A., Sah, N. (2015). *Empowerment of rural women of Uttarakhand through textile activities.* Discovery Publishing House ltd., New Delhi, India.

10. Imonikebe, B. (2010). Constraints to Rural Women Farmers' Involvement in Food Production in Nigeria. *Africa Research Reviews,* 4(3b):281-288.

11. Kayode, A., Adebayo, S., Adejoh, S., Joseph, G. (2022). *Data related to accessibility to empowerment programs on agricultural activities among rural woman farmers in Kogi State, Nigeria*. Internal documentation, University of Ilorin, Ilorin, Nigeria.

12. Kayode, A., Okunade, E. (2019). Gender differentials in the accessibility of farm inputs among arable crop farmers in Oyo state, Nigeria. *International Journal of Agricultural Economics and Rural Development,* 10(1):16-22.

13. Kayode, A., Oladipo, F., Daudu, A. (2017). Determinants of Adoption of Land Management Practices in Kogi state, Nigeria. *Agro science Journal of Tropical Agricultural, Food, Environment and Extension,* 16(2):52-58.

14. Kelvin Iloafu, L., Igwe, N., Enemuo J. (2019). Managing the Challenges of Women and Youth Empowerment Programmes in Nigeria. *Global Journal of Human-Social Science,* 19(5):1-12.

15. Mahmud, S., Shah, N., Becker, S. (2012). Measurement of women's empowerment in rural Bangladesh. *World Development,* 40(3):610-619.

16. Mukoro, A. (2020). *Administration of the public service*. Abacha press ltd., Ibadan, Nigeria.

17. Natukunda, H., Peter, N., Sawuya, N. (2021). Woman empowerment and household income in Kira municipality, Uganda. *Journal of Economic Science Research*, 4(4):13–24.

18. Obetta, K. (2009). Women empowerment is an effective strategy for enhancing the community management of development projects in Enugu State. *International Journal of Research in Arts and Social Science*, 1:343-363.

19. Ohowofasa, W., Olueh, C., Okoh, E. (2013). Empowering rural women for productive agriculture: A panacea for food security and sustainable rural development in Nigeria. *Benin Journal of social sciences*, 21(1):352-361

20. Ojukwu, U. (2013). *Understanding Rural and Community Development in Nigeria; Theory and Practice*. Rex Charles and Patrick Ltd., Lagos, Nigeria.

21. Olomukoro, O. (2015). Strategies for Improving the Standard of Women Empowerment Programmes in Nigeria. *Sokoto Educational Review,* 16(1):110-124.

22. Rathnachandra, S., Malkanthi, S. (2020). Management activity of women farmers in Imbulpe DS division in Sri Lanka: A Household Level Analysis. *Bulgarian Journal of Agricultural Economics and Management*, 65(2):70-75.

23. Umar, A. (2019). Assessment of the effect of Fadama III project on Women Farmers in Shelleng Local Government Area, Adamawa State, Nigeria. *International Journal of Innovative Social Science & Humanities Research,* 7(3):56-65.

24. WPR (2020). *Nigeria Population Review*. Portal of World Population Review (WPR), Lancaster, USA, retrieved at: https://worldpopulationreview.com/countries/nigeria-population, 15th January 2024.