

DETERMINANTS OF RURAL WOMEN PARTICIPATION IN INCOME GENERATING ACTIVITIES IN RURAL COMMUNITIES OF KOGI STATE, NIGERIA

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ABSTRACT

This study analyzed the determinants of rural women participation in income generating activities in rural communities of Kogi state, Nigeria. The specific objectives were to: describe the socioeconomic characteristics of women in rural areas; examine the level of participation of rural women in the available income sources; determine factors that influence women participation in income generating activities in the study area. Primary data were collected for this study using questionnaire and were analysed using descriptive statistics and binary logit regression. Description of the socioeconomic characteristics revealed a mean age of 39 years. Majority (63.3%) of the women were married with a mean household size of 6 members. Most (40.4%) of the respondents were primarily traders and 65% were members of association with a mean monthly income of 25,376 NGN. Investigation further showed that majority of the women were highly involved in both farm and off farm income generating activities. Seasonal vegetable cultivation (mean = 2.71) and trading (mean = 2.79) were mostly the farm and off farm activities respectively. Estimates of the binary logit regression model on the determinants of women involvement in income generating activities showed a log likelihood ratio of 93.549 and χ^2 value of 54.47, significant at 1%. Four of the seven variables included in the model significantly influenced the likelihood of women involvement or participation in income generating activities. These are age ($\beta=-0.041$), access to credit ($\beta=4.334$), membership of association ($\beta=0.049$), and nearness to market ($\beta=1.014$). The study therefore recommends women' participation in multiple income generating activities to boost their financial base and be given adequate source of credit which guarantee their finance and encourage their participation in such activities. Also, women should form marketing groups to help them market their products efficiently.

Keywords: women, rural, participation, income generation

1.0 Introduction

Poverty is mainly a rural phenomenon but with large regional disparities. Rural poverty is more prevalent, deeper, and more severe than urban poverty (Perdiz-Vincente and Rubio, 2010). Rural poverty is further pronounced in unlimited employed and income

generating opportunities due to the absence of commercial and industrial facilities or lack of the necessary resources to establish them.

Further, vocational education, training and entrepreneur programmes for rural women are often limited to a narrow range of female-dominated fields that reinforce their traditional roles and responsibilities. While improving their opportunities to generate income, such training limits the chances to benefit from newer, non-traditional areas that can offer women higher earning and more skilled technical or managerial jobs (Food and Agriculture Organization, 2010).

It is a common knowledge that gender equality is an essential component of sustainable economic growth and poverty reduction. Equitable access to more and better jobs in rural areas enable rural women to become effective economic actors and engines of growth; as well as to produce or acquire the food, water, fuel and social services their families need. Indeed, the quality of services or care that mothers are able to give to their children and other household members contributes to the health and productivity of whole families and communities and improves prospects for future generations. This makes it important to investigate determinants of rural women participation in income generating activities

The common maxim that the only place for women is the kitchen, and a further belief that women are subordinate, and their husband's property have not only impeded their status but also handicapped their contribution to wealth creation and economic development is quite disturbing.

Rural women are resourceful economic agents who contribute to the income of families and the growth of communities in a multitude of ways. Underlying the assumption is the lack of recognition that in the household, women have distinct rights and obligation as well as distinct functions with regards to economic activities. Their situation is determined by their multiplicity for the care and wellbeing of their families and communities, household tasks, farm and non-farm income generating activities that cannot readily be monetized (FAO, 2011).

They work as entrepreneurs, as farm and non-farm laborers, in family businesses, for others and as self-

employed; while they take on a disproportionate share of unpaid work at home. However, their contribution is limited by unequal access to resources as well as persistent discrimination and gender norms which need to be addresses to allow the realization of their full potential. Based on this background, the study seeks to analyse the determinant of rural women participation in income generating activities in Kogi State, Nigeria which has the following specific objectives:

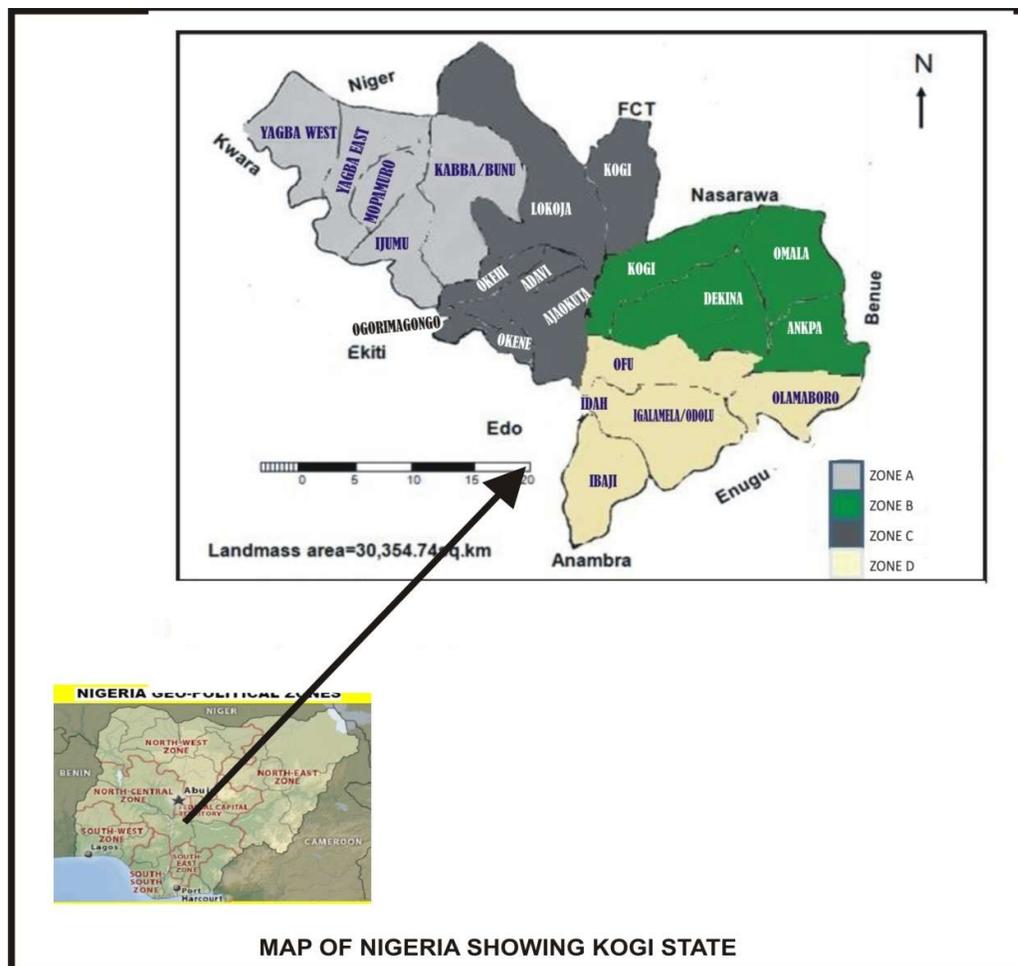
- i. describe the socioeconomic characteristics of women in rural areas;
- ii. examine the level of participation of rural women in the available income sources in the study area;

- iii. identify factors that influence women participation in income generating activities in the area

2.0 Methodology

The study area

The study area is Kogi State, Nigeria. Kogi State was created on 27th August, 1991 out of Kwara and Benue States. The State is located in the central region of Nigeria. The headquarters of the State is Lokoja, which is situated at the Confluence of rivers Niger and Benue making the State to be popularly known as the Confluence State. The distance from Lokoja to the Federal Capital Territory, Abuja is approximately 193 kilometres (National Bureau of Statistics, NBS 2011). The State consists of 21 Local Government Areas. The State is located between latitude 6°30'N and 8°05'N and longitude 5°51'E and 8°00'E



2.2 Data collection

Structured questionnaire and personal interview schedule was used to collect the primary data. The questionnaire was administered to 240 women in the state using eight trained research assistants from the four agricultural zones of Kogi ADP. The instrument

was designed in line with the stated research objectives

Data analysis

Data collected for this study were analysed using descriptive statistics such as frequency count, percentages, mean, and mode and binary logit regression

Objective 1 was achieved using frequency distribution
 Objective 2 was analysed using mean score from a 3 point likert type of scale
 Objective 3 was realized using binary logit regression

Model specification

Binary Logit

The logit model is based on the cumulative logistic distribution function. The model is specified as follows:

$$P_i = f(Z_i) = \frac{1}{1 + e^{-Z_i}} = \frac{e^{Z_i}}{1 + e^{Z_i}} \quad \text{----- (1)}$$

$$Z_i = \text{Ln} \frac{P_i}{1 - P_i} = \beta_0 + \sum_{j=1}^n \beta_j X_j \quad \text{----- (2)}$$

The explicit logit model is expressed as:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \dots + \beta_6 X_6 + e_i \quad \text{----- (3)}$$

Where, Y is a dependent variable from the equation above and it stands for involvement in income generating activities. Since Y is a dichotomous variable, it takes the value of 0 and 1. Hence, Y =1 if the respondent is involved in income generating activities. Y = 0 if not involved. The variables X₁ – X₆ are the factors affecting women involvement in income generating activities and they are the independent variables that will be obtained from the field. X₁ = Age of the respondent (in years) X₂=

education (years) X₃ = access to electricity (1 = Yes, 0 = No) X₄= access to credit (1 = Yes, 0 = No), X₅ = Membership of an association (1 = Yes, 0 = No), X₅ = family size (number), X₆ = nearness to market (km) β₁– β₆ = coefficients, β₀ = constant.

Mean Score

Likert scale was developed by Rensis Likert in the 1930s; the three point Likert type of scale was used to identify the level of participation in income from various income sources as specified below:

Opinion	Point
High (H)	3
Medium (M)	2
Not Involved (NL)	1

The mean response to each item was calculated using the following formula:

$$\bar{X} = \frac{\sum FX}{N}$$

Where: \bar{X} = means response, \sum = summation, N = number of respondents choosing a particular scale point, X = numerical value of the scale point and N = total number of respondents to the item

3.0 Result and discussion

3.1 Socioeconomic Characteristics of Women in Rural Communities

The socioeconomic characteristics of women in rural communities of the study area are presented in Table 1.1. Socioeconomic variables described in this study include: age, marital status, household size, primary occupation, educational status, cooperative/association membership, and household monthly income.

Age (years)

Results on Table 1.1 show a mean age of 39 years, which is an indication that the rural women were in their economically productive age. In terms of income, it is expected that women within their economically active age should have higher income

level. This finding agrees with Jacqueline *et al.* (2014) and Bashir *et al.*, (2013) who reported an age range of 30 – 40 years among women in Benue and Borno States respectively.

Marital Status

Table 1.1 further indicated that majority (63.3%) of the rural women were married. Marital status determines an individual’s decision to demonstrate a mark of social responsibility and also indicate a readily source of available labour input. Expectedly, married women are more productive and tend to have higher income than the unmarried. This finding agrees with Ezedinma (2001) who reported that, about 70% of rural women involved in income generating activities are married.

Table 1.1: Distribution of Respondents According to Socioeconomics Characteristics

Socioeconomic Variables	Frequency	Percentage	Mean/Mode
A. Age (years)			
≤20	18	7.5	
21 – 30	71	29.6	39.11years
31 – 40	59	24.6	
41 – 50	63	26.3	
≥ 50	29	12.1	
Total	240	100	
B. Marital Status			
Single	45	18.8	Married
Married	152	63.3	
Divorced	05	2.1	
Widowed	38	15.8	
Total	240	100	
C. Household Size (members)			
1 – 5	95	39.6	
6 – 10	108	45.0	6 members
16 – 20	31	12.9	
≥ 20	06	2.5	
Total	240	100	
D. Primary occupation			
Farming	63	26.3	Trading
Civil service	41	17.1	
Trading	97	40.4	
Food Processing	39	16.3	
Total	240	100.0	
E. Educational Status			
No formal education	55	22.9	Primary education
Primary education	132	55.0	
Secondary education	35	14.6	
Tertiary education	18	7.6	
Total	240	100	
F. Cooperative/Association Membership			
Member	158	65.8	Member
Non-member	82	34.2	
Total	240	100	
G. Monthly Income (Naira)			
Below 50,000	101	42.1	
50,000 – 100,000	84	35.0	25,376
101,000 – 150,000	45	18.8	
Above 150,000	10	4.1	
Total	240	100	

Source: Field Survey, 2022

Household Size

The mean household size of 6 members obtained in this study is almost the same as the national average of 7 members per household which was reported by National Population Commission, NPC in 2012. This finding implies that most rural communities in the State had household members which could be available as family labour for farming and other activities. This finding agrees with Femi and Shittu (2014), when they reported that 91% of rural households had household size greater than five. According to Onuche, *et al.* (2014), household sizes have implications for labour availability and could influence the likelihood of innovation adoption

especially in relation to the financial status of the family which is largely influenced by differences in age among families. Also, Omonona and Agoi (2007), reported that household size exerts more pressure on consumption than it contributes to production. Paddy (2003) earlier reported that household composition largely determines the way in which a household is able to respond to changes.

Primary Occupation

Table 1.1 also shows trading and farming as major occupation among the women. Women productive activities could serve as extra source of income and help rural households to have steady income especially during the off farming season. Ibitoye, *et al.*

(2015) reported civil service and trading as the major secondary occupation among rural farm households.

Educational Status

The result shows that 77.1% of the rural women could read and write, while 22.9% could not. However, most (55%) of the women had only primary education. Education increases households' decision to engage in various income sources. This finding agrees with Onuche, *et al.* (2014) when they reported an average schooling years of 7.2 in rural areas of Kogi State and classified the State as one of the educationally less developed states in Nigeria.

Cooperative/Association Membership

The result in Table 1.1 indicates that 65.8% of the respondents were members of a cooperative society or an association, while 34.2% did not belong to any association. Farmers' association enables them to solve their agricultural problems among other things (Kehinde, *et al.* 2009). Membership of associations has been found to enhance the interaction and cross-fertilization of ideas among people (Bamire, *et al.*

2002). Women who are not members of associations are expected to have lower probabilities of access to credit source and its multiplier effect on income.

Monthly Income

Result in Table 1.1 shows a mean monthly income of ₦25, 376 among the women. It is expected that income will improve the probability of households being food secure and also the likelihood of higher income through expansion and/or diversification. This finding corroborates Babatunde *et al.*, (2007). Mikloda (2006) associated low income with poverty. According to Amalu (2005), over 90% of Nigeria's food supply comes from the agricultural population who are smallholder farmers.

3.2 Level of Women Participation in Different Income Sources

The distribution of women according to their involvement in various income generating activities (IGAs) are presented in Table 1.2. The IGAs are categorized into farm (agricultural related activities) and off farm income generating activities.

Table 1.2: Distribution of Women According to their Level of Involvement in IGAs

Name of the IGAs	High	Medium	Not Involved	Mean Score
Farm IGAs				
Seasonal vegetable production	211 (87.9)	08 (3.3)	21 (8.8)	2.79
Tree plantation	87 (36.3)	55 (22.9)	98 (40.8)	1.95
Selling of fruit seedlings	21 (8.8)	11 (4.6)	208 (86.7)	1.22
Poultry production	59 (24.6)	109 (45.4)	72 (30.0)	1.95
Goat production	122 (50.8)	66 (27.5)	52 (21.7)	2.29
Artisanal fishery	0 -	13 (5.4)	227 (94.6)	1.05
Food crop production	101 (42.1)	66 (27.5)	73 (30.4)	2.12
Off Farm IGAs				
Wage income (paid employment)	111 (46.3)	22 (9.2)	107 (44.6)	2.02
Trading	201 (83.8)	09 (3.8)	30 (12.4)	2.71
Making handicraft	66 (27.5)	34 (14.2)	140 (58.3)	1.69
Food processing	136 (56.7)	18 (7.5)	86 (35.8)	2.21
Tailoring	166 (69.2)	33 (13.7)	41 (17.1)	2.52
Hair dressing	22 (9.2)	14 (5.8)	204 (85.0)	1.24
Other small businesses	43 (17.9)	19 (7.9)	178 (74.2)	1.28
*Remittance (money sent from abroad)	07 (2.9)	0 -	233 (97.1)	1.06

Source: Field Survey, 2022

figures in parenthesis are in percentages

Traditionally it was thought that rural households only participated in agriculture, with a focus on cropping

activities. However, this research, among others has shown that rural households actually participate in a

variety of income activities — both on and off the farm. Table 1.2 showed the various activities that farm households generate income from (both on-farm and off-farm sources). It was observed that on farm IGAs have higher percentages than the off-farm farm sources of income. Most rural women are involved in agricultural productive activities, while the off-farm income serves as complement to the on-farm income and could sometimes be substitute for on-farm income. This finding is in agreement with Osuafor, *et al.* (2017), when they reported that most (50.21%) of the rural households engage in on-farm activities. Ogbanje, *et al.*,(2015) reported that 42.78% were in self-employment category of off-farm work. Self-employment activities in rural areas were non-farm in nature and generated steadier income; the activities did not require high technical competence. Participation in off-farm work was necessary so as to provide insurance against agricultural production risks. In the same assertion, Verter and Bečvářová (2014) argue that owing to the meager income from agricultural activities; some smallholder farmers are “pushed” to diversify into non-farm activities to complement their low earnings from farming activities.

The result also indicated that petty trading forms significant proportion of the off farm income generating activities. This IGA has most participants probably because it does not need a lot of initial capital to establish. Secondly, it is often done in the open markets, hawked from house to house or near residential plots in temporarily built structures or kiosks. In most cases, the participants would like to minimize on costs so as to achieve maximum profits. According to women traders, the profit they make depend on the seasons of the year (harvesting, weeding, ploughing) and on the time of the month (month end or mid-month). This perhaps, explains while some are also involved in food processing. During harvesting seasons, prices of various produce are generally low. Women petty traders, therefore, loose a large proportion of the money they earn from these commodities. Further, during the middle of the

month, some regular customers are given goods on credit. These creditors sometimes default in payments or pay in installments. Therefore, due to these problems, women petty traders are more often unable to make enough profits to sustain them in business. It can thus be deduced that this activity is surrounded by uncertainty of income generation.

Most of the rural women in the study area were participating in tailoring as an income generating activity. Tailoring is an IGA which requires substantial amount of money to set up. Individual women in the area who do not own sewing machines hire them for a fee or from friends and relatives. It should be mentioned that this activity is carried out inside residential houses or outside shops or in large rented premises depending on the amount of business. Tailoring or dressmaking has noted a boom over the past years. This is because women’s fashions are changing fast and yet ready made clothes are sold expensively in boutiques.

Aside remittances, hairdressing had the least number of participants under the off farm income generating activities. The small number of participants can be associated with the fact that tools required for effective participation in this activity are expensive and difficult to maintain. Further, hairdressing requires a lot of skills which was often lacking among the rural women in the study area. From the survey, it is often quite difficult to find a woman who is well conversant with all the hair styles. Women, therefore, do these activities in groups. Within these groups, women with different skills put their resources together. This also helps in meeting the demands of many clients at the same time.

3.3 FACTORS THAT INFLUENCE WOMEN INVOLVEMENT IN INCOME GENERATING ACTIVITIES

Estimates of the binary regression model on factors that influence women participation in income generating activities (IGAs) are presented in Table 1.3.

Table 1.3: Estimates of the Binary Logistic Regression showing the Determinants of Women Participation in IGAs

Variable	Coefficient	t-value	Significance level
Age (years)	-0.041	-2.350	0.037**
Education (years)	0.031	0.530	0.467
Access to electricity (dummy)	0.038	0.974	0.164
Access to credit (dummy)	4.334	11.320	0.000***
Membership of assoc. (dummy)	0.049	5.233	0.007***
Family size (No.)	0.063	0.890	0.345
Nearness to market (km)	1.014	1.462	0.027**
Constant	0.579	1.146	0.082*

Source: Computed from Field Survey Data, 2022.

Log-likelihood= 93.549, LR $\chi^2 = 54.47$, Prob> $\chi^2 = 0.001$; Pseudo R²= 0.426

***, ** and * = significant at 1%, 5% and 10% respectively.

Estimates of the binary logistic regression analysis on the determinants of women involvement in income generating activities in the State is presented in Table 1.3. The model's log likelihood ratio of 93.549 and χ^2 value of 54.47 indicate that all variables included in the model significantly influence the probability of rural women involvement in income generating activities at 1%. Out of the seven explanatory variables included in the model, four significantly influenced the likelihood of women involvement or participation in income generating activities.

The coefficient of age was negatively signed and significant at 5%. This means that, the probability or likelihood of participating in income generating activity is more with younger women. Women who are aged do not like income generating activities, especially when it requires a lot of physical strength. Income generating activities such as trading, poultry keeping, livestock production, food crop production/farming and many others involve movements of long distances in addition to manual work.

Access to credit had positive coefficient and was significant at 1% level of probability. This implies that women who had access to credit are more likely to participate or get involved in income generating activities. This may be because their access to credit is likely to facilitate them to invest more on their activities.

Similarly membership of an association showed positive coefficient and was significant at 1% level of probability. This indicates that an increase in number of respondents in an association is likely to increase involvement in IGA. This is because being members of an association with certificate of membership; they have more chance of receiving training and assistance from government that will help to improve their performance in income generating activities.

Also, the coefficient of nearness to market was positively signed and significant at 5% level of probability. The distance variable measured by hours of distance to a nearest market shows that as distance increases, the likelihood of participating in income generating activities increases. This result is as expected and suggests that in less accessible rural areas, probably with a low population concentration, it is difficult to establish rural enterprises because of the lack of demand and the fact that productive linkages cannot be established.

Education, though not significant, was positively signed. By implication, an increase in the years of formal schooling will increase the likelihood of women participation or involvement in income generating activities. It is apparent that some income generating activities requires some years of schooling than others. The more competent a participant is, the more chances she has of attracting more customers and, therefore, earning a substantial amount of income than the participant without skills. After acquiring

knowledge up to a given level, a woman feels competent to do a particular income generating activity.

4.0 Conclusion and Recommendation

4.1 Conclusion

This study is aimed at analyzing the Determinants Of Rural Women Participation In Income Generating Activities communities of Kogi State, Nigeria. From the conclusions, it was established that the women were mostly involved in seasonal vegetable production, goat production, food crop production, tree plantation, trading, tailoring, food processing, and wage income or paid employments. The likelihood of women participation or involvement in these income generating activities was influenced by age, access to credit, membership of association, and nearness to market. The monthly income obtained by women in rural communities in the study area was determined by education, experience, farm income, and household size.

4.2 Recommendation

1. Inadequate capital was a problem which faced women participating in income-generating activities. Most of the women were lacking stable sources of acquiring capital. This was enhanced by the fact that most of them were not well acquainted with procedures to be followed in acquiring loans. Consequently it followed that most of the women had not acquired any substantial loans from recognised financial institutions. There is need for liberal terms in loan acquisition by the financial institutions. The banks should be strengthened by relevant agencies to give loans or grants to women participating in income generating activities.
2. Women should form marketing groups or co-operative societies. Through these, they can market their products directly instead of doing this through middlemen who exploit them. Also, through co-operative societies women can be able to alleviate their financial problems. These societies can bargain on behalf of the women so as to be given loans or grants from financial institutions or NGOs and CBOs.

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