Determinants of Women Empowerment in Rural Households in Kwara State, Nigeria

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ABSTRACT

Despite the established roles of women in agriculture, Nigerian women farmers continue to be disadvantaged economically, politically and socially, with adverse consequences for their productivity. This study assessed the level of empowerment among women in rural areas of Kwara State, Nigeria. It identified the determinants of levels of empowerment among the women. Data was elicited with the use of an interview schedule from 150 rural households across ten communities in the State following a three-stage random sampling technique.

Descriptive statistics, women empowerment index and the multinomial logistic regression were the analytical tools used. Eighty percent of the women were concentrated in the low to medium level of empowerment distribution. At p<0.10, educational level, gender of household head, membership of rural groups and access to credit were significant in determining levels of women empowerment.

The study concluded that the level of empowerment among women in rural households in Kwara State was low and influenced by some socio-economic characteristic of the households. It recommends that agricultural extension officers should encourage women to increase their levels of participation in rural groups. A multidimensional approach to credit accessibility among rural women and increased campaign on adult literacy and education of the girl child should be embarked upon by the government.

(Keywords: women empowerment index, determinants, rural households, Nigeria)

INTRODUCTION

According to the latest population census in Nigeria (2006) and projections therefrom, about half (49.1%) of the population of the nation are female. Reports on the percentage contribution of women to the agricultural production labor force range from 50 percent to as high as 90 percent depending on the parts of the country under consideration (Amali, 1989; Mgbada, 2000; FAO, 2008; Ogunlela and Muktar, 2009). Studies have also confirmed the dominance of the agricultural processing sub-sector by women (Odurukwe, Mathews-Njoku and Ejiogu-Okereke, 2006; Ogunlela and Muktar, 2009; and SAHEL, 2014).

In addition, women play a significant role in the marketing of agricultural produce, particularly at the retail level. The prominent role played by women in homestead poultry and dairy farming has also been enunciated (Mulugeta and Amsalu, 2014). Aside from their agricultural related roles, women often engage in activities which though not recognized as active employment, are central to the well-being of their households. Such activities include home maintenance and family care.

Despite the established role of women in agricultural and rural development, empirical evidence abounds on the low level of access of women to resources and opportunities such as land, credit, and even extension services. Their productivity has therefore remained low relative to their potential (FAO, 2011; Anaglo et al., 2014; Fon, 2015). About half of the world's population comprises of women, and two-thirds of the world's adult illiterates are women. According to FAO (2008), the most disadvantaged section of the society is the women; they are the 'silent majority' of the world's poor. Seventy percent world poor are women who consistently face peculiar social, cultural, educational, political and allied problems (Sharma & Varma, 2008). There is, therefore, the need to address the issues relating to women empowerment in a bid to ensure sustained agricultural development.

A diverse body of knowledge exists on the definition, conceptualization and measurement of women empowerment owing primarily to the different perspectives of individual fields of study. However, there are common threads among the submissions of the various fields. Women empowerment is defined as a bottom-up process of transforming gender power relations, through individuals or groups, developing awareness of women's subordination and building their capacity to challenge it (Baden and Oxaal, 1997; Baden and Reeves, 2000; Dejene, 2003; Ogato, 2013).

The earlier definition of women empowerment according to Malhota (2003), emphasizes that women empowerment is first and foremost a process and that it involves women themselves serving as the agencies of their own empowerment. Also, women empowerment requires the provisioning of structures and an enabling environment for the process in which women transform themselves through a series of self-actions.

The many indices proposed for the measurement of women empowerment have been categorized under; economic, socio-cultural, familial, legal, political and psychological dimensions (Malhota, 2003). The economic dimension measures women's level of control over her income, family resources and contribution to the family economy.

The level of commitment to factors that raise the social status such as education and freedom of movement and departure from cultural ideologies which discriminates against, or limits females are measured under socio-cultural dimensions. The familial dimension is concerned with the level of involvement of women in decision-making with respect to family issues such as choice of spouse, the timing of marriage, sexual relation, childbearing, etc. The legal dimension measures women's knowledge of their rights and the level of domestic support received by them in the exercise of these rights.

Women's knowledge of, and access to political systems such as freedom to exercise their right of vote are the units for measuring the political dimensions to women empowerment. The level self-esteem, self-reliance and general of psychological well-being are indicators of the psychological dimension. However, strong arguments exist on the nature and level of importance of what constitute the indices for the measurement of women empowerment in different contexts (Kritz, Makinwa-Adebusoye and Gurak; Mason and Smith, 2000). What constitutes empowerment in a particular part of the world for instant, may be a "given" elsewhere. In essence, the inappropriateness of a single module for all settings necessitate that the indices be determined on a case by case basis, taking cognizance of the peculiarity of the context in which empowerment is being measured.

The gap created by the paucity of information on the level of empowerment of women in rural households with a focus on the peculiarities of what constitute empowerment among rural households in Kwara State is what this study tries to fill. More so, for developing countries like Nigeria, the dearth of gender-disaggregated data with which to carry out concise macro-level studies on women empowerment further gives support to the need for microanalysis which provides insight into individual and household levels of empowerment which could be aggregated for communities.

It is possible also that some socio-economic characteristics of rural households influence the level of empowerment among the women. Knowledge of such characteristics will be valuable in driving increased levels of empowerment among women. It is against this backdrop that this study set out to answer the following research questions:

- What are the socio-economic characteristics of rural households in Kwara State, Nigeria?
- How empowered are women in the study area?
- What are the factors that influence women empowerment in the study area?

Objectives of the Study

The main objective of the study was to investigate the determinants of women empowerment among rural households in Kwara State, Nigeria. The specific objectives were to:

- 1. Describe the socio-economic characteristics of rural households in Kwara State, Nigeria;
- 2. Examine the levels of empowerment of women in the households; and
- 3. Identify the determinants of levels of empowerment among women in the study area

METHODOLOGY

The Study Area

Nigeria has a total land area of 923,800 square kilometers and occupies about 14% of land area in West Africa. The country lies on latitude 4° N and 14° N, and longitude 3° E and 15° E. The study area, Kwara State is one of the 36 states of Nigeria and lies on latitude 7° N and 9° N and longitudes 2° E and 6° E covering a land area of about 32,500 square kilometers.

The state which is located in the middle belt region of the country shares international boundaries with the Republic of Benin. The state has sixteen Local Government Areas (LGAs) with a population of about 2.37 million people (National Population Council, 2008). Kwara State has two climatic seasons annually: the dry and wet seasons. The annual rainfall averages between 1000-1500mm, while average maximum temperature ranges between 30°C and 35°C.

The natural vegetation consists broadly of the rain forest and wooded savannah while the landforms are mainly undulating hills, valleys, and plains which are traversed by the River Niger and its tributaries. The sizable expanse of arable, rich fertile soils supports the cultivation of a wide variety of staple food such as yam, cassava, maize, cowpea, fruits and vegetables. Kwara State is largely agrarian with a huge rural population.

Sampling Procedure and Instrument for Data Collection

The population for the study comprised of all women in rural households in the study area. The rural household listing obtained from the Kwara State Agricultural Development Project (KWADPA) was adopted as the sampling frame for the study. A three-stage random sampling technique was used in the selection of the respondents for the study.

The first stage involved the random selection of two out of the four agro-ecological zones in the state. The second stage involved the random selection of 10 rural communities from the selected zones. Finally 150 respondents were selected across the communities. For the second and third satges of the sampling process, proportionate sampling was ensured.

Primary data used for the study was collected through the use of an interview schedule. Only 133 of the interview schedules were found useful for the analysis giving a response rate of 88.67%.

<u>Data Analysis</u>

The tools used for data analysis in the study descriptive statistics. Women were: Multinomial Empowerment Index, and Regression Analysis. Descriptive statistics comprising the use of measures of central tendency and dispersion (mean, mode, median and standard deviation), percentages frequency and tabulation was used to capture the socioeconomic and demographic characteristics of the respondents.

Women Empowerment Index was used to measure the level of empowerment among women in the study area. Indicators which correctly measure what constitute women empowerment in the study area were carefully itemized based on available literature on the socio, economic, cultural and political status of the State.

Three broad categories of indicators; sociocultural, economic and psychological indices of empowerment were identified. For each of the indicators, suitable constructs were generated which when pulled together, accurately depicts the indicators. A summary of the indicators and individual construct used for the measurement is provided as follows:

- Economic Indicators: Women's control over income, Relative contribution to family support, Access to and decision-making production resources, access to cash and assets
- Socio-cultural indicators: Freedom of movement, discrimination against the girl child, commitment to education of girl children, input to family decision making, input to decision on childbearing and other sexual related issues, control over marriage timing and choice of spouse, and freedom from domestic violence
- **Psychological indicators:** Respondents' level of self-esteem, self-efficacy, psychological well-being, sense of inclusion, and sense of entitlement.

The individual ratings of the respondents on each construct were aggregated and a mean score was

generated for each indicator. The indicators were weighted equally, and so were the constructs within each indicator domain following Alkire and Foster (2007). The overall index was thereafter derived from the average of the value obtained for the three indicators. The resultant index ranged between zero and one where higher values indicated greater empowerment. The indexes were categorized into 3 for ease of reference as follows:

0.00 - 0.30 = Low level of empowerment

0.31 - 0.50 = Medium level of empowerment

0.50 - 1.00 = High level of empowerment

Multinomial Logistic Regression analysis was used to determine the factors influencing the levels of empowerment of women. The response (or dependent) variable is a dummy variable that indicates whether a woman has a low, medium or high level of empowerment.

Multinomial Logit Model Probability Specification is given as:

$$\Pr\{y_i = s\} = \exp\{\beta_{0s} + \beta_{1s}x_{1i} + \dots + \beta_{ps}x_{pi}\} / \sum_{j=1}^{J} \exp\{\beta_{0j} + \beta_{1j}x_{1i} + \dots + \beta_{pj}x_{pi}\}$$

Multinomial Logit Model Odds Specification:

$$\frac{\Pr\{y_i = s\}}{\Pr\{y_i = t\}} = \exp\{(\beta_{0s} - \beta_{0t}) + (\beta_{1s} - \beta_{1t})x_{1i} + \dots + (\beta_{ps} - \beta_{pt})x_{pi}\}$$

Where,

 $\begin{array}{l} Y_i = \text{Level of Women Empowerment} \\ X_1 - \text{Gender of household head (male or female)} \\ X_2 - \text{Age in years} \\ X_3 - \text{Household size (Number)} \\ X_4 - \text{Household head's educational level} \\ X_5 - \text{Women's access to credit (dummy)} \\ X_6 - \text{Asset ownership (dummy)} \\ X_7 - \text{Membership of group (dummy)} \end{array}$

a-Intercept

 $\beta_1, \beta_2, \dots, \beta_7$ each is a partial slope coefficient and measures the change in the estimate for a unit change in the value of the given factor (while holding other factors constant).

 ϵ_i – Error term, assumed to be uniformly distributed.

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RESULTS AND DISCUSSION

Socio-economic Characteristics of Rural Households in Kwara State

This sub-section highlights selected socio-economic features of the respondents. The findings are summarized in Table 1.

Characteristics	Category	Frequency	Percentage (%)
Gender of household head	Male	115	86.5
	Female	18	13.5
Age of household head	30-39	13	09.8
	40-49	42	31.6
	50-59	43	32.3
	≥60	35	26.3
Marital status of household head	Married	124	93.2
	Divorced	01	0.8
	Widow	08	6.0
Highest educational level of household head	No formal	31	23.3
	Primary	59	44.4
	Secondary	25	18.8
	Tertiary	12	9.0
	Others	06	4.5
Household size	1-5	58	43.6
	6-10	74	55.6
	> 10	01	0.8
Primary occupation of household head	Farming	65	48.9
	Civil/servant	16	12.0
	Artisan	18	13.5
	Trading	17	12.8
	Others	17	2.8
Household head's access to credit	Yes	43	32.3
Women's access to credit	Yes	12	9.0
Asset ownership by household heads	Yes	110	82.7
Asset ownership by women	Yes	28	24.8
Household head's Membership of a group	Yes	103	77.4
Women's Membership of a group	Yes	71	53.4

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Source: Field Survey, 2015

As shown in Table 1, majority (86.5%) of the household heads were male which means households in the study area are majorly maleheaded. This is quite similar to the results of the study carried out by Emaziye, Okoh and Ike, (2013). The modal class of the household heads' age was 50-59 years, and the mean age of the household heads was about 52years. Most household heads in the study area were married which is a reflection of the age class of most of the household heads. About 23% of the rural household heads had no formal education while 44.4% had primary education. Also, 18.8% of the household heads had secondary school level of education while 9.0% had tertiary education. The modal household size was 6-10 persons with a mean household size of 5.96. Most of the household heads in the study area (48.9%) had farming as their primary occupation. Only about a third of the household heads and 9 percent of the women in the study area had access to credit. About 82.7% and 24.8% of the household heads and women owned assets. Also, 77.4% of the household heads and 53.4% of women present in the households were members of a group/association.

Level of Women Empowerment

The level of empowerment among women in rural households is the focus of this subsection. Table 2 presents the distribution of women based on their levels of empowerment.

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Measures	Frequency	Percentage (%)
a. Socio-cultural Indices		
<0.2	31	23.3
0.21-0.40	33	24.8
0.41-0.60	32	24.1
0.61-0.80	23	17.3
Above 0.80	14	10.5
b. Economic Indices		
<0.2	30	22.6
0.21-0.40	24	18.0
0.41-0.60	31	23.3
0.61-0.80	23	17.3
Above 0.80	25	18.8
c. Psychological Indices		
<0.2	92	69.2
0.21-0.40	16	12.0
0.41-0.60	11	8.3
0.61-0.80	09	6.7
Above 0.80	05	3.8
d. Overall empowerment index		
<0.2	22	16.5
0.21-0.40	56	42.1
0.41-0.60	48	36.1
0.61-0.80	06	4.5
Above 0.80	01	0.8
e. Levels of Empowerment		
Low-level empowerment	46	34.6
Medium empowerment	60	45.1
High-level empowerment	27	20.3

Table 2: Distribution According to Women Empowerment Measures and Level (n=133).

Source: Field Survey, 2015

Table 2 shows that 48.1% of the household women had indexes ranging from ≤ 0.04 using socio-cultural indices as a measure of women empowerment with only about 28% havening indexes greater than 0.6. These figures reveal that the women in terms of socio-cultural elements of empowerment, women in the study area do not fare well.

Also, assessing the women along economic indices, only 36.1% have scores of above 0.60. The measurement based on psychological indices gave the poorest result as majority of the women (81.2%) had scores of \leq 0.40 while only about 10% had indexes of above 0.60. Overall, majority (94.7%) of the household women ranged between 0.00 – 0.60. More than half of the women had less than 0.05 and only about 5% had index scores of above 0.06%.

As shown in Table 2, 34.6% of women in the study area had a low level of empowerment while 45.1% had a medium level of empowerment. Only 20.3% had a high level of empowerment. It can be seen, however, that an overwhelming majority of women (80%) were concentrated in the low to medium level of empowerment distribution. Similar findings were recorded in Bangladesh as reported by Shahnaj & Ingrid-Ute, (2004).

Socio-economic Determinants of Levels of Empowerment among Women in Kwara State

The socio-economic factors influencing women empowerment in the study area were analyzed using multinomial logistic regression model. The results are summarized in Table 3.

Variables		В	S.E	WALD	Df	Sig	Exp (B)
Low-level	Intercept	4.448**	2.172	4.193	1	0.041	
empowerment	Gender(X ₁)	-2.750**	1.141	5.811	1	0.016	0.064
	Age(X ₂)	0.012	0.031	0.151	1	0.698	1.012
	Household size(X ₃)	-0.259	0.170	2.320	1	0.128	0.722
	Education(X ₄)	0.618**	0.282	4.811	1	0.028	1.855
	Women Access to Ioan(X ₅)	1.293**	0.587	4.860	1	0.027	0.274
	Asset ownership(X ₆)	0.350	0.785	0.199	1	0.655	0.704
	Member of group(X7)	1.351*	0.768	3.094	1	0.079	0.259
Medium-level	Intercept	3.226	2.080	2.406	1	0.121	
empowerment	Gender(X ₁)	-1.920*	1.117	2.951	1	0.086	0.147
	Age(X ₂)	0.004	0.029	0.016	1	0.898	1.004
	Household size(X ₃)	0.051	0.153	0.111	1	0.739	0.950
	Education(X ₄)	0.368	0.260	2.012	1	0.156	1.445
	Women Access to Ioan(X ₅)	1.063**	0.517	4.222	1	0.040	0.345
	Asset ownership(X ₆)	-0.199	0.752	0.070	1	0.791	0.819
	Member of group(X ₇)	-0.815	0.736	1.226	1	0.268	0.442

Table 3: Multinomial Regression Result on Factors Influencing Women Empowerment.

a. The reference category is High-level of empowerment.

**,* Significant at 5% and 10% respectively

-2log Likelihood = 252.204, Nagelkerke R²= 0.190, Model Chi-square = 24.325, P-value = 0.05

Table 3 shows the result of factors influencing the level of women empowerment in the study area using the multinomial logistic regression model. The model was found to be statistically significant at (p=0.05). All the independent variables jointly explained the probability of women empowerment level in the study area. In this analysis, the Pearson chi-square value (24.325) indicates a good fit at p< 0.05

The result of the multinomial logistic regression analysis showed that four of the variables were significant in predicting the levels of empowerment among the women. These were; gender of household head, level of education of household head, women access to loan and membership of group.

In distinguishing low levels of empowerment from high levels of empowerment, the gender of household head, the level of education of household head, women access to loan and membership of groups significantly predicted empowerment levels. The negative coefficients reported for the gender of the household head indicates an inverse relationship for this variable at p< 0.05. While a direct relationship was observed between levels of education and access to credit at 5% level of significance, the relationship was observed to be direct for membership of groups only at p<0.1. Bushra and Wajiha (2015) also reported similar findings. However, the absence of significant relationships between empowerment and age contradicts the submissions of Kabeer, 2005. In addition, the finding of this study is at variance with that Chaudhary and Nosheen, (2009) with respect to the absence of a significant relationship between women empowerment and their household sizes.

In the second comparison between medium level empowerment and high-level empowerment, two explanatory; gender of the household head and women's access to credit were significant in predicting levels of empowerment at p < 0.10 and p< 0.05 respectively. While the relationship between empowerment and gender was indirect, that with access to credit was a direct relationship as indicated by the positive coefficient. This implies that women in male headed households have a lower probability of empowerment compared to those from female-headed households. Also, the more access women have to credit, the more their probability of being empowered. This finding agrees with Kabeer, (1999) who found out that access to more credit enabled women to negotiate for an increased role in household decision making, presumably increasing empowerment.

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Deshmukh- Randive, 2003; Malhotra and Mather 1997, however, reported that women's autonomy or personal accumulation of resources might not necessarily result in empowerment.

CONCLUSION AND RECOMMENDATION

Based on the findings of the study, it concluded that the level of empowerment among rural women in Kwara State was low and significantly influenced by some of their socio-economic characteristics such as educational level and gender of household head, membership of groups and women's access to credit were at p<0.10.

Given the positive influence of women's membership of rural group on their levels of empowerment, the study recommends that agricultural extension agencies should develop programs specifically aimed at strengthening existing rural groups and encouraging active participation of women in such groups. In addition, a multidimensional approach to making credit accessible to rural women should be explored. This should involve a collaborative effort of the three tiers of government in the country, nongovernmental organizations farmer and cooperatives.

These efforts should take cognizance of accessibility issues such as collateral, bureaucracies, and interest rates. Finally, the literacy level among rural women in the study area should be enhanced by the government through the promotion of adult education. In planning such programs, the domestic role of women should be taken into consideration in deciding venues and timing of classes as measures to encourage their participation.

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