

## Socio-Economic Determinants of Women Participation in Agricultural Cooperatives in Kogi State, Nigeria

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### Abstract

*Agriculture is the bedrock of national development; its exploration broadened employment opportunities as well as food security however its potentials seem not to have been fully explored. This study examines economic and social factors of women participation in agricultural cooperatives in Kogi State, Nigeria. The study adopts descriptive research survey design. The population of this study is six thousand and forty-four (6044) registered women in agricultural cooperatives in Kogi State but considering the large size the study reached a handful of 210 respondents determine using Godden sample size statistical formula. Structured questionnaire was the research instrument used in reaching respondents. The instrument was subjected to reliability test using Cronbach's alpha consistency method. Data were analyzed using descriptive tools such as frequencies, percentages, mean, standard deviation, while hypotheses were tested using linear regression analysis. The findings revealed that economic and social factors do have significant effects on women participation in agricultural cooperatives in Kogi State. This study therefore, recommends that Cooperative societies should strive to source for funds and ensure provision of credit to members when needed. Again, women farmers in Nigeria should be encouraged and supported to acquire higher education through adult-education model. This will help address the economic factors that are restraining women participation in cooperatives.*

**Keywords:** Social, Economic, Women, Cooperative

### Introduction

Agriculture is the bedrock of national development as well as source of employment and income in developing nations, where majority of the world's hungry and poor people live (FAO, 2013). Agriculture is also seen as an industry of major proportions which has always played significant role in the economic history of any nation. Thus, agricultural activities are often constituted and carried out in groups, like cooperatives.

Agricultural cooperative is seen to be a group of farmers who combine their resources together for efficient facilitation of improved production. These activities entail joint purchase of farm inputs such as seedlings, farm equipment, aiding members morally and financially during cultivation and seeking marketing channels for farm products to ensure better and fair prices (Msimango & Oladele, 2013). Agriculture also means a unit of business organization charged with the responsibilities of meeting welfare needs of members in particular and the society in general. Agricultural cooperatives hold much potential to enable economically weak farmers to increase their collective bargaining power, enhance income, provide inputs and create market opportunities.

Women are at the centre stage of agricultural production in Sub-Saharan Africa, where they play key role in household food security and rural poverty alleviation (World Bank 2011, FAO 2011, Dufio 2012). The role of women in agriculture and rural life has been especially important and cannot be overemphasized. Women are the backbone of the development of rural and national economies as they represent 43% of the global agricultural labor force and, 80% of the agricultural production in Africa (Mucavele, 2015). Africa Human Development report (2016) revealed that equal participation in agricultural cooperatives is women's right and important for sustainable people-centered development. If cooperatives are gender-responsive and inclusive, they can help women overcome gender constraints to improve their self-confidence, knowledge, leadership skills, income, access to agricultural inputs,

social networks and position in value-chains (FAO, 2013). When women are more economically and socially empowered, evidence shows that there are direct and positive impacts on their household, community decision-making, access to and control over productive assets. These lead to improved household nutrition, food and income security, broader development outcomes, and a more integrated production of both food and cash crops (Qui-sumbing 2003. Danjuma, Awulu & Audu, 2014).

However, there have been some demographic, economic and socio-cultural factors influencing women participation in agricultural cooperatives. In mixed cooperatives, female and male members tend to learn to adopt more gender equitable values that promote respect for one another as full-fledged farmers, processors and entrepreneurs. Agricultural cooperatives are important in the socio-economic development of the rural economy. Basically, poverty entails low income, low or no access to production inputs, low productivity, illiteracy and lack of access to information and basic necessities of life. It also portends a condition of low income that leads to low savings, resulting in low investment and productivity (Adegeye & Dittoh, 2015). In addition, rural inhabitants, poor and uneducated people are not served as expected by formal financial institutions in developing countries (Adjei & Arun, 2012). Thus, creating a wider disparity in credit assessment between them and their urban, educated and informed counterparts.

Socially, in a male dominated cooperative, many women appear uneasy to join as they would not be allowed to hold headship positions and the possibility of making male friends/associates could be culturally misinterpreted (Olayemi, Olayide, Eweka & Bello-Osagie, 2013). Again, certain traditional beliefs in such areas forbids a woman to head or lead the men, hence, women would choose to stay away. Such systemic gender biases and other socio-cultural factors appear to be the major issues limiting full women participation and assessment of abundant cooperatives opportunities. In view of the foregoing therefore this study examines the socio-economic and determinants of women participation in agricultural cooperatives in Kogi State, Nigeria.

### **Objectives of the Study**

The broad objective of this study is to examine the socio-economic determinants of women participation in agricultural cooperatives in Kogi State, Nigeria.

The study is set to achieve the following specific objectives:

1. To examine the effects of economic factors on women participation in agricultural cooperatives in Kogi State.
2. To examine the effects of social factors on women participation in agricultural cooperatives in Kogi State.

### **Research Questions**

In seeking to realize the specific objectives, the following research questions were raised;

1. What are the effects of economic factors on women participation in agricultural cooperatives in Kogi State?
2. What are the effects of social factors on women participation in agricultural cooperatives in Kogi State?

### **Research Hypotheses**

In line with the specific objectives and research questions, a number of hypotheses are formulated to guide this study. They are;

1. H<sub>0</sub>: Economic factors do not have significant effect on women participation in agricultural cooperatives in Kogi State.  
H<sub>1</sub>: Economic factors have significant effect on women participation in agricultural cooperatives in Kogi State.
2. H<sub>0</sub>: Social factors do not have significant effect on women participation in agricultural cooperatives in Kogi State.  
H<sub>1</sub>: Social factors have significant effect on women participation in agricultural cooperatives in Kogi State.

## **Conceptual Review**

### **The Concept of Participation**

Participation refers to the State of participating or sharing in common with others. It is also seen as the distribution or division into shares which could emanate through community, fellowship or association. It is important to point out the primary aim of cooperative society is to meet the needs of its members through active participation. Participation is an ideologically contested concept which produces range of competing meanings and applications. The result is a variety of views on how participation is defined, whom it's expected to involve and what it is expected to achieve and how it is to be brought about (Agarwal, 2001).

Some definitions focus on other aspect such as the involvement of all stakeholders at all stages of development, on outcomes, on empowerment, and on the important role of disadvantages groups particularly women and the poor. Woldu et al (2013) and Oyemike et al (2017) provided a good holistic starting point for defining participation "a social process whereby specific group with shared needs living in a defined geographic area actively pursue identification of their needs, take decisions and establish mechanisms to meet these needs. Studies have shown that active participation in organization, groups is twofold in that it is a mechanism to empower and facilitate an improvement on the lives of the world's poor people.

### **Reasons for Participation**

In the view of Ola (2020), participation in agricultural cooperatives is for sustainable food security and contributes to the growth and development endeavour of the region. To Dawson et al (2016), participation can serve as fundamental tool for sustainable food security at household level. He further posited that participation in agricultural cooperatives is the best institutional intervention for attaining food security in any country.

There are other reasons for participation according to Verhofsta (2014), they are for management of skills, mobilization of community, conflict resolution and institution building among extension personnel.

Further still, participation in agricultural cooperatives could be for and not limited to the following;

- Increases the actual agricultural benefits to members of the cooperatives.
- It decreases the dependence of people on government to make the public self-sustaining.
- It makes possible for the mobilization of local sources.
- Implementation of projection at micro levels

**Economic and Social Factors and Women Participation in Agricultural Cooperatives**

Cash is considered the catalyst that activates other factors of production and make under used capacities functional for increased production (Ijere, 2008). It is a major factor necessary for technological transfer in traditional agriculture (Selhausen, 2014). They often turn down the credit request of the poor farmers due to lack of collateral and awareness on how to go about sourcing of fund. This hamper mechanized agriculture and forces many to remain dormant in the subsistence or even traditional means of farming.

Farm credit can be obtained from either the formal source which include the banks and other government owned institutions or the informal sources which are self-help groups, money lenders, cooperatives and Non-Government Organizations (NGO’s). The informal source of credit is more popular among small scale farmers which may be to the relative ease in obtaining credit devoid of administrative delay, non-existence of security or collateral, flexibility built into re-payment which is against what is obtainable in the formal sector. The institutional lending system has failed to meet the objectives for which they were set up (Damisa & Yohana, 2017).

Aweto (2014) was of the view that fraudulent and dishonest practices have been widely identified as the most serious ill which hinders the growth of cooperative endeavors in Nigeria. Social migration is another factor influencing or determining women participation in agriculture in different places. In some parts of South Africa, farming is only a part-time occupation. She further maintained that corruption and embezzlement could be widespread among cooperators themselves, or amongst the cooperative officials or staff and government officials who collaborate to embezzle cooperative funds. This in consequence has made many cooperative societies or union bankrupt. Sometimes, the administrators or cooperative personnel such as cooperative officers exploit the ignorance of gullible members by embezzling the society’s fund. Omotosho (2007) reported that corruption also occur where there is no adequate auditing of the society’s accounts. This situation usually discourages farmer cooperators from participating fully in the cooperative activities. Again, it prevents potential cooperators from being involved in cooperative activities.

Cooperative according to Woldu *et al* (2015) report noted that social drivers hamper African women’s advancement and proposes policies to close gender gap. Finally, deeply-rooted structural obstacles such as unequal distribution of resources, power and wealth, as well as social institutions and norms that sustain inequality that are holding the women farmers down.

**Research Methodology**

The study adopts a descriptive research design which is a research survey design that involves reaching the respondents by collecting their responses for the purpose of analysis. The primary data were through a structured questionnaire and the collected data were subjected to descriptive and parametric statistics. The population of this study comprised the entire women cooperatives in Kogi state. The population is six thousand and forty-four registered women cooperatives in Kogi state. This research therefore adopted Godden’ statistical formula which is statistical technique for determination of sample size therefore, in using the Godden statistical formula we have:

The Godden (2004) formular denoted as.:

$$SS = \frac{Z^2 (P) (1 - P)}{C^2} \quad \text{-- equ (1)}$$

$$\text{New SS} = \frac{SS}{\dots}$$

$$\frac{1 + (SS - 1)}{\text{Population}} \quad - \quad - \quad - \quad - \quad - \quad \text{equ (2)}$$

Where SS = Sample size

Z = Confidence level 95 %

P = Percentage of population (70%)

C= Confidence interval = 5 % (0.05)

$$SS = \frac{1.96^2 (0.7) (1 - 0.7)}{0.05^2} \quad - \quad - \quad - \quad - \quad - \quad \text{equ (1)}$$

$$SS = \frac{3.8416 (0.7) (1 - 0.7)}{0.0025}$$

$$SS = \frac{0.806736}{0.0025}$$

$$SS = 322$$

Population = 6044

$$\text{New SS} = \frac{322}{1 + \frac{(322 - 1)}{6044}}$$

$$\frac{322}{1 + 0.53}$$

$$SS = \frac{322}{1.53}$$

$$\text{New SS} = 210$$

Therefore, the sample size = 210

However, out of the total 210 questionnaire distributed only 196 were duly completed and returned giving a retrieval rate of 93%.

The questionnaire was the only source of primary data therefore in doing this the study designed a structured questionnaire which was close ended while a five- point Likert-scale responses of strongly agree, Agree, Undecided, Disagree and strongly disagree was used. The decision criterion is to accept any item with a mean of 3.00 and above otherwise such a mean will be rejected.

### Data Analysis and Results

The study tests two hypotheses using the simple linear regression with the aid of Statistical Packages for Social Sciences (SPSS). The independent variables are economic and social environments while the dependent variable is women participation. The specific analytical approaches adopted are the descriptive, model summary and analysis of variance (ANOVA). The decision rule is to accept P. value if the alpha value is  $\geq 0.05$  otherwise the null hypothesis be rejected.

### Test of Hypotheses

#### Hypothesis 1

1.  $H_0$ : Economic factors do not have significant effect on women participation in agricultural cooperatives in Kogi State.  
 $H_1$ : Economic factors have significant effect on women participation in agricultural cooperatives in Kogi State.

Table 2: Descriptive Statistics

Descriptive Statistics			
	Mean	Std. Deviation	N
Women participation	3.642	1.41	196
Economic factors	3.584	1.22	196

Table 2 shows the descriptive statistics of the two variables, it shows that the selected scale means lie within the accepted range, therefore, they are highly reliable and the research concludes that data obtained and analyzed is significant and reliable. The mean value for economic factors is 3.642 and women participation is 3.584 as well as standard deviation for economic factors is as 1.22 and women participation is as 1.41 This implies that women participation is highly dependent on economic factors.

Table 3.

#### Model Summary

##### Model Summary<sup>b</sup>

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.8452 <sup>a</sup>	.7144	.713	.2523	.120

a. Predictors: (Constant), economic factors

b. Dependent Variable: women participation

Table 3 shows that there is a significant positive relationship between the dependent variable (women participation) and independent variable (economic factors) as indicated by a strong R of 0.8452. The coefficient of determination  $R^2$  (R square) which measures the percentage of the total change in dependent variable that can be explained by independent variable indicating that economic factors increase 0.7144 which means that economic factors increase the 71 % of women participation. This

also implies that a 1% increase in economic factors will lead to 71% of women participation s. However, this could be overstated so the adjusted estimate for the whole result was explored and it also gives 0.713 and the standard error of the estimate is considered low at 0.2523. Finally, the model shows that there is no auto regression in the variables as it shows the Durbin Watson of 0.120

**Table 4.**

ANOVA <sup>b</sup>					
Model	Sum of Squares	Df	Mean Square	F	Sig.
1Regression	212.371	1	212.371	3648.121	.000 <sup>a</sup>
Residual	12.242	195	.032		
Total	224.613	196			

a. Predictors: (Constant), economic factors

a. Dependent Variable: women participation

The ANOVA table for regression line shows that the P-value is 0.000 which is lower than 0.05 alpha values. The table shows the f statistics is 3648.121. Therefore, it shows that economic factors do have significant effect on women participation in agricultural cooperatives in Kogi State which implies that the null hypothesis is rejected.

### Hypothesis 2

1. H<sub>0</sub>: Social factors do not have significant effect on women participation in agricultural cooperatives in Kogi State.

H<sub>1</sub>: Social factors have significant effect on women participation in agricultural cooperatives in Kogi State.

**Table 5: Descriptive Statistics**

Descriptive Statistics			
	Mean	Std. Deviation	N
women participation	3.69	1.31	196
Social factors	3.67	1.21	196

Table 5 shows the descriptive statistics of the two variables, it shows that the selected scale means lie within the accepted range, therefore, they are highly reliable and the research concludes that data obtained and analyzed is significant and reliable. The mean value for social factor is 3.69 and women participation is 3.67 as well as standard deviation for social factor as 1.21 and women participation as 1.31. This implies that women participation is highly dependent on social factors.

**Table 6.**

### Model Summary

Model Summary <sup>b</sup>					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.926 <sup>a</sup>	.857	.854	.21324	.122

a. Predictors: (Constant), social factors

b. Dependent Variable: women participation



Table 6 shows that there is a significant positive relationship between the dependent variable (Women participation) and independent variable (social factors) as indicated by a strong R of 0.926. The coefficient of determination  $R^2$  (R square) which measures the percentage of the total change in dependent variable that can be explained by independent variable indicating that social factors increase 0.857 which means that social factors increase the 86% of women participation.

This also implies that a 1% increase in social factors will lead to 86% of women participation. However, this could be overstated so the adjusted estimate for the whole result was explored and it also gives 0.854 and the standard error of the estimate is considered low at 0.21324. Finally, the model shows that there is no auto regression in the variables as it shows the Durbin Watson of 0.122.

**Table 7.** ANOVA

ANOVA <sup>b</sup>					
Model	Sum of Squares	Df	Mean Square	F	Sig.
1Regression	212.236	1	212.326	2445.011	.000 <sup>a</sup>
Residual	15.433	195	.033		
Total	227.669	196			

a. Predictors: (Constant), social factors

b. Dependent Variable: women participation

The ANOVA table for regression line shows that the P-value is 0.000 which is lower than 0.05 alpha values. The table shows the f statistics is 2445.011. Therefore, it shows that social factors have significant effect on women participation in agricultural cooperatives in Kogi State which implies that the null hypothesis is rejected.

## Conclusion

This study has revealed that economic and social factors determine women participation in agricultural cooperatives in Kogi state. As a patriarchal society, many women have suffered lack, deprivation and even negligence in the hands of men in Nigeria. Despite the fact that women constitute about seventy percent of farming population in the country, they are often deprived access to land ownership, inputs and other benefits from farming. Finally, this study concludes that women participation in agricultural cooperatives in Kogi state is significant but low and this is as a result of socio-economic factors.

## Recommendations

Premised on the findings from this research the following recommendations are made for possible policy implementation;

1. Cooperative societies should strive to source for funds and ensure provision of credit to members when needed. Again, women farmers in Nigeria should be encouraged and supported to acquire higher education through adult-education model. This will help address the economic factors that are restraining women participation in cooperatives.
2. Women should be given the opportunity and level playing ground to attain their full potentials in the society. This can be done through effective law enactment against any form of cultural restriction of women on land ownership or usage. This will help eradicate the traditional misconception that women are not to exceed reproductive or domestic boundaries, and enable them to fully harness their agricultural potentials.

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