Continental J. Agricultural Economics 3: 61 - 66, 2009


# ANALYSIS OF GENDER ACCESSIBILITY OF CREDIT BY SMALLHOLDER CASSAVA FARMERS IN AFIKPO-NORTH LOCAL GOVERNMENT AREA OF EBONYI STATE, NIGERIA

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ABSTRACT
The study assessed the gender accessibility of credit by smallholder cassava farmers in Afikpo North Local Government Area (L.G.A.) of Ebonyi State, Nigeria. A multistage random sampling technique was employed to select 120 smallholder cassava farmers used as sample size. Data were collected using questionnaires and interview schedule. Data collected were analysed using both descriptive statistics and ordinary least square regression analysis. From the analysis, it was observed that explanatory variables as gender, age and marital status were statistically significant at 5% and 10% as having strong effect on the amount of loan obtained by the smallholder cassava farmers. The goodness of fit was justified by the coefficient of determination $R^2$ which stood at 48%. It was equally observed that most of farmers (male 35% and female 25%) accessed credit through informal means (Cooperative Societies/Isusu). Again, male farmers have been noted to have higher access to credit than female farmers due to their ability to present collateral. Furthermore, the study revealed that lack of collateral, high interest rate, delay in accessing credit, and inability of the farmers to get sureties for the loan are the most constraining factors in accessing credit by the smallholder cassava farmers. Based on the finding, the study recommended for proper education of the farmers on the need to access credit through Micro-Finance Banks and Nigerian Agricultural, Cooperative and Rural Development Bank (NACRDB) where credit can be obtained at a low interest rate. Again, farmers should form cooperative societies as an easier way of accessing agricultural credits.

KEYWORDS: gender, farmers, access, credit, interest rate, Ebonyi State.

## INTRODUCTION

The word “gender” could be said to be an ideology that justifies the allocation of duties on the analysis of social relation and being marked by the economic determinism with all household processes being judged in terms of what they contribute to the development processes. It has often been misunderstood as being about the promotion of women only. However, Bhattacharya and Thansi (1995) opined that gender focuses on the relationship between men and women, their roles, access to and control over resources, division of labour and needs. Boserup (1970), described gender as a set of characteristics, roles and behavioural patterns which distinguishes women from men, which is not biologically constructed but socially and culturally. To this effect, Okorodudu (2000) opined that certain task activities are regarded as “male” or “female”, and in some settings, a rigid division of labour exists between men and women.

In agricultural production, women are more constrained than their male counterparts as a result of which most women have less access to and higher effective costs for information technology, inputs and credit (Shultz, 2007). Adesina and Djato (1997) buttressed that gender inequalities reduce productivity in farm and enterprises. These lead to inefficiencies that arise from excluding women from access to productive resources, public services, and employment. Productive resource such as agricultural credit is very vital for efficient production. Agricultural credit is needed by both male and female farmers to enable them cope with the risk and uncertainty situations of farming business (Nweke, 2001). It is the first essential factor in agricultural production and with it, farmers can secure farm inputs, equipments and hire additional labour.

Thus, agricultural credit refers to an undertaking by individual farmers or farm operator to borrow capital from intermediaries for the farm operations.

The socioeconomic characteristics of both male and female farmers have been noted to have significant effect on gender access to credit. Again, certain acceptable traditional and cultural norms of the society have been noted to serve as constraints to gender access to credit (Doss, 1999). He further opined that, access to credit may be limited by the perception that agriculture is characterised by risks and uncertainties.

Meanwhile, most micro-credit institutions due to gender bias especially against the female farmers in accessing credit had the promotion of female welfare as the basis for their establishment. Thus, about 97.4% of the clients in the year 2001 were females (CBN, 2004).

In a bid to alleviate the problem associated with credit acquisition by farmers, the Federal Government of Nigeria established Nigerian Agricultural Co-operative and Rural Development Bank (NACRDB). Meanwhile, despite the establishment of the Bank and other financial institutions across the States of Nigeria, there seems to exist, a wide disparity to credit access by both genders in Afikpo North L.G.A. of Ebonyi State. In view of these problems, the study seeks to analyse gender accessibility of credit by smallholder cassava farmers in the area. Specifically, the objectives are, to; describe the socioeconomic characteristics of the smallholder cassava farmers in the area; identify the various sources of credit available to smallholder farmers in the area; determine the effect of the socioeconomic characteristics of the smallholder cassava farmers on the amount of credit obtained; categorise the smallholder cassava farmers based on their access to credit, and analyse the constraints to accessing credit by smallholder cassava farmers in the area. Based on the objectives, a null hypothesis which states that the socioeconomic characteristics of the smallholder farmers have no significant effect on the amount of credit obtained was tested.

## METHODOLOGY

A multi-stage random sampling technique was employed to select a total of one hundred and twenty (120) smallholder cassava farmers used as sample size. Data for the study were obtained using questionnaires and interview schedule. Data generated, were analysed using descriptive and inferential statistics. Specifically, descriptive statistics such as tables, percentages, means, etc were used to analyse objectives (i), (ii), and (iv). Ordinary Least Regression analysis was used to analyse objective (iii). Objective (v) was analysed using mean score. The null hypothesis was tested using F-test at 5% and 10% levels of significance.

The regression model used is stated explicitly as:

$$Y = b_0 + b_1X_1 + b_2X_2 + b_3X_3 + b_4X_4 + b_5X_5 + b_6X_6 + b_7X_7 + Ut$$

Where;

Y = credit obtained
$b_0$ - $b_9$ = regression coefficients
$X_1$= gender
$X_2$ = age
$X_3$ = marital status
$X_4$ = farm size
$X_5$ = household size
$X_6$ = educational level
$X_7$ = annual income

## RESULTS AND DISCUSSION

The analysis of the socioeconomic characteristics of smallholder cassava farmers (Table 1) shows that greater number of the farmers were males (57%). Again, the mean age range of the farmers was between

40-50 years representing 39.2% of the total sample size. This justifies the finding of Rathman, *et al* (2002) who deduced that the age bracket is the economically active age and as such will respond positively to any intervention aimed at improving their productive capacity.

The size of a farm determines the access to the amount of credit, and output obtained. *Ceteris paribus*. The result shows that a total of 70% of which 41.7% were males and 18% females cultivate a hectare of land. This implies that males have greater access to land than the female cassava farmers. About 58% of the respondents had a household size of greater than 8, thus implying that majority of the smallholder cassava farmers were having large families. This then justifies Ojemade, Edeh, and Onemolease (2008) who opined that agricultural production activities are labour intensive and large households can provide family labour at least cost.

The analysis on sources of credit to the smallholder cassava farmers in Afikpo North L.G.A. (Table 2) revealed that co-operative societies, rotator contributory fund often called *Isusu* in Ibo language and private money lenders were the major source of credit to smallholder cassava farmers. This was evident from 51.5% and 48.1% of males and females respectively that sourced credit from the cooperatives and *Isusu* groups. In the same way, 27.9% and 25% of males and females respectively sourced credit form money lenders. This findings agrees with the observations of Vakulahbranam and Motriam (2007) that the core of conventional bankers found it difficult to provide credit or other financial services to smallholder farmers or small enterprises due to lack of collateral. Generally, the most accessible source of credit known to smallholder farmers is the informal source as it agrees with Nwoye and Ezike (2006), that informal credit institutions with their organisational structure, universal members' savings; indigenous credit associations have the potential to assist in mitigating the negative effects of dearth of rural credit, even if they cannot entirely overcome them due to low capital base. Furthermore, informal credit associations can reach many farm families, thus creating a greater impact than could have been possible through most formal credit institutions which satisfy a comparatively few individuals.

The analysis of the effect of socioeconomic characteristics of the smallholder cassava farmers on the amount of credit obtained revealed that gender ($X_1$) and age ($X_2$) were positively signed and significant at 10% and 5% respectively. This implies that as farmers' age increases, the ability to obtain credit will increase. It further revealed that marital status ($X_3$) was negatively signed but significant at 5% level. Thus, indicating an inverse relationship to the amount of credit obtained. Meanwhile, the coefficients of other explanatory variable except that of annual income ($X_7$) were positive but not significant at 1% and 5% level. The coefficient of determination ($R^2$) stood at 0.484 is an evidence for a reasonable fit. Hence, about 48% of the variations on the dependent variable were explained by the independent variables. The F-statistics of 8.187 indicates the overall significance of the model at 1% and 5%.

Analysis on the constraints in accessing credit by smallholder farmers (Table 4), showed that lack of collaterals, high interest rate, delay in accessing credit from financial institutions, and inability to get surety(ies) for the loan are the most constraining factors to both gender. This observation is in tandem with CBN (2000) observation that most financial institutions give financial services (loan, credit, insurance cover, etc) more to male gender because of their collateral base.

## CONCLUSION

From the regression analysis, it was observed that gender, age, marital status, and farm size have strong effect on the amount of credit obtained by the smallholder cassava farmers. Consequently, the coefficient of determination of 0.484 ($R^2$ = 0.484) expressed the goodness of fit of the regression equation. It was equally observed that the most readily source of credit for both genders is cooperative societies/isusu.

Despite the availability of sources of credit to both genders, the study revealed that males have more access to credit than the females. Meanwhile, lack of collateral, high interest rate, delay in accessing credit, and in

ability of the farmers to get surety(ies) for the loan are the most constraining factors in accessing credit by the smallholder cassava farmers.

RECOMMENDATION

Based on the findings, the study recommended for proper education of the farmers on the need to access credit through micro-finance banks and NACRDB as the institutions have the mandate to give credit to smallholder farmers at a low interest rate. Again, farmers should be encouraged to form cooperative societies as an easier way of accessing credit through the aforementioned credit institutions.

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Table 1: Percentage Distribution of Smallholder Cassava Farmers Based on their Socio-economic Characteristics

| Socio-economic | Description | Frequency | Percentage |
|---|---|---|---|
| Age (years) | 21-30 | 16 | 13.3 |
| | 31-40 | 29 | 24.2 |
| | 41-50 | 47 | 39.2 |
| | 51-60 | 25 | 20.8 |
| | > 60 | 3 | 2.5 |
| Gender | Male | 68 | 56.7 |
| | Female | 52 | 43.3 |
| Marital status | Single | 20 | 16.7 |
| | married | 70 | 58.3 |
| | Separated | 5 | 4.2 |
| | Widowed | 25 | 20.8 |
| Farm size | < 1hectare | 42(20m, 22f) | 35.0(16.7m,18.3f) |
| | 1 – 1.5 hectares | 72 (50m,22f) | 60.0(41.7m,18.3) |
| | 1.6–2.0 hectares | 4(4m, 0f) | 3.0(3.0m, 0f) |
| | > 2 hectares | 2(2m, 0f) | 2.0(2.0m,0f) |
| Household size | < 5 | 14 | 11.7 |
| | 6-8 | 36 | 30.0 |
| | > 8 | 70 | 58.3 |
| Educ. level | No formal edu. | 12 | 10.0 |
| | Primary | 47 | 39.2 |
| | Secondary | 57 | 47.5 |
| | Degree | 08 | 3.3 |
| Annual income(₦) | < 10000 | 0 | 0 |
| | 11000-50000 | 13 | 10.8 |
| | 51000-100000 | 95 | 79.2 |
| | > 100000 | 12 | 10.0 |

Source: Field survey, 2008
m = males, f = females

Table 2: Percentage Distribution of Smallholder Cassava Farmers According to Sources of Credit

| Credit source | Male | | Female | |
|---|---|---|---|---|
| | Freq. | percentage | Freq. | percentage |
| NACRDB | 3 | 4.4 | 2 | 3.8 |
| Micro-Fin. Banks | 1 | 1.5 | 7 | 13.5 |
| Comm. Banks | 3 | 4.4 | 0 | 0.0 |
| Friends | 4 | 5.9 | 3 | 5.8 |
| Relations | 3 | 4.4 | 2 | 3.8 |
| Money lenders | 19 | 27.9 | 13 | 25 |
| Co-operative/Isusu | 35 | 51.5 | 25 | 48.1 |
| Total | 68 | 100 | 52 | 100 |

Source: Field Survey, 2008

Table 3: Effect of Socioeconomic Characteristics of Smallholder Cassava Farmers on the Amount of Credit Obtained

| Variable | Regression co-efficient | Standard error of estimates | t-values | Level of significance |
|---|---|---|---|---|
| Constant | 35269.497 | 5745.952 | 6.738 | * |
| Gender | 4897.137 | 2353.587 | 2.081 | ** |
| Age | 6288.972 | 1459.489 | 4.309 | * |
| Marital status | 7259.797 | 3178.896 | 2.284 | * |
| Farm size | 902.016 | 904.739 | 0.997 | - |
| Household size | 129.979 | 1292.636 | 0.101 | - |
| Educ. Level | 245.694 | 290.163 | 0.847 | - |
| Annual income | 3201.586 | 2491.324 | 225 | - |

Source: Field survey, 2008
*significant at 5%, **significant at 10%, $R^2$= 0.484, F-ratio = 8.187, SE= 9808.0040

Table 4: Constraints in Accessing Credit by Smallholder Cassava Farmers

| Constraints | Males $\overline{X}_S$ (mean scores) | Females $X_S$ (mean scores) |
|---|---|---|
| Lack of collateral | 2.4 | 3.6* |
| High interest rate | 2.8* | 2.9* |
| Lack of basic education | 1.6 | 2.3 |
| Short duration of loan | 1.3 | 1.8 |
| Delay in accessing credit | 2.6* | 2.8* |
| Inability to get sureties | 3.0* | 2.6* |

Source: Field survey, 2008
* accepted as constraining factor based on 2.5 mean score decision rule

Received for Publication: 07/07/2009
Accepted for Publication: 22/07/2009

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