SOCIO–ECONOMIC DETERMINANTS OF RURAL WOMEN ACCESS TO FORMAL AGRICULTURAL CREDIT

Grace Hezekiah Isa

Department of Economics,
Bingham University,
Karu, Nasarawa State
E – Mail: gracehezekiah@yahoo.com, Phone No: +2348028195539

&

Josephine Olowu

Department of Sociology,
Bingham University,
Karu, Nasarawa State
E – Mail: oluwujosephine@gmail.com

Abstract

Rural women in Kaduna state are actively involved in agricultural production. They constitute the bulk of agricultural producers in the state. Most of these women are poor and the only alternative for raising capital has continued to elude them. Obtaining loan from the banks (formal) was more problematic than the informal source that is, the non organised sector. This study therefore, investigated rural women access to formal credit. Primary data were collected through the use of structured questionnaire and Focus Group Discussion (FGD). A multi-stage random sampling technique was applied in the selection of eighty (80) women farmers. Each Local Government Areas had (40) respondents. The analytical tools used are frequencies, crosstab and percentages. The chi-square was also used to test the null hypotheses that there was a significant relationship between socio-economic factors and access to credit. It was discovered that 17 percent of rural women sourced credit from formal sources such as commercial banks, agricultural banks) and 83 percent. They got theirs from informal sources such as friends, relatives, NGOs and personal saving. The difficulty in accessing formal credit was due to socio-economic factors. The cross tabulation and chi-square analysis showed that occupation, education and landownership had influenced on access to agricultural credit. Socio-economic factors like age, family size, farm size had no influence on access to credit. Recommendations were made which includes reviewing the Land Use Act, improving education for rural women amongst others.

Key words: Women, Adashi, Chi square, Formal Credit, Informal credit, Socio-economic

1.   INTRODUCTION

Rural women are known to produce up to 60% of food consumed and have been described as the backbone of subsistence agriculture in Nigeria (Osuala, 1991). Almost all active women in rural areas engage in agriculture (Adawo and Umobang 2003) yet, majority of these rural women are poor and lack access to resources. Most rural women in Kaduna State particularly, the southern part engages in agricultural production. Jema'a and Kaura Local Government Areas work under very difficult conditions, they use traditional tools and techniques. These tools are not efficient enough to generate the required output. Rural women are known to do other tedious farm work like marketing and processing of the product. Improving their access to credit would enable rural women to undertake profitable projects, increase their income and insure against negative shocks (Sadoulet and Janvry 1995).

Credit market imperfections can have severe consequences for poverty alleviation and growth. Many national governments, development organizations and financial institutions address the problem of women in general without specifically focusing on rural women. Rural women suffer from a range of both formal and informal barriers to develop themselves. These women lack collateral security for bank loan and have higher risk aversion for development servicing. Hence, women depend heavily on their own sources of income which are farming activities to meet their responsibility and sustain their farm (Okunade, 2007). For agriculture to play a dynamic role in economic development, it requires substantial capital inputs. Credit should be seen as one of the essential agricultural inputs needed for commercializing agricultural production. This study is important because rural women in Kaduna State are vital driving force of food security. Therefore, this study sought to evaluate the socio-economic factors influencing women access to formal credit particularly in the two Local Government Areas in Kaduna State.

2. LITERATURE REVIEW AND THEORETICAL FRAMEWORK

2.1 Conceptual Framework

Credit according to Messah and Wangai (2011) enables small scale business operators overcome their liquidity constraints. This credit is either sourced from formal or informal financial sector (Gelinas, 1998; Aruwa, 2004). Formal credit can be sourced from institutions such as commercial banks, microfinance banks, international development banks (Gbandi and Amissah, 2014). The most common formal credit institutions are commercial banks and microfinance.

2.2 Theoretical Framework.

The risk management theory relates to this study. In risk management theory according to Jafee, (1989), the prime lending rate plays an important role. Interest rates on riskier loans are determined as a mark -up that is, an interest rate premium over the prime rate. The rural women are regarded as riskier borrowers. It is believed that their socio- economic characteristics like poor education, lack of collateral influences their loan repayment rate. In practice, the mark up over the prime rate charged a risky borrower may also depend on the degree of competition in the loan market. When the market is highly competitive the mark up represents only the expected loss due to default. If a bank tried to charge more, competitors would offer a lower interest rate and take away the customer. The absence of perfect competitive market makes it possible for banks to charge risky borrowers a mark up over the prime rate that is, more than the expected loss due to default. There are few banks in the rural areas. This makes the banks in the rural areas not to be highly competitive. Therefore, these few banks will charge more. Jaffee furthermore stressed that, the amount of competition in loan market is different for prime and risky borrowers. For prime borrowers and for highly collateralized loans, the loan markets tend to be highly competitive. Since rural women are regarded as risky borrowers, banks must determine the degree of risk. In determining the degree of risk the loan market in rural areas becomes less competitive.

2.3 Empirical Literature Review

Ajagbe (2012) study was on analysis of access to and demand for credit by small scale entrepreneurs in Oyo State, Nigeria. Primary data was obtained through stratified sampling technique and multinomial logit estimation technique. The work evaluated the impact of personal and household characteristics

like age, education, gender, family size, value asset, membership composition, period of obtaining credit, contribution to credit market and business situation before credit on access to credit. Age, membership status of entrepreneur, education and possession of valuable assets were found to influence demand for credit from different credit markets. The research failed to capture occupation, marital status as a factor that could determine access to credit

Using descriptive and regression analysis, it was discovered that the level of education, number of dependants, gender and household income significantly determined the access to formal credit (Wangai and Messah, 2011). This study investigated the factors that influenced the demand for credit among small scale investors. There is also the supply side of credit which the study ignored. Terms and conditions are usually attached to any loan facility. These terms and conditions deters borrowing by women. A study on women entrepreneurs' access to microfinance credit in Imo State was done by Eze et al (2016). Data collected was analysed through descriptive and logit analytical tools. It was discovered that, microfinance banks supplied credit to women entrepreneurs in Imo State. However, women found it difficult to access credit in the subsequent years because of the stringent conditions introduced by microfinance banks. This stringent conditions are interest rate and shorter loan repayment period. Furthermore, the socio-economic characteristics of women entrepreneur influenced women access to microfinance credit. The study did not consider rural women access to credit. A survey data consisting of 210 couples in rural Paraguay was analysed by Fletchener (2008) to determine the factors responsible for credit constraints among women. The study found out that, factors such as collateral requirement, the difficulty in finding a guarantor, lack of information about the availability of funds, low literacy rate, risk averse characteristic of women lack of confidence when applying loans, the requirement of the authorization by the husband or male relative, high transaction cost of receiving a loan and the requirement of the authorization by the financial institutions. This study did not consider the influence of women age on credit accessibility.

3. METHODOLOGY

3.1 The Area of the Study.

This research was conducted in two local government areas in Kaduna State. These two local government areas Jema'a and Kaura are situated in the southern part of Kaduna State having latitude 10.20` North and longitude 7.45` East. It covers an area of 45,711.2 square kilometers. People of these areas engaged in both pre- harvest and post- harvest activities. Again, women in these areas are known to be actively involved in agricultural activities.

3.2 The Nature and Sources of Data

The data for this study was primarily sourced. The primary data was collected through administration of structured questionnaire and interviewing method. A focus group discussion was also conducted in regard to the study. Also, information was obtained through personal contacts with the ADP field enumerators. The sampling frame for the study consists of only female farmers who engaged in different types of agricultural activities. According to 2006 census result, the two local government areas had an estimated total population of about two hundred and forty thousand (240000) women. Out of this total, about one hundred and eighty thousand (180000) were actively involved in farming. Therefore, to select the sample for this study, the two local government areas were divided into districts. These districts were made up of villages. Jema'a is made up of eight (8) districts and one

hundred and sixty seven (167) villages, While, Kaura has 7 districts and 74 villages. Multi-stage random sampling technique was, therefore applied. Four (4) districts where women engaged actively in farming were selected from each local government area. This gave a total of eight (8) districts. The next selection is one village from each district. On village was targeted due to the fact that some districts were made up of two villages. Again, ten (10) farming households were selected from each village by simple random sampling method. From each household, only, female farmers were identified when administering the questionnaires. This gave a total of eighty (80) sample size.

3.3   Measurement of Accessibility

Accessibility to credit was ranked by the degree to which their sources were easily reached and the problems encountered in accessing credit. This accessibility was ranked using 2 scale of Very accessible (VA) and Not accessible (NA).

> VA = Availability of credit institution, no emphasis on collateral, adequate
> amount, and low interest rate.
> NA = Availability credit institution, emphasis on collateral, insufficient amount and
> high interest rate.

3.4   Analytical techniques.

Various statistical methods were adopted for this study. They include descriptive statistical tools, cross tabulation and the chi-square test.

4.   RESULT AND DISCUSSION

Table 4.1 Agricultural Credit from Formal and Informal Sources

Sources	Types	Jema'a	Kaura	Total
		Freq (%)	Freq. (%)	Freq. (%)
Formal	Comm./Agric bank	8 (20	9 (22.5)	17 (19)
Informal	Friends	4 (10)	2 (5)	6 (7.5)
	Relative	8 (20)	7 (17.5)	15 (21)
	Personal Saving (Adashe)	12 (30)	10 (25)	22 (28)
	NGOs	8 (20)	12 (30)	20 (25)
TOTAL		**40 (100)**	**40 (100)**	**80 (100)**

Source: Field Survey.

Various sources of credit were identified in table 4.1 formal source were obtained from commercial and agricultural banks, while the informal sources includes personal savings (adashe), friends, relatives and non-governmental organization (NGOs) like fanstwan foundation and pathfinder. Majority of the women in the study area obtained their agricultural finance from the informal sources. This suggests that there is problem in accessing formal agricultural credit.

Table 4.2 Distribution of Respondent by Problems Faced in Obtaining Credit From Formal source (Banks)

Problem encountered	Jema'a	Kaura	Total
	Freq.	Freq.	Freq (%)
Inaccessibility to credit institution	18	22	40 (50)
Lack of collateral security	18	14	32 (40)
Untimely Disbursement	11	9	20 (25)
Administrative/Bureaucratic procedure	16	24	40 (50)
Illiteracy	10	8	18 (23)
Interest Rate	9	11	20 (25)
Insufficient amount			

Source: field Survey

Table 4.2 shows that 50% of the respondent experienced difficulty in getting formal loans. This was due to the fact that credit institutions were inaccessible and there were also long administrative procedures. Again, 40% of these women lacked collateral security for bank loans. The least problem encountered is insufficient amount. This means that, the women had some challenges in accessing credit from the formal source (banks).

4.1.1 Analysis of the Socio-economic Factors

Age

Generally credit delinquency has been attributed to certain category of credit beneficiary below a particular age group. Therefore, the inversion here is to verify and test the relationship between age and accessibility to credit. The table below verifies this relationship.

Table 4.2 Age and Accessibility

Crosstab

	Accessibility		
Age	NA(%)	VA(%)	Total(%)
Less than 20	2 (66.7)	1 (33.3)	3 (3.8)
21-30	8 (61.5)	5 (38.5)	13 (16.3)
31-40	17 (56.7)	13 (43.3)	30 (37.5)
41-50	7 (30.4)	16 (69.6)	23(28.8)

51-60	6 (60)	4 (40)	10 (12.5)
Over 60	0 (0)	1 (100)	1(1.3)
Total	40	40	80(100)

KEY: NA (Not Accessible) VA (Very Accessible)

The cross-tab of table 4.2 shows that respondents did not vary significantly in their opinions with respect to the various accessibility rating. This means that age is not a factor to credit accessibility in the study.

Chi- Square Test

	Value	D f	Asymp.sig(2sided)
Pearson chi-square	15.913	15	.388

The chi-square test for age and accessibility is not statistically significant at 5% level. The chi-square p value of .388 has confirmed the cross tab result. Therefore there is no relationship between age and accessibility.

Occupation

An individual engage in a job to earn income. The predominant occupation in these rural areas is farming. Most rural women practice subsistence farming which give them low income. This low income can discourage them from opening accounts with banks. Those in non -farming jobs especially civil servant have easy access to formal credit. The interaction with these women made it clear that those in the civil service usually have salary account with bank. This salary account minimizes the problem of long protocol in opening an account. Again most of the civil servants have acquired formal education this makes them literate therefore, overcoming the problem of illiteracy in accessing credit.

Table 4.3. Occupation and Accessibility

Crosstab

Count

Occupation	Accessibility		
	N A (%)	V A (%)	Total (%)
Farming	30 (65.2)	16 (34.8)	46 (57.5)
Trading	8 (50)	8 (50)	16(20)
Civil Servant	2 (11.1)	16 (88.9)	18 (22.5)
Total	40	40	80(100)

KEY: NA (Not Accessible) V A (Very Accessible)

Table 4.3 Shows that more than half of the respondents were farmers. However, majority of then are saying credit is not accessible. Therefore, the cross tabulation between occupation and accessibility to credit indicates that civil servants have more access to credit than farmers. This is because they are capable of meeting bank condition of depositing cash in the banks.

Chi-Square Test

	Value	D F	Asymp sig. (2-sides)
Pearson chi-square	23.546	9	.005

The chi-square result also confirms the relationship. The chi-square p value was 0.005. It is statistically significant, meaning that there is a significant relationship between occupation and access to credit.

Marital Status

Most policy programmes usually target the household and the head of households (husbands) are considered first. The women (married ones) have problem accessing resources. Since their husbands always represent the family. This assumption is verified in the table below:

Table 4.4 Marital Status and Accessibility.

Crosstab

Count

Marital Status	Accessibility		Total (%)
	N A (%)	V A (%)	
Married	35(49.3)	36 (50.7)	71 (88.8)
Widowed	2 (40)	3 (60)	5 (6.3)
Divorced	3 (75)	1(25)	4 (5)
Total	40	40	80(100)

KEY: N A (Not Accessible) V A (Very Accessible)

The cross-tabulation result of table, 4.4 shows that the different categories of women face the same thing when accessing credit. The result is evenly distributed in the sense that the differences in their responses are minimal. The women in the study areas testified that they were not discriminated based on marital status. This implies that marital status is not a yardstick for obtaining credit. Any woman can access credit irrespective of her marital status.

Chi-square Test

	Value	D f	Asymp. Sig (2-sided)
Pearson chi-square	4.728	6	.579

The chi-square result with p value 0.579 also shows that the relationship between marital status and accessibility to credit is not statistically significant at 5%.This research finding contradicts previous works like Ishengoma (2004). This finding differs because some of the married women are also accessing credit like others without husband. This contradiction might be as a result of time lag that is increasing gender awareness.

Education

Education addresses the problem of illiteracy. The educated women stands the chance of accessing credit. The table below verified this fact

Table 4.5 Education and Accessibility

Crosstab

		Accessibility		
Education	NA (%)		VA(%)	Total (%)
None	7(63.6)		4 (36.4)	11 (13.8)
Primary	23(63.9)		13(36.1)	36 (45)
Secondary	10 (52.6)		9 (47.4)	19 (23.8)
Post Secondary	0(0)		14(100)	14 (17.5)
Total	40			80 (100)

KEY: NA (Not Accessible), VA (Very Accessible)

The above table shows that fewer number of respondents with none formal education ticked "Very Accessible" (VA). That is, four (4) out of eleven (11) women with none formal education selected "Very Accessible" (VA).Those with higher educational qualification agreed that credit was generally accessible. The cross tabulation between education and accessibility to credit shows that the more educated a woman is, the better chances of accessing credit.

Chi Square Test

	Value	D f	Asymp sig(2 sided
Pearson chi-square	26.185	9	.002

The p value 0.002 is also statistically significant. The result is similar to that a cross tabulation between education and accessibility. The relationship between education and access to credit is proven by the two tests. Therefore, higher level of education increases women chances to accessing formal credit.

Family Size

The formal credit institutions activities at times use children as security for loan collected. Hence this work tends to investigate the influence of family size on access to credit.

Table 4.6 Family Size and Accessibility

Accessibility			
Family size	NA (%)	VA (%)	Total (%)
1-4	18(52.9)	16 (47.1)	34 (42.5)
5-9	18 (50)	18 (50)	36 (45)
10+	4(40)	6 (60)	10 (12.5)
Total	40	40	80(100)

KEY: NA (Not Accessible) VA (Very Accessible).

Table 4.6 shows no much difference in the responses of the different family size. This result shows that accessibility to credit does not increase or decrease with family size.

Chi-square test

	Value	D f	Asymp-sig(2-sided)
Pearson chi- square	6.071	6	.415

The chi-square result also proved it. The chi-square value (0.415) is not statistically significant, hence family size is not a basis for accessing credit.

Farm Size

The banking sector also gives priority to large scale farmers. They have the tendency of making profit and their possibility of paying back is high.

The relationship between farm size and accessibility is shown in table 4.7.

4.7 Farm Size and Accessibility

crosstab

	Accessibility		
Farm size	NA (%)	VA(%)	Total (%)
1.0-3.0	21(50)	21(50)	42(52.5)
3.1-5.0	18(56.3)	14(43.8)	32(40)
5.1 and above	1(16.7)	5(83.3)	6(7.5)
Total	40	40	80(100)

KEY: NA (Not Accessible) VA (Very Accessible)

It is clear that farm size does not determine accessibility to credit. The chi-square test will confirm it. The is because result is evenly distributed

Chi-Square Test

	Value	D f	Asymp sig-(2 sided)
Pearson chi square	6.427	6	.377

The p value of chi-square test is 0.377 therefore, it is not statistically significant. This so because 0.377 is greater than 0.05 which is the significant This means there is no significant relationship between farm size and access to credit.

Landownership

Land is a very important factor of production serves as collateral for accessing credit. Women need land to access credit. The table below explains the relationship between landownership and accessibility to credit.

Table 4.8 Landownership and Accessibility

Crosstab

	Accessibility		
Landownership	NA(%)	VA(%)	Total(%)
Husband land	15 (71.4)	6 (28.6)	21(26.3)
Inherited	0(0)	7(100)	7(8.8)
Hired	23(48.9)	24 (51.1)	47 (58.8)

| Purchased | 2(40) | 3 (60) | 5 (6.3) |
| Total | 40 | 40 | 80(100) |

KEY: NA (Not Accessible) V A (Very Accessible)

The result of table 4.8 shows that women who inherited land had more access to credit. Land plays a great role in accessing credit in the study areas.

Chi-square Test

	Value	D f	Asymp sig(2-sided)
Pearson chi square	38.639	9	.000

The chi-square value (0.00) also substantiated the fact that there is significant relationship between ownership of land and accessibility to credit.

5. CONCLUSION AND RECOMMENDATION

The finding shows three major factor that influence access to agricultural credit. They are occupation education and landownership. Education and occupation are directly linked in the sense that those with higher educational qualification had well paid job. Landownership also increased these women chances of getting credit. There was no significant relationship between other socio-economic factors like age, marital status, family size; farm size with access to credit that is to say age, family size, marital status, farm size did not have influence on access to credit. The current food policy in Nigeria is directed at self- sufficiency in food crop production and improvement in the level of economic and technical efficiency. Barriers to accessing inputs like credit should be taken into consideration. There cannot be significant improvement in agricultural outputs without adequate credit to rural women farmers.

It is now acknowledge by many development agencies that credit is important in agricultural productivity. Credit can help rural women improve their agricultural productivity. Credit can help rural women improve their agricultural productivity. Based on the finding of this study following recommendation is put forward.

    i.   Adult education should be encourage for older rural women and the younger
          Ones (girls) are sent to school.
    ii.. Agricultural development programme should facilitate women access to credit.
    iii. The land Act decree should increase women access to land.
    iv.   The procedure of obtaining loan from bank should be minimized. This will in turn reduce transactional cost of borrowing.

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