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Abstract: The study was carried out to examine the credit availability, utilization and repayment among women arable crop farmers in Egba Division, Ogun State, Nigeria. The total number of sampled respondents selected randomly for these findings was one hundred and twenty eight (128) through the use of a well-structured questionnaire. The statistical tools used for this study are descriptive and inferential statistics. The study revealed that age of the women arable crop farmers within the range of 41 to 50 years has the percentage of 41.4% at this age with an average of 42.58, majority (85.9%) of the women arable farmers are married in which 50.8% have 4-6 household size in the study area. Majority (60.1%) of the farmers are literate while 39.8 percent of the women arable crop farmers are non literate. In addition, majority of the women farmers with the percentage of 57.0 have a farm size ranging within 1.0-3.0 hectares with 30.5% of them have farming experience ranging from 1-5 years, the results also revealed that majority (33.6%) women farmers earned ₦300,001 – ₦ 500,000 from their farming activities. Specifically, the regression analyses indicate that age of the respondents, farming income, farming experience had positive while household size was negative with significant relationship to socio-economic factors that affect loan repayment. Furthermore, the study revealed that majority of women arable crop farmers in the study have financial problem (75%), high interest rate (68.8%) and Educational level (64.1%), respectively which serve as the major problems confronting them in obtaining credit. Therefore, the study recommends agricultural credit should be made available by the financial institutions to meet the various needs of the women farmers.

Keywords: Credit, loan, output, women, households

Introduction

Small-holder farmers engage mostly in mixed farming and cropping in order to ensure steady flow of income. Agricultural credit is any of the several credit vehicle used to finance agricultural transaction, including loans, notes, bills of exchange and bankers acceptances. These types of financing are adapted to the specific financial needs of farmers, which are determined by planting, harvesting and marketing cycles. Short term credit finance operating expenses, intermediate term credit is used for farm machinery and long term credit is used for real-estate financing (Adebayo and Adeola, 2008). Credit is regarded as a major factor in agricultural development and lack of it is usually given as an explanation for many of the problems facing the sector in the developing nations, if credit were made available, the retarded agricultural sector will start moving by their contributions to the modernization of the sector.

Although, it is a major factor consideration, other constraints contributing to the poor performance of Nigerian agriculture include the problem of pest and diseases, inadequate supply of agricultural inputs, rural-urban migration, inadequate transport facilities and land tenure system. Limited access to credits perpetuates poverty and low quality of life among farmers. This is because some of the innovation which the farmers wish to adopt may be too expensive to procure if they have restricted access to credit facilities or don't have access at all (Aminu and Romanus, 2016).

In an attempt to tackle the problem of access to agricultural credit by peasant farmers, government at different levels in the country resorted to establishing specialized credit institution such as Nigerian Agricultural and Co-operative Bank (NACB), Nigerian Agricultural and Rural Development Bank (NARDB), Agricultural Credit Guarantee Scheme (ACGS) and so on; for agricultural purpose and also to make credit acquisition easy for the farmers. In spite of all efforts to make agricultural credit available to peasant farmers, food

price have been rising persistently and there have been great shortages of most essential food stuff and raw materials. Previous studies indicated that inadequate supply of credit generally in the form of chemicals and fertilizers and other inputs constitute major constraints, which could cripple agricultural development in Nigeria. The need to find out more about existing constraints in the access of agricultural credit and proffer solution to avert these constraints informed the decision for this study. A number of credit institutions have been established to finance small scale industrial and agricultural enterprises in Nigeria. Some of these credit institutions were designed to fund both industrial and agricultural sector of the economy while others are meant to finance just the agricultural sector. Hence, this study aimed at finding out the extent to which women crop farmers were having access to the credit facilities.

Women play major roles in farm production, product processing and marketing of food and cash crops as well as in livestock production (International Fund for Agricultural Development IFAD, 2009). In spite of these, women and households headed by women remained chronically poor members of rural communities (Ekpo *et al.*, 2010). Improving access of women farmers to farm credit is central to rural development because it enables women to invest in and improve production in agriculture, small businesses and small-scale manufacturing all of which improve their living standard. Micro-credit to women farmers empowers them to invest in agriculture and permit them to sustainably remain in farming.

According to Joel (2017), the poor are poor not because they are lazy but because they have no access to credit. Accessibility to formal credit facilities has been difficult for women farmers and people who are poor (Raidimi, 2014). Their only respite has been with informal sources of farm credit.

The informal financial sector from where women farmers obtain credit comprises essentially the Self-Help Groups (SHGs) and money lenders. The SHGs include – Rotating Savings and Credit Associations (ROSCAs) locally referred to as “*Isusu*” or “*Etotos*” or “*Akawo*” (Igbo), “*Esusu*” or *Bam* (Yoruba) or “*Asusu*” (Hausa). Other informal sources of credit are cooperative societies, age grades, work groups, town unions, religious associations, family or kith and kin associations. These groups, among others, have had developmental impacts in rural areas where they have extended loan facilities (micro-credit) to their members without demanding physical collaterals except guarantors (Onyeagocha *et al.*, 2012). Most women farmers depend on the services of these informal financial units and groups for credit for funding agricultural activities and improve their livelihood (Henri-Ukoha, 2011).

Credit, has been the main focus of many research workers in agricultural finance. To some, credit is “all in all” for a farmer to produce (productive input) while others hold different opinions. Whichever way it is looked at, credit is an important instrument in the development of agriculture. Credit is defined as the ability to obtain goods and services or money now in exchange for promise of payment in future. There are three major roles in the financial intermediation system, saving, intermediation and borrowing. Savings is the part of income reserved for future use, that is, future production and consumption. In the absence of savings, there cannot be a build-up of capital stock to increase production of goods and services. However, savings in a society does not become an investment in capital until it is borrowed and utilized.

Financial intermediaries are an integral part of the broader concept of rural financial markets. It embraces all rural institutions, which affect accumulation and use of savings, allocation of investment capital, the flow and holding of fund and indeed the integration of rural financial market with national and international capital market. The intermediation process is a reversible flow of funds from the savers to users through intermediaries. The borrowers must of necessity provide evidence of a debt obligation to intermediaries for loan. In the same process, the intermediary provides saver a range of products and opportunities for further investment. It is obvious therefore, that financial intermediation has a key role in channeling funds to agriculture. and harvesting or it may represent long term capital formation in the provision of building equipments (Ghorbani *et al.*, 2005) noted that “at a certain stage of agricultural development, agricultural credit thus clearly becomes a strong force for further improvement when a man with energy and initiative who lacks only the resources for more and efficient production is enabled by the use of credit to eliminate the hindrance on his path to improvement.

Objectives of the Study

The broad objective of this study is to examine credit availability, utilization and repayment among women arable crop farmers in Egba Division of Ogun State, Nigeria. The specific objectives are to:

- i. describe the socio-economic characteristics of the women arable crops farmers in the study area;
- ii. examine the credit available and uses to which the credit was put by the respondents;
- iii. ascertain the determinants of agricultural credit availability to women arable crop farmers;
- iv. analyze the socio-economic factors that affect loan repayment performance of the beneficiaries;
- v. identify problems confronting women crop farmers in obtaining credit.

Materials and Methods

Study area

The study area is Egba division of Ogun State, Nigeria. Egba division consists of six (6) Local Government Areas namely; Abeokuta North, Abeokuta South, Ewekoro, Ifo, Obafemi Owode and Odeda Local Government Area. The Egba are a Yoruba group, presently located in the central portions of Ogun State in south-western Nigeria. The Egba settled as refugees at the site of Abeokuta in 1830, and remained formally independent from British rule until 1914. The Egba are divided into the provinces of Ake, Gbagura, Oke-Ona, and Owu (Agiri, 1974). The obas (kings) of each province are known respectively as the Alake, Agura, Osile, and Olowu. Egba agriculture is typical of the West-African forest zone. In the mid-nineteenth century, the Egba cultivated principally Indian-corn, cotton, yams, and beans, supplementing these with sugarcane, ginger, bird-pepper, arrowroot, groundnuts, onions and sweet potatoes. These were intercropped, and planted in heaps. Unfree labor in the form of slaves and pawns was widespread. Palm oil and palm kernels were the principal nineteenth-century exports of the Egba, and they were among the first Yoruba groups to become involved in this trade.

Methods of data collection

Data were collected from both primary and secondary sources. The primary data were obtained through the use of well-structured questionnaire. The secondary data were sourced from published books related to agriculture, Journals of agricultural research and finance, annual reports, agricultural finance bulletins, financial institutions progress report and from relevant public agencies.

Sampling techniques

Multi-stage random sampling technique was adopted. From the six Local Government Areas, which the Division is divided into, two Local Government Areas namely: Odeda and Obafemi Owode were selected randomly. In stage two, four farming communities/villages were selected from each of these two Local Government Areas earlier selected. This was achieved by random sampling. This gave a total number of farming communities/villages in the sample to be eight. In stage three, sixteen women arable crop farmers were randomly selected in each community/villages of the sample. This gave a total number of one hundred and twenty eight women arable farmers sampled.

Methods of data analysis

The specific objectives were analyzed using both descriptive and inferential statistics.

- (i) **Socio-economic characteristics of the women arable crops farmers:** Descriptive statistics such as percentages, frequency, tables and mean was used to describe the socio-economic characteristics of the women arable crops farmers in the study area.
- (ii) **Credit available and repayment and uses to which the credit was put by the respondents:** Descriptive statistics such as percentages, frequency, tables and mean was used to examine the credit available, repayment and utilization by the respondents.
- (iii) **Determinants of credit available facilities for arable cropping among women farmers:** The Ordinary Least Square model was used to ascertain the determinants of credit availability from financial institutions to women arable crop farmers.

The Ordinary Least Square model measures credit available as a function of various variables factors ($X_1, X_2, X_3, \dots, X_n, e_i$). Implicitly, the function is represented thus:

$$Y = f(X_1, X_2, X_3, \dots, X_n, e_i)$$

Where: Y = Credit availability; X_1 = Farm size (in hectares); X_2 = Age (in years); X_3 = Farm income (in naira);

X₄ = Farming experience (in years); X₅ = Distance between house and source of credit (in kilometers); X₆ = Household size (number of dependents); X₇ = Years of Formal Education (years); X₈ = Marital Status (1=married, 0=otherwise); X₉=Primary occupation (1= farming, 0= otherwise); X₁₀ = Membership to farmers association (1= member, 0= otherwise)

(iv) **Socio-economic factors that affect loan repayment performance:** The multiple regression model was measure credit repayment as a function of various variables factors (X₁, X₂, X₃, ..., X_n, e_i). The explicit form is stated as follows:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \dots + \beta_n X_n + e_i$$

Where: Y= Loan repayment rate (%); X₁= Marital status (Married = 1; 0 otherwise); X₂ = Farm size (in hectares); X₃ = Age (years); X₄ = Farm income (₦); X₅ = Farming experience (years); X₆ = Distance between house and source of credit (km); X₇ = Household size (number of dependents); X₈ = Number of visits to farmers by the credit supervisors (days); X₉ = Primary occupation (farming = 1; 0 otherwise); e_i = Error term

The equations of loan repayment are fitted using the linear, exponential, semi-log and double log functional forms.

(v) **Problems confronting women crop farmers in obtaining credit:** Descriptive tools of percentages, frequency, tables and mean was used to identify problems confronting women crop farmers in obtaining credit.

Results and Discussions

Data in Table 1 shows the socio-economic characteristics of the women arable crop farmers in the study area with their discussion and implications. Socio-economic characteristics includes the age, marital status, household size, religion, educational level, years of formal educational, membership of cooperatives society, farming income, farming size, farming experience and major occupation.

The age of the women arable farmers is an important factor that affects their level of productivity and overall coping ability during farming activities. Age is believed to influence the level of physical work. It is necessary to describe the age of the respondent for possible generalization and inference on how it relates to credit availability, utilization and repayment among women arable crop farmers. These result shows that the age of the women arable crop farmers within the age bracket of 41 to 50 years has the highest percentage and they tend to produce more arable crops at this age with an average of 42.58. In other words they are active to work on the farm which is in line with Taiwo *et al.* (2015) who says that majority of the women are still in their active and productive stage with average age of 43-61 years.

Marital status are the distinct options that describe a person's relationship with a significant others. It includes single, married, divorced, widowed and sometimes it is a source of self-discrimination. It helps to reduce labor cost especially when the women arable farmers are married in which they can supply labor cost from their household. This in turn increases their income considerably. The finding revealed that majority (85.9%) of the women arable farmers are married, 7.0% are widow, 5.5% of the women farmers are single, and 1.6% are divorced. Most of them are married which makes them crave for more credit from different financial institutions to increase their farm productivity. This is similar to Adegboye *et al.* (2008) who say married farmers demand more microcredit because they had pressing need to supplement their family's income for better livelihood. These implies that the married

women were relatively considered as being more stable, easily identifiable and more credit worthy due to these they tends to utilize their credit for the farming process or activities in order to increase their productivity.

Household size refers to the number of individuals, persons in a house or settlement; household size included the women arable farmers, their number of children or the numbers of people that live with them that receive half of the women's farmers support. It may determine whether the respondents will make use of the credit and what the women arable farmers will use their income for after harvesting. It also determines the availability of labor for households' farm economic pursuits. The result shows that majority of the women farmers with 50.8% have 4-6 household size and 8.6% of the women arable farmers have a household size greater than 9 with an average of 5.82. The study revealed that moderate household size occur between household ranging from 4 to 6 persons or individual (50.8%), this tend to bring balance in arable farming process among the household size in the study.

This household size was considered to be high and of advantage because labour is available for agricultural production. On the other hand, it is a reflection of a high level of dependency hence high level of poverty and food insecurity in the household since the larger the household the higher the number of mouth to be fed and vice versa. This finding agrees with the assertions of Oluwatayo (2008) and Babatunde *et al.* (2007) that the larger the household size the more mouth to be fed. These implies that large household size of the women arable crop farmers will serve as a family labour and consequently reduce the cost of hiring labour on their farm, this will help to save their cost and expenses during arable faming.

Education is the proof that an individual study a particular subject to a certain level or that an individual have completed a specific programme. The educational background would no doubt help in decision making especially in terms of leadership and investments. This is because good education plays important role in agricultural production, especially in this era of advanced agricultural technology. Data in Table 1 also indicates that 39.8% of the women farmers have no formal education or they are non-literate, 30.5% of the women farmers were able to complete their primary school, 14.8% of the women farmers have secondary and tertiary education. According to the results from the study, majority of the women farmers are with a percentage of 60.1 have formal education and they are literate while 39.8% of the respondent are non-literate with no formal education. According to Eze (2013), the high level of formal education suggests possession of high literacy level, which is an advantage in appreciating procurement of credit (informal microcredit) as literate borrowers have enhanced capacity to repay loans. This implies that literate women farmers have the ability to use the credit to improve farming activities and repay their loan.

Farm sizes apply to the area of agriculture used by the women farmers for arable crop production. It can be defined as the size of an area of land that is devoted primarily to agricultural processes with the primary objectives of producing food and other crops. The result revealed that majority of the women farmers with the percentage of 57.0 have a farm size ranging within 1.0-3.0 hectares, 29.7% of the women farmers have a farm size of 3.1 – 6.0 and greater than 6.0 hectares of the farm size have 13.3% with a mean of 3.97. This indicates that majority of the women farmers have the ability to cultivate 1 - 3 farm size of land because of their capacity to obtain credit for arable farm land influence the amount they repay to the financial institutions. This result can be compared favorably with Asogwal *et al.*, (2014) which indicate that majority (55.83%) of the farmers had farms sizes ranging between 1

and less than 3 hectares. This suggests that the farmers were mostly small scale producers. Those farmers whose farm sizes were more than 3 hectares were those who had some good number of years of experience and had gradually expanded their farm sizes for some number of years as they made profit from efficient utilization of agricultural credit accessed. They were motivated to expand for more profit as human wants are insatiable.

This is also in collaborations to with the result revealed by Ibekwe *et al.* (2012) and Onumadu (2009) the limited access of women farmers to land attributable to higher rent paid on land, cultural problem of land tenure system (women exclusion from inheriting land which prevents many of them from taking title of ownership), and land fragmentation prevalent in the study area. All these problems hindered them from having a contiguous land that can be cultivated with tractor and tractor drawn implements (mechanized agriculture) and impeded farm productivity. It investigates the relationship between adoption of agricultural technologies, farming experience is the collections of all events or activities from which an individual or group may gather knowledge, opinions and skills in order to achieve increase in productivity during arable farming process.

The finding revealed that majority (30.5%) of the women arable crop farmer have farming experience ranging from 1 -5 years, (28.1%) of the women farmers have 6-10 years of experience, (18.0%) of farming experience have 11-15 years, (13.3%) of the women farmers have more than 20 years of farming experience (10.2%) of the women farmers have 16-20 years of farming experience and with an average of 11.73 years. This confirms that majority of the women arable farmers ranging within the farming experience of 1-5 years enables the women farmers to make use of recently acquire innovations from the extension agent into arable crop farm in order to help them to improve sustainable agricultural production leading to greater efficiency of arable crops produces. Moreover they have limited years of farming experience which is likely to affect how they utilize the credit obtained from financial institutions

Farm income refers to the profits or losses incurred through the operation of an arable farming. It is a summary of income and expenses that occurred during a specified accounting period, farming income includes any income women farmers received from tilling the soil, planting of crops etc. The result indicated that majority (33.6%) women farmers earned between ₦300,001- ₦500,000 (31.3%) of the women farmers earned between ₦100,001 - ₦300,000, women farmers with 12.5% earned between ₦100,000 to ₦300,000 as their income farming income, (33.6%) women farmers earned between ₦ 300,001- ₦500,000 with an average of ₦471,914.06. This implies that farming is crucial and important factor in the study area. 33.6% of the women farmers had earn moderate credit from the findings so this promotes the uses of credit by the respondents to improve their standard of living.

The uses to which the respondents put the credit obtained for are shown in Table 1, the study implies that majority of the women farmers (28.9%) use credit to pay children school fees (23.4%) of the women farmers uses their credit for expansion of the farm and children school fee (12.5%) use it as other purposes or uses (4.7%) of the women farmers used it as social function (7.0%) use it as chieftaincy title and. This indicates that majority women arable farmers use their revenue to pay their children school fees from the money they obtained for arable crop farming.

Table 1: Socio-economic characteristics of the women arable crop farmers

Variables	Frequency	%	Mean
Age (years)			
Below 31	13	10.2	42.58 years
31 - 40	38	29.7	
41 - 50	53	41.4	
51 - 60	22	17.2	
Above 60	2	1.6	
Marital Status			
Single	7	5.5	
Married	110	85.9	
Divorced	2	1.6	
Widow	9	7.0	
Household Size (persons)			
1-3	15	11.7	6 persons
4-6	65	50.8	
7-9	37	28.9	
>9	11	8.6	
Educational Level			
No formal education	51	39.8	
Primary education	39	30.5	
Secondary education	19	14.8	
Tertiary education	19	14.8	
Farm Size (hectares)			
1.0 - 3.0	73	57.0	3.97 ha
3.1 - 6.0	38	29.7	
Above 6.0	17	13.3	
Farm Experience (years)			
1 - 5	39	30.5	11.73 years
6 - 10	36	28.1	
11 - 15	23	18.0	
16 - 20	13	10.2	
Above 20	17	13.3	
Farming Income (₦)			
100,000 - 300,000	16	12.5	₦471,914.06
100,001 - 300,000	40	31.3	
300,001 - 500,000	43	33.6	
500,001 - 700,000	12	9.4	
700,001 - 1,000,000	12	9.4	
>1,000,000	5	3.9	
Uses of Credit Obtained			
Expansion of the farm	30	23.4	
Children school fee	30	23.4	
Social function	6	4.7	
Paying children school fees	37	28.9	
Chieftaincy title	9	7.0	
Others	16	12.5	
Total	128	100	

Source: Field Survey (2019)

Table 2: Distribution of the respondents by amount obtained and repaid

Amount Received from Financial Institution (₦)	Amount Received		Amount Repaid	
	Freq	%	Freq	%
30,000-100,000	26	20.3	14	10.9
100,001-300,000	55	43.0	56	43.8
300,001-600,000	37	28.9	32	25.0
600,001-1,000,000	7	5.5	21	16.4
>1,000,000	3	2.3	5	3.9
Total	128	100.0	128	100.0
Mean	₦311,812.50		₦384,508.34	

Source: Field Survey (2019)

Availability, repayment and uses of credit

This revealed how much credit available, requested and repaid to the financial institutions (formal and informal) at a particular period.

Amount received or obtained by the respondents

This is the amount of credit the women arable crop farmers received or recollect after engaging in all arable crop farming activities. This was expatiated in the Table 2. The result

indicates that 43.0, 28.9, 20.3, 5.5 and 2.3% of the women arable crop farmers received a range of credit between ₦100,000 – ₦300,000; ₦300,001 – ₦600,000; ₦30,000 – ₦100,000; ₦600,001 – ₦1,000,000 and greater than ₦1,000,000, respectively with an of average of ₦311,812.50. This revealed that majority of the farmers received ₦100,001 to ₦300,000 of income from financial sources of credit for efficient purchase of resources to enhance their agricultural productivity.

This is a certain amount of credit or money the women arable farmers paid to the financial institutions at the end of the farming activities. This indicates that, 43.8, 25.0, 16.4, 10.9% and 3.9% of the women arable farmers repaid their credit ranging from ₦100,001 – ₦300,000; ₦300,001 – ₦600,000; ₦600,001 – ₦1,000,000; ₦30,000 – ₦100,000; and greater than ₦1,000,000, respectively with a mean of ₦384,508.34. This is further strengthened by the fact that majority of the farmers within the range of 43.8% found it easier to repay their requested or borrowed credit from financial institutions. Therefore this enables the financial institutions to be able to loan the credit or borrowed the women arable farmers to enhance their agricultural productivity, the result indicate that the farmer are able to pay the credit they requested for earlier to finance arable production.

Determinants of agricultural credit availability to women arable crop farmers

The results of the Ordinary Least Square showed that the findings give direct estimate of the determinant of agricultural credit available to women arable crop farmers. The results revealed that Ordinary Least Square Regression analyses of the agricultural credit availability to women arable crop farmers as shown in the Table 3.

Table 3: Factors affecting agricultural credit availability to women arable crop farmers

Variable Code	Variable Name	Standard error	T-ratio
β_0	Constant		-0.217
X ₁	Farm size	0.266***	2.969
X ₂	Age	0.138	1.408
X ₃	Farm income	0.052	0.580
X ₄	Farming experience	0.038***	3.768
X ₅	Distance sources of credit	0.361***	4.090
X ₆	House hold size	-0.136	-1.510
X ₇	Years of formal Education	0.052	0.607
X ₈	Marital status	0.046	0.544
X ₉	Primary occupation	0.055	0.666
X ₁₀	Membership to Farmers Association	-0.114	-1.396
	R ²	0.628	
	Adjusted R ²	0.601	
	F-ratio	14.468	

Source: Field Survey (2019); *Significant at 10%; **Significant at 5%; ***Significant at 1%

The coefficient of farm size was positive and statistically significant at 1% in order to determine the credit available by the women arable crop farmers. This implies that there is a direct relationship between the farm size and the credit available, the larger the farm land used by the women arable farmers, the more the credit accessed. This implies that ownership of land is very important for accessing loan since formal and informal lenders normally require land use certificates as collateral for loans. The land can be cultivated with tractor and implements to enhance farm productivity. Also, the women farmers had chances of access to credit to pay workers and purchase implements used on their farm. Moreover, the coefficient of the farm experience was revealed to be positive according to the result shown above and it is statistically significant at 1%. This implies that there is direct

relationship between the women farmers experience and the credit available from financial institutions. Most women farmers in the study area have access to credit by financial institutions (money lenders, cooperative society, and Micro finance banks, etc.) as a result of ability to meet up the years of experience in arable farming which significantly improve the rate at which women used their knowledge in farming activities. The result is in contrast with Osondu *et al.* (2015) who mentioned that the more experienced women farmers could not access more informal credit possibly on grounds of their acquired practical knowledge over time that have enabled them to manage their resources at levels that have enabled them to positively impact on their productivity and hence their reduced demand and access to informal microcredit.

The coefficient for distance between house and sources of credit was positive and the Table 4 revealed a statistical significant of 1%. This implies that there is direct relationship between the distance covered from house to sources of credit and the credit available in financial institution. This inferred that the nearness to distance covered from the house to the sources of credit leads to increase in the credit available for women arable farmers in the study area. The implication of this was that women farmers tend to have access to credit from financial institution in order to increase the productivity of the arable farming.

Socio-economic factors that affect loan repayment performance

As shown in Table 4, the result revealed that regression analyses estimate indicate socio-economic factors that affect loan repayment performance. The coefficient of age was positive and statistically significant at 5% in order to determine the socio-economic factors that affect loan repayment. This indicates that there is direct relationship between the age of the farmers and the socio economic factors that affect loan repayment. Increase in age of the women arable farmers lead to increase in the volume or amount of credit repaid to financial institution. This implies that aging and literate women farmers in the study area have technical skills, knowledge or the use of new farm implements such as tractor, sprayer, etc. Moreover women tends to improve their skills during farming process by accessing loan to get a new farm implements which result to increase in the amount of credit repaid to the financial institution to enhance their means of livelihood.

The coefficient of farming income was positive and statistically significant at 10%, this implies that increase in farming income result to increase in loan repayment, therefore there is a direct relationship between the farmer’s income and the amount of credit repaid to the financial institution. In other words the more income generated, the more women farmers are able to refund or repaid their credit thereby enabling the financial institutions to able to use the credit repaid to other women farmers who are in need in the study area.

The coefficient of farming experience is positive and statistically significant at 5%; this revealed that there is a direct relationship between farming experience and the amount repaid. This implies that increase in farmers experience leads to increase in the ability of the women farmer to repay their loan. Women arable farmers tends to make use of the new innovations and technologies with the use of a new farm implements such as tractor to improve their knowledge in the study area thereby increasing the productivity in arable farming activities. Furthermore, increase in the amount of credit access to get a new tractor in the study area leads to increase in the amount repaid

The coefficient of household size was negative and statistically significant at 5%; this revealed that there is an

inverse relationship between the household size and the amount repaid by the women farmers. Therefore, increase in household size leads to decrease in loan repayment performances. This implies that women arable farmers tends to use family labour which reduces the cost of spending on or paying wages to both skilled and unskilled labour, this will improve the efficiency of the work thereby reducing the loan repaid to the financial institutions.

Table 4: Regression estimates of socio-economic factors on loan repayment performance

Variable Code	Variable	Coefficient	T-value
β_0	Constant		7.270
X ₁	Marital status	0.017	0.184
X ₂	Farm size	-0.034	-0.356
X ₃	Age	0.239**	2.299
X ₄	Farming income	0.002*	1.985
X ₅	Farming experience	0.242**	2.330
X ₆	Distance between house and sources of credit	0.121	1.218
X ₇	House hold size	-0.202**	-2.017
X ₈	Number of visit farmers by the credit supervisors	-0.017	-0.174
X ₉	Primary occupation	-0.028	-0.322
	R ²	0.453	
	Adjusted Square	0.388	
	F-ratio	12.366	

Source: Field Survey (2019); *Significant at 10%; **Significant at 5%; ***significant at 1%

Table 5: Distribution of problems confronting women crop farmers in obtaining credit

Variables	Frequency	%
High rate of interest	88	68.8
Delay and difficulty in acquiring credit from financial institution	24	18.8
Insistence on provision of collateral	26	20.3
Covering long distances to the bank	41	32.0
Low Educational level	82	64.1
Unprofitable scale of operation	45	35.2
Afraid of default payment	27	21.1
Bureaucracy of the lenders	27	21.1
Financial problem	96	75.0
Unwillingness of bank in granting agriculture credit	25	19.5

Source: Field Survey (2019)

Problems confronting women crop farmers in obtaining credit

Data in Table 5 represents the distribution of the respondents according to the problems confronting women arable farmers in obtaining credit. The result revealed that 68.8% of the respondents were faced with the problem of high interest rate, 64.1% of the respondents were faced with education level and 75% of the women arable farmers were faced with financial problems.

Moreover the major problems confronting the respondents in the study area includes high interest rate, education level and financial problems thereby affecting the productivity in farming business activities of the women arable crop farmers. This result implies that majority of the women farmers didn't have enough capital to meet their needs in order to enhance the increase in farming in the study area. The implication of this result is that the majority of the respondents in the study area could have been easily enhanced through provision of agricultural credit obtained for the availability of the needed farming resources. In other words, women farmers could have

make impact in agricultural production when adequately provided with the needed agricultural credit to increase their productivity.

Conclusion

In conclusion, the study revealed that the farm size, farming experience and distance covered from house to sources of credit had positive and significantly related with the determinants of agricultural credit availability to women arable crop farmers. In addition, the study indicate that age, farming income, farming experience had positive while household size had negative and it is significantly relationship with the socio economic factors that affect loan repayment performance. Also, it was concluded that financial problem, high interest rate, and low educational level are the major problems confronting women arable crop farmers in obtaining credit.

Agricultural credit availability, utilization and repayment enable the women arable crop farmers to obtain credit from financial institution in order to use it to boost their farm investment thereby expanding arable crop production and increasing farm income.

Recommendation

Based on the findings, the following recommendations are important to provide solution to the problems associated to the women arable farmers' access to credit, its usage and credit repaid in the study area:

- (i) Agricultural credit should be made available to farmers by the financial institutions (formal and informal) to meet the various needs of the women farmers.
- (ii) Interest rate should be reduced to enable the farmers to be able to repay their borrowed credit or loan.
- (iii) Women arable farmers should be advised not to request for more than the credit they would be able to utilize and repay in order to enable them use the credit effectively.
- (iv) Higher educational level increases access to credit according to the findings, the arable women farmers should be given adequate knowledge by the extension agents to increase productivity which in turns increase repayment of loan and access to credit.

Conflict of Interest

The authors declare that there is no conflict of interest related to this study.

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