

# Access to and Repayment of Agricultural Credit in the Face of COVID 19: A Gender Analysis in Selected Microfinance Institutions in Cameroon

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# Peter Ngek Shillie\*, Mary-Juliet Egwu Bime, Roland Azibo Balgah & Miranda Lambiv Wiysherinyuy

Department of Agribusiness Technology, College of Technology, University of Bamenda, Bambili, North West Region,
Republic of Cameroon
\*Corresponding Author:spngek@yahoo.co.uk

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# **Research Article**

Purpose: Gender differences in access to and repayment of loans seem to be the reason behind the persistent subsistence and small-scale nature of most agribusinesses in Cameroon. This study examines access to and repayment of agricultural credit in the face of COVID 19 in the West Region of Cameroon building on evidence from selected microfinance institutions in the West Region of Cameroon. Specifically, the study mirrors gender differences in microfinance loan disbursements and repayments, determinants of loan repayment, and constraints to loan access and loan repayment during the period of COVID 19.

**Method:** The purposive sampling technique was employed to select 100 farmers who had access to agricultural credit in three villages in the West Region of Cameroon. A pre-tested questionnaire was used for primary data collection and secondary data was collected from microfinance institutions and internet. Collected data were analyzed employing tables, frequencies, t-test, and regression analysis.

**Results:** Findings indicated that there was a positive insignificant difference in the amount of credit received and repaid by male farmers than that of the female farmers. The male and female have equal access to credit and the same repayment capacities ( $R^2 = 0.55$  or 55%). Loan repayment was statistically and significantly determined by loan amount, interest rate, and time lag for repayment at the 5% significance level. Serious constraints to loan access were lack of sensitization, lack of collateral security, and illiteracy while major constraints to loan repayment were family commitment, price fluctuation, crop failure, high cost of production, and interest payment.

**Implications:** Increasing the ceiling for loan amount approved for farmers and curbing excessive bureaucratic procedures would ensure minimal diversion of the loans, higher income for the farmers, and hence better repayment rates.

**Originality:** The distinctiveness of this study is viewed from the context of the COVID 19 pandemic within which data was collected, thus capturing how the pandemic situation played a role in access to and repayment of agricultural loans from the perspective of gender.

Keywords: Agricultural Credit, Gender, COVID 19, Loan Access and Repayment

# 1. Introduction

The concept of microcredit has retained significant importance since its emergence. According to Aterido, Beck & Lacovone (2011), microcredit has for decades been used as an economic liberalization tool because its design focuses on addressing the financial credit needs of the rural people who often have collateral security challenges. Apparently, the smallholder farmers play a significant role in agriculture but their productivity is constrained by

limited access to credit facilities (Odoemenem & Obinne, 2010). There is no doubt that agricultural credit can serve as a catalyst enhancing productivity, output, and income of actors.

In Cameroon, the agricultural sector plays a predominant role in its contribution to national GDP. For example, 43.33% of the population is employed in the agricultural sector and 14.28 % of GDP is generated from agriculture (World Bank, 2020). Hence, ensuring access to microcredit by farmers may increase benefits from agriculture in Cameroon.

Interestingly, microfinance institutions have contributed significantly to reducing rural poverty (World Bank, 2015). This according to Fikirte, (2011) has been achieved as microfinance services help strengthen the economic bases of the low-income generating activities of the rural people. Officially, there is no sex discrimination in access to credit; but for women, research has highlighted some hindrances ranging from lack of collateral security and low literacy level to gender bias amongst extension workers (F.A.O., 1985 as cited in Ugwumba, Ike & Nnabuife 2009), non-involvement in development and extension projects, fears and uncertainties and inadequate participation in agricultural co-operative societies (Uwaegbute & Oke, 2004).

According to World Bank (2001), gender refers to socially constructed roles and social behavior and expectations linked with females and males. Similarly, Ugwumba, Ike & Nnabuife (2009), assert that gender is a society-dependent term used to denote the socially constructed relations between women and men. Apparently, there may be a relationship between gender type and social activities like the exercise of authority, production resources access/control, income distribution as well as rewards.

It would appear that in Cameroon in general, the contributions of women in terms of farming labor, and household management duties are higher when compared to men (Tambi, Atemnkeng & Bime 2017; Logo & Bikie 2003). On this basis, it would be normal to think that financial services notably credit should favor women against men if agricultural productivity must be increased. Unfortunately, the land tenure system and land laws in Cameroon appear to play significantly against the youths (Presidential Decree, 2005) and females. Land inheritance rights disfavor females as only males are given priority. Thus females may own land more through acquisition. Further, young people below the age of 40 cannot have land certificates, thus will find it difficult often in satisfying the collateral security request usually posed by microcredit institutions as conditions to access credit.

In the study area, Bafoussam, Bandjoun, Bafang, Babaju, Bangangte, Dschang, and Mbouda agriculture is widely practiced, predominantly subsistence farming of crops such as maize, cocoyam, plantains, beans, groundnuts, vegetables, and fruits and plantation agriculture with coffee being the main cash crop. Women's engagement is significantly high in all the stages from farm preparation through crop health management to postharvest activities. Given the great involvement of women in agriculture in this area, this study attempts to examine if there exist gender differences in access to and repayment of agricultural credit among agricultural microfinance members in the West Region of Cameroon. Specifically, the study examines the determinants of loan repayment, gender consideration determinants in access, and constraints to access to and repayment of agricultural loans in the face of COVID 19.

# 2. Literature Review

In society, there is a wide gap between owned and required capital to finance the agricultural activities of smallholder farmers. Often, men-headed households are usually approached and registered as farmers to the disfavor of women-headed households, this likely due to land ownership associated rights. The lack of access to capital in rural areas is one of the major factors which hinder the development of agriculture (Tefera, 2004).

Hypothesizing twenty variables to explain factors affecting smallholder farmer's access to formal credit in Ethopia, Assifaw & Gemechu (2016) found 13 variables which include: age of smallholder, membership of farmer's multipurpose cooperatives, the physical distance of farmers from lending institutions, family size, farm size, experience in credit use from the formal sources, gender, education level of household head, participation of households in extension package program, attitudes towards risk as important factors influencing smallholder farmers to access to formal credit in the study area. It was also found out that credit access to female-headed households is still limited and the difference between the wealthy groups in accessing credit from the formal sources was also statistically significant.

According to Chandio, Jiang, Wei, Rehman & Liu (2017) credit is highly demanded in different parts of the world, mainly for the capital requirement to improve land, purchase of main agricultural inputs including fertilizers, seeds, pesticides, and purchase of farm machinery. Using a simple random technique to obtain data from 300 farmers, they

found out using a probit regression model that gender, household size, educational level, farming experience, farm size, income, and availability of collateral have a positive effect on farmers' access to credit, while age has a negative and statistically insignificant effect on the farmers' access to credit. The accessibility of credit was to be influenced by several socioeconomic factors of the respondents. Results obtained show that an estimated marginal coefficient of household size, farming experience, income, and availability of collateral has a significant and positive influence on the accessibility of credit.

Ugwumba & Uchehara (2015) believe that gender differences in access to and repayment of loans seem the reasons behind the persistent subsistence and small-scale nature of most agribusinesses in Nigeria. Using data collected through multi\*stage and random sampling techniques from 10 cooperatives societies and analyzing using parametric and non-parametric tools, they found out that males had more access to loans but the female repaid more (72.14 percent). Loan repayment was statistically and significantly determined by the type of lending institution, loan amount, annual income, and gender. The parameter gender was negative and significantly related to loan repayment at a 5% probability level. This meant that the female farmers performed better than their male counterparts in loan repayment. Serious constraints to loan repayment were the amount of loan disbursed, family commitment, size of income, and excessive bureaucratic procedures.

Also using a logit estimation model with data collected from 200 respondents through a questionnaire survey, Maru & Roberto (2010) found that variables such as higher family size, incurring unforeseen expenses, and taking loans for oxen fattening decreased the probability of individual loan repayment within a group. On the other hand, variables such as participation in off-farm employment activities and an increase in loan terms increased the probability of individual loan repayment within a group lending scheme.

Furthermore, Enimu, Eyo & Ajah (2017) writing on the topic "Determinants of loan repayment among agricultural microcredit finance group members in Delta state, Nigeria" thought that females form a greater proportion of the study area microcredit group members at 70%, while 73% of the respondents have a household size of between 6 to 10 persons. A further result showed that the determinants of the group member's loan repayment included the group member's age, household size, house income, educational level, the amount of credit received, length of stay in their locality, distance to the credit source, supervision and disbursement lag.

Also in investigating the factors that affect farmers' access to agricultural credit and its role in adopting improved agricultural technologies in the rain-fed zone of Khyber Pakhtunkhwa (KP), Pakistan, Ullah, Mahmood, Zeb & Kächele (2020), using logistic models, assessed and compared the relative role of farmers' socio-economic attributes in their access to credit and adoption strategies. They found a moderate positive association between farmers' access to agricultural credit and their adoption of improved agricultural technologies. Further results from the binary logit model indicated that farmers with a large-sized farm, high farm income, better access to information, and large physical asset ownership showed a positive influence on credit access. However, the farming experience showed a negative effect on farmers' access to agricultural credit. Regarding farmers' credit sources, their study found that asset-rich farmers with more farming experience and better access to information relied more on banks than on input providers and informal credit sources. Similarly, older farmers with more education, larger farm sizes, and high farm income were more likely to have borrowed from input providers than banks.

#### 3. Methodology

This study adopted a quantitative research design because of the nature of the research objectives. The study population consisted of farmers and microfinance institutions in the three villages in the West Region-Bafoussam, Babaju, and Mbouda. A purposive sampling technique was used to select study participants. Also, a simple random technique was used to select three microfinance institutions operating in the area.

Both secondary and primary data were used. Secondary data was collected from the microfinance institutions on access and repayment situations between the female and male gender during this period of COVID 19. Also, scholarly works were reviewed which helped in the selection of study variables. Primary data used for the study was collected utilizing a pre-tested questionnaire administered to the respondents through direct personal service. The questionnaire was structured to capture data on farmer demographics like gender, age, farming experience in years, level of education. In loan-related, key issues captured by the questionnaire included loan amounts received, amount repaid, loan interest amounts, repayment time lag, farmers' annual income, loan disbursement rapidity among others. The questionnaire was administered to 110 respondents, and the best completed 100 copies were used for data analysis. This implies that the retained study sample was 100. Data generated on the socio-economic

characteristics of respondents; and on constraints to access-to and repayment of agricultural loans faced by farmers in the study area were analyzed utilizing non-inferential statistical techniques such as means, frequencies, and percentages while data on the determinants of loan repayment amongst farmers in the West Region were analyzed using the ordinary least squares (O.L.S.) regression method.

LOR = f (LOA, ANI, DID, INR, GEN, FAE, LDI, TIL, AOF, LED, ATR, PLOR; e)

Where:

LOR = Loan repayment (FCFA)

LOA = Loan amount (FCFA)

ANI = Annual income (FCFA)

DID = Delay in disbursement (dummy: delayed = 1; otherwise = 0)

INR = Interest (FCFA)

GEN = Gender (dummy: male = 1; female = 0)

FAE = Farming experience (years)

 $LDI = Type ext{ of lending institution (dummy: } MFI = 1; otherwise = 0)$ 

TIL = Time Lag for repayment

AOF = Age of farmer

LED = Level of education

ATR = Attitude towards risk (1=if they fear risk; 0=otherwise)

PLOR = Farmers perception to loan repayment (1= perceived as constraint, 0=otherwise)

e = error term.

The data was fitted to four functional forms (linear, exponential, semi-log and double-log) of the multiple regression model and was tried by means of the SPSS. The explicit versions of the functional forms are given as:

**Linear:** LOR  $=X_0 + X_1LOA + X_2ANI + X_3DID + X_4INR + X_5GEN + X_6FAE + X_7LDI + X_8TIL + X_9AOF + X_{10}LED + X_{11}ATR + X_{12}PLOR + ei$ 

**Exponential**:  $lnLOR = X_0 + X_1LOA + X_2ANI + X_3DID + X_4INR + X_5GEN + X_6FAE + X_7LDI + X_8TIL + X_9AOF + X_{10}LED + X_{11}ATR + X_{12}PLOR + ei$ 

**Semi-log:** LOR =  $X_0 + X_1 lnLOA + X_2 lnANI + X_3 lnDID + X_4 lnINR + X_5 lnGEN + X_6 lnFAE + X_7 lnLDI + X_8 lnTIL + X_9 lnAOF + X_{10} lnLED + X_{11} lnATR + X_{12} lnPLOR + ei$ 

**Double-log**:  $lnLOR = X_0 + X_1 lnLOA + X_2 lnANI + X_3 lnDID + X_4 lnINR + X_5 lnGEN + X_6 lnFAE + X_7 lnLDI + X_8 lnTIL + X_9 lnAOF + X_{10} lnLED + X_{11} lnATR + X_{12} lnPLOR + ei$ 

The output of the functional form with the best result in terms of both the 1st order (number, sign, and sizes of the parameter estimates (bi), t-ratios, F-statistic, R<sup>2</sup>, R<sup>2</sup>(adjusted), and 2nd order (Durbin-Watson statistic) econometric criteria was chosen as the lead equation. The variables used in this model were drawn from the literature reviewed.

#### 4. Results and discussion

# 4.1 Determinants of Loan Repayment

The multiple regression analysis was used to estimate the determinants of loan repayment. Outputs of the analyses as shown in Table 1 below informed that the linear form was best in terms of some significant regressors, signs, and sizes of the 1<sup>st</sup> and 2<sup>nd</sup> order econometric criteria, and was chosen as the lead equation.

According to the linear regression result (Table 1), three regressors (loan amount, interest rate, and time lag for repayment) had significant influences on loan repayment. Delay in disbursement, gender, farming experience, farmers' age, and farmers' discernment to loan repayment was not statistically significant but confirmed to the a priori signs. Lastly, Annual income, Type of lending institution, Level of education, Attitude towards risk, were not significant and did not conform to the a priori signs.

The loan amount had a positive and significant influence on loan repayment at the 5% alpha level. This implied that the farmers who obtained higher loan amounts were likely to invest more, generate more income, and repay better. This could also be explained by the fact that the positive coefficient of the amount granted may enable farmers to adopt agricultural innovations which can translate to an increase in the level of income and hence a high level of loan repayment ceteris paribus. This results in ties with those of Ugwumba & Uchehara, (2015) that carried out a study on gender differences in access to and repayment of Bank of Agriculture loans among cooperative farmers in Anambra State, Nigeria. They used a multistage and random sampling technique to select 200 farmers. Using

multiple regression analysis, results obtained from the linear equation showed that loan amount was positively significant to loan repayment at 5% alpha level.

Loan repayment was positively and significantly affected by the interest rate (P<0.05). This implies that an increase in the interest rate will positively favor loan repayment. This could be explained by the fact that an increment in interest rate may induce the rational debtor to repay quickly to escape further increment while on the contrary, a decrease in interest rate will cause the borrower to relax telling himself that the interest rate is not high until he finally finds himself accumulating so much interest that results to default in repayment. Afolabi (2010), reported a similar situation in his studies on the analysis of loan repayment among small-scale farmers in Oyo State, Nigeria. The coefficient of time lag for repayment impacted positively and significantly on loan repayment at 5% level. This implies an increase in the time given to the farmer to repay his loan will lead to an increase in his repayment capacity. This can be explained by the fact that the farmer will have enough time to invest and reinvest the loan, generate more income and thus repay his loan, ceteris paribus. Firafis (2015) in his study on the determinants of loan repayment performance in Ethiopia had closely related results in which 69% of correspondents recommended a repayment period that is longer than a year while the rest recommended a repayment period that is less than a year, as suitable.

Table 1: Estimated determinants of loan repayment

Variable	Linear	Exponential	Semi-log	Double-log
Constant	2894.815	11.186	-2150377.600	2.692
	(0.013)	(19.509)	(-4.182)	(2.981)
LOA (FCFA)	0.258	0.000	186100.429	0.739
	(3.176)**	(1.966)	(4.389)**	(9.926)**
ANI (FCFA)	-0.041	0.000	-62695.791	-0.067
	(-1.727)	(-0.293)	(-1.887)	(-1.153)
DID(delayed=1;	-121717.433	0.480	-125598.366	0.162
otherwise=0)	(-1.186)	(1.801)	(-1.147)	(0.841)
INR (FCFA)	9.894	0.000	81594.234	0.074
	(4.058)**	(3.018)**	(2.184)**	(1.132)
GEN(male=1; female=0)	52728.132	0.440	32097.596	0.187
	(0.956)	(3.079)**	(0.516)	(1.707)
FAE (years)	-26094.600	-0.087	-29994.772	0.034
	(-1.069)	(-1.367)	(-0.509)	(0.329)
LDI(MFI=1; otherwise=0)	-148346.618	-0.531	-18785.128	-0.436
	(-1.395)	(-1.924)	(-0.189)	(-2.942)**
TIL	166059.218	0.103	188841.226	0.138
	(2.620)**	(0.627)	(2.890)**	(1.205)
AOF (years)	3055.831	0.053	470.609	-0.049
	(0.084)	(0.563)	(0.003)	(-0.189)
LED	-13342.659	-0.046	-11517.503	-0.066
	(-0.407)	(-0.536)	(-0.161)	(-0.530)
ATR	-6185.047	0.036	-21111.439	-0.063
(1=fear risk; 0=otherwise)	(-0.089)	(0.197)	(-0.300)	(-0.514)
PLOR	184960.912	0.399	243038.546	0.508
(1=constraint;0=otherwise)	(1.189)	(0.989)	(1.478)	(1.759)
$\mathbb{R}^2$	55 %	50 %	50 %	74 %
R <sup>2</sup> (Adjusted)	49 %	43 %	43 %	71 %
F-Statistics	8.934	7.321	7.339	21.404
<b>Durbin-Watson Statistics</b>	1.814	1.607	2.077	1.854

Notes: Figures in ( ) = t-statistic values. \*\*=Significant at 5% alpha level. Source: field survey, 2020

Among the remaining nine determinants that had no significance on loan repayment at the 5% level, three determinants (Gender, age of farmer, and farmer's perception of loan repayment) had an insignificant positive effect on loan repayment at 5% alpha level. This implies an increase of any of these determinants will lead to an insignificant increase in loan repayment and a decrease in any of them will result in an insignificant decrease in loan repayment.

The parameter gender was positive but insignificantly related to loan repayment at a 5% probability level. This meant that both female and male farmers had the same performance in loan repayment. That is, being a female or a male has no significance on loan repayment. This contradicts the results of Abu, Bata & Haruna, (2020); Ugwumba & Uchehara (2015) who used the same analytical method and their result showed that at a 5% significant level, female farmers performed better than their male counterparts in loan repayment.

On the other hand, six determinants (annual income, delay in disbursement, farm experience, type of lending institution, level of education, and attitude towards risk) had an insignificant negative effect on loan repayment. This implies an increase in any of these determinants will lead to a decrease in loan repayment but at a rate that is not significant at 5% level and a decrease in any of them will result in an insignificant increase in loan repayment. Annual income on its part has an insignificant negative effect on loan repayment at a 5% alpha level. This implies that an increase in annual income will result in a decrease in loan repayment. This can be explained by the fact that the annual income generated by the farmers after investing is so insignificant that the farmers prefer to reinvest it rather than going to repay their loan. However, this is contrary to the studies of Ugwumba & Uchehara, (2015) who stipulated that loan repayment is positively and significantly affected by the annual income of the farmers (p<0.05). The three determinants of the loan amount, interest rate, and time lag for repayment had a significant influence on loan repayment, thus we reject the null hypothesis which states that no significant relationship exists between loan amount, interest rate, the time lag for repayment, and the amount of loan repaid.

The coefficient of multiple determination (R<sup>2</sup>) value of 55 % indicated that 55 % of the variation in loan repayment was accounted for by variations in the predictor variables while the remaining 45 % was due to random disturbance. The F-statistic value of 8.934, which was highly insignificant, showed that overall the multiple regression model was not a good fit and that the regressors had joint insignificant influence on the regress and (loan repayment).

# 4.2 Gender differences in access to and repayment of agricultural loans

Prompt and adequate disbursement of approved credit to farmers is a catalyst to the accelerated acquisition of production inputs, modern techniques, large farm size, and hence better efficiency, sustainable production, and food security (Ugwumba & Omojola, 2013). On the other hand, prompt repayment of the loan is the panacea to sustainable availability of credit facilities for the existing and new entrances into agribusinesses (Adegbite, 2009). Results collected from secondary data from 3 microfinance institutions for the past 5 years revealed that more males (58 %) received agricultural credits compared to 42 % of females who received agricultural credits. Results equally showed that the mean amount of credit received by males' stands at 198,186,700 FCFA while that received by females' stands at 108,802,157 FCFA. This shows that males had more access to agricultural credit than females. However, of the total amount of credit received by males, 79 % was repaid meanwhile females repaid 90 % of the total amount of credit received. The distribution according to the mean amount of credit received and repaid is shown in table 2.

Table 2: Mean distribution of respondents according to the amount received and repaid

Gender	Mean number (%)	Mean amount received (FCFA)	Mean amount repaid (FCFA) (%)	Mean amount not repaid (FCFA)
Male	436.0667	198,186,700.0000	157,449,921.2000	40,736,778.8000
	(58 %)	(100 %)	(79 %)	(21 %)
Female	317.6667	108802157.5333	97804996.7333	10,997160.8000
	(42 %)	(100 %)	(90 %)	(10 %)

Source: field survey, 2020

The test of the hypothesis of no significant difference between pairs of the mean of female and male farmers' access to and repayment of agricultural credit are indicated in table 3. As revealed by the results, the mean difference in the amount of credit received by males and females stands at 89,384,542.467 FCFA while the mean difference in the amount repaid stands at 59,644,924.467 FCFA. Also, at a 5 % significant level, the t-test results showed that there is a positive insignificant difference in the amount of credit received and repaid by the male and female farmers. This implies that the males receive more credits than the female and the females repay their credits than the male but the difference is statistically insignificant at 5 % alpha level.

Thus, we accept the null hypothesis which states that there is no significant difference between pairs of the mean of female and male farmers' access to and repayment of agricultural credit. This contradicts the results obtained by Ugwumba & Uchehara (2015) in their studies on gender differences in access to and repayment of the bank of agriculture loans among cooperative farmers in Anambra State, Nigeria. The results of their studies revealed that the male farmers obtained more bank loans than the females; however, the female farmers repay more of their loans than the males. This difference could be because they studied the farmers in cooperatives whereas; this study looks at individual farmers.

Table 3: Test of hypothesis between pairs of the mean of female/male farmers' access and repayment of agricultural credit.

agricultural credit.							
Item	Gender	Mean diff. FCFA	Std. dev	Std. error diff.	T	Df	Sig (2-tailed)
Number	Male	110.4	562.02586	186.172	0.636	28	0.53
	Female	118.4	451.69422	_			
Amount	Male	00 204 542 47	277465129.6	82076003	1.089	21.972	0.288
received	Female	89,384,542.47	155113362	_			
Amount	Male	50 644 004 47	220374597.4	66832485	0.892	23.29	0.381
repaid	Female	59,644,924.47	135770956.2	_			

Source: field survey, 2020

# 4.3. Constraints to access-to and repayment of agricultural loans

The common problems militating against loan access and repayment in the area were identified. Data collected on these problems were examined by finding the mean scores (M) of the various constraining variables and comparing the calculated mean scores (M) with the critical mean (CM) of 8.72 for access to loan and 3.3 for loan repayment

#### 4.3.1. Constraints to access-to loan

The result as presented in Table 4 showed the constraints to loan access ranked according to descending order of the seriousness of the problems to include lack of sensitization (M=13), collateral security (M=11.6), illiteracy (M=9.4), excessive bureaucratic procedures (M=7.8), untimely disbursement of fund (M=0.6).

Table 4: Constraints to access-to agricultural loans

Variables	Frequency	Mean score	Percentage	Ranks
X 1 0	(Xi)	(M)	20.04	4 at
Lack of sensitization	65	13	30 %	1 <sup>st</sup>
Collateral security	58	11.6	26.6 %	$2^{\text{nd}}$
Illiteracy	47	9.4	21.5 %	$3^{\rm rd}$
Excessive bureaucratic procedures	39	7.8	17.8 %	4 <sup>th</sup>
Untimely disbursement of fund	9	1.8	4.1 %	5 <sup>th</sup>
Total	218	43.6	100 %	

Notes: N=5; M= Sum of Xi/N; CM= M/Sum of Xi \*M

Source: field survey, 2020.

# 4.3.2. Constraints to the repayment of agricultural loans

The result as presented in Table 5 showed the constraints to loan repayment ranked according to descending order of the seriousness of the problems to include: family commitment (M=6.8), price fluctuation (M=6.2), crop failure (5.1), high cost of production (M=3.8), repayment with interest (M=3.6), poor prices of produce (M=1.6), pay-back period (M=1.2), size of income (M=1.1), amount of loan disbursed (M=0.6).

Table 5: Constraints to the repayment of agricultural loans

Variables	Frequency (Xi)	Mean score (M)	Percentage	Rank
Family commitment	61	6.8	22.6 %	1 <sup>st</sup>
Price fluctuation	56	6.2	20.7 %	2 <sup>nd</sup>
Crop failure	46	5.1	17 %	3 <sup>rd</sup>
High cost of production	34	3.8	12.6 %	4 <sup>th</sup>
Repayment with interest	33	3.6	12.2 %	5 <sup>th</sup>
Poor prices of produce	14	1.6	5.2 %	6 <sup>th</sup>
Payback period	11	1.2	4.1 %	7 <sup>th</sup>
Size of income	10	1.1	3.7 %	8 <sup>th</sup>
Amount of loan disbursed	5	0.6	1.9 %	9 <sup>th</sup>
Total	270	30	100 %	_

Note: N=9; M= Sum of Xi/N; CM= M/Sum of Xi \*M

Source: field survey, 2020.

# 5. Conclusion and recommendations

This study was carried out on gender differences in access to and repayment of agricultural credit in the west region, Cameroon. Findings revealed that there were three determinants to loan repayment, that is, loan amount, interest rate, and time lag for repayment at 5% alpha level. From these results, it can be concluded that loan amounts given to farmers should be increased such that they can invest more by increasing their farm sizes, getting improved farm technologies, getting quality seeds and other quality inputs to generate more income and thus repay their loans on time. These credits should be given to the farmers at a lower interest rate and the time lag for repayment should be increased to favor repayment of agricultural credits.

Results equally revealed that there is no significant difference between male and female access to agricultural credit (M=198,186,700 FCFA) and (M=157,449,921 FCFA) respectively and male and female repayment of agricultural credit (M=108,802,157.5 FCFA) and (M=97,804,997 FCFA) respectively.

Also, from the results, we can say without a doubt that there is no bias between the male and female farmers as far as access to agricultural credit is concerned and on the other hand, it can equally be said that both genders are fully involved in investments that permit them to repay their loan, thus the males repay their credits as well as the females.

Finding solutions to the problems identified by this study that stand as constraints to loan access and loan repayment would ensure the sustainability of the loan scheme and accelerate the agricultural development of the country. From this study, we recommend that the microfinance institutions, through their information unit, should encourage farmers to apply for higher amounts of credit, and maintain gender equality in disbursements. This would minimize diversion of the fund, improve net farm income, enable better repayment and ensure availability of funds. Also, microfinance institutions should streamline administrative procedures to reduce the cost of obtaining credit by the farmers, ensure prompt release of approvals and encourage proper utilization of the loans. In addition, we recommend that farmers should ensure that agricultural credit is effectively invested in the agricultural project. This will go a long way to ensure efficiency in inputs and high outputs that will enable the farmer to repay his loan on time.

# 6. Limitations and Direction for future research

The key limitation of this study is that it studies farmers as a whole and did not focus on farmers of a specific crop type. Thus, further research may be carried out to compare loan access and repayment among varied crop farmers, to establish relationships that may be associated with specific crops. Moreover, the study builds on the challenging period of COVID 19, and thus results in general and loan repayment results, in particular, may not reflect the reality during non-pandemic periods. To this end, a similar study using a comparative approach may be conducted in the same locality in the post-COVID 19 pandemic period.

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# REFERENCES

- Abu, B. M., Bata P., & Haruna I., (2017). Microcredit Loan Repayment Default among Small Scale Enterprises: A Double Hurdle Approach. *Ghana Journal of Development Studies*, 14(1), 146-165
- Afolabi J.A., (2010). Analysis of Loan Repayment among Small Scale Farmers in Oyo State, Nigeria. *Journal of Social Sciences*, 22(2), 115-119, DOI: 10.1080/09718923.2010.11892791
- Assifaw L. & Gemechu A. (2016). Analysis of Factors affecting smallholder farmers' access to formal credit in Jibat District, West Shoa Zone Ethiopia. *International Journal of African and Asian Studies*, 25, 48-53
- Aterido, R., Beck T. & Lacovone L., (2011). Gender and Finance in Sub-Saharan African: Are Women Disadvantaged? Policy Research Working Paper 5571. The World Bank, Washington D.C.
- Chandio A. A., Jiang Y., Wei F., Rehman A. & Liu D. (2017) Famers' access to credit: Does collateral matter or cash flow matter?—Evidence from Sindh, Pakistan, *Cogent Economics & Finance*, 5(1)1-13, DOI: 10.1080/23322039.2017.1369383
- Enimu S., Eyo E. O. & Ajah E. A. (2017), Determinants of loan repayment among agricultural microcredit finance group members in Delta State, Nigeria. *Financial Innovation* 3, 1-12, DOI 10.1186/s40854-017-0072-y
- Fikirte K., (2011). Determinants of Loan Repayment Performance: A Case Study on Addis Credit and Saving Institution, Addis Ababa, Ethiopia. Master's Degree Thesis in Management, Economics and Consumer Studies, Wageningen University, The Netherlands
- Firafis H., (2015). Determinants of Loan Repayment Performance: Case Study of Harari Microfinance Institutions. Department of Rural Development and Agricultural Extension, Institute of Cooperative and Development Studies, Ambo University, Ethiopia. *Journal of Agricultural Extension and Rural Development*, 7(2)56-64 DOI: 10.5897/JAERD140622
- Logo P., & Bikie E (2003). Cameroon: overcoming custom, discrimination, and powerlessness. In women and land in Africa: culture, religion and realizing women's right, ed. M. L. Wanyeki London: Zed Books Ltd. pp. 281-287
- Maru S. & Roberto J. G. (2010) Agricultural credit repayment in Finoteselam town, northwestern Ethiopia. Ethiopian Journal of Business and Economics, 1(2), 1-28
- Odoemenam, I. U. & Obinne, C. P. O., (2010). Assessing the Factors Influencing the Utilization of Improved Cereal Crop Production Technologies by Small Scale Farmers in Nigeria. *Indian Journal of Science and Technology* 3(2),180-183 DOI: 10.17485/ijst/2010/v3i2.23
- Presidential Decree (2005). Decree No. 2005/481 of 16 December 2005, amending and supplementing Decree No. 76-165 of 27 April 1976 setting out the conditions for obtaining land title in Cameroon, Cameroon Tribune News Paper
- Tambi D. M., Atemnkeng J. T. & Bime M.J. (2017) Women in agricultural production and food security in rural Cameroon, *International Journal of Agricultural Policy and Research*, 5(3),70-79 https://doi.org/10.15739/IJAPR.17.008
- Tefera D., (2004). Determinants of smallholder farmers' demand for non-formal credit: The case of FartaWoreda. Unpublished M.Sc thesis, Alemaya University, Ethiopia.
- Ugwumba, C. O. A., Ike, P. C. & Nnabuife, E. L. C., (2009). Loan repayment among microfinance cooperators of the Nigerian Agricultural Cooperative and Rural Development Bank (NACRDB) in Anambra State. *Journal of Research in National Development*, 6(2), 79-84.
- Ugwumba C. O. A. & Uchehara F. O, (2015). Gender Differences in Access to and Repayment of Bank of Agriculture Loans among Cooperative Farmers in Anambra State, Nigeria. Chukwuemeka Odumegwu Ojukwu University, Nigeria. *International Journal of Arts & Sciences*. 8(8):263–272
- Ugwumba, C.O.A. & Omojola, J.T. (2013). Credit access and productivity growth among subsistence food crop farmers in Ikole local government area of Ekiti State, Nigeria, *Journal of Agricultural and Biological Science*, 8(4), 351-356
- Ullah A., Mahmood N., Zeb A. & Kächele H. (2020), Factors Determining Farmers' Access to and Sources of Credit: Evidence from the Rain-Fed Zone of Pakistan. *Agriculture*, 10, 1-13, Doi: 10.3390/agriculture10120586
- Uwaegbute A.C & N.O Oke (2004). Women in Agriculture and Rural Development. In R.P.A. Unamma, O.C. Onwudike, A. C. Uwaegbute, H.O. Edeoga and A. C. Nwosu (eds) FSR&D in Nigeria.: Principles and Practice in Humid and Derived Savanna Southeast Zone. MOUAU Nigeria.
- World Bank (2001). World development report (2000-2001). London: Oxford University Press.
- World Bank (2015). Nigeria Overview. Retrieved from <a href="http://www.worldbank.org/en/country/nigeria/overview">http://www.worldbank.org/en/country/nigeria/overview</a> on July 3rd, 2021

World Bank, (2020). Cameroon World Bank Groups Employment Opportunities. World Bank Group, Retrieved from <a href="http://www.worldbank.org/en/country/cameroon/overview/employment">http://www.worldbank.org/en/country/cameroon/overview/employment</a> on March 3rd, 2021



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