COLLEGE OF AGRICULTURE AND NATURAL RESOURCE

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SENIOR RESEARCH PAPER ON FACTORS AFFECTING LOAN REPAYMENT PERFORMANCE OF SMALL HOLDER FARMER : IN CASE OF LERA TOWN AZERNAT DISTRICT, SILTE ZONE, CENTRAL ETHIOPIA

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WOLKITE, ETHIOPIA

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ACRONYMS

CBB Construction and Business Bank

CBE Commercial Bank of Ethiopia

DBE Development Bank of Ethiopia

EIC Ethiopian Insurance Corporation

FAO Food and Agricultural Organization

GDP Gross Domestic Product

MOA Ministry of Agriculture

NBE National Bank of Ethiopia

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ABSTRACT

The study was conduct on factors affecting loan repayment of farmers in lera town azernat district . The main objective of the study was to investigate loan repayment of rural farmers in the study area. The specific objective of the study was to identify socio-economic and institutional factors that affect loan repayment of rural farmers and also the source of credit for rural farmers. In order to achieve the proposed objective both primary and secondary data was used. The primary data was collected from interview, whereas secondary data was obtained from published and unpublished documents. The sampling techniques that were used in this study were simple random sampling technique to have50 respondents. After data gathered from perspective source it was analyzed using logit model. From nine explanatory variables only two variables were significantly affect loan repayment of rural farmers. Those were Number of livestock, land size, source of credit and marital status were affect loan repayment of rural farmers positively and significantly. On the other hand age and amount of loan were affecting loan repayment significantly and negatively.

1 INTRODUCTION

1.1,Background

Agriculture is the main stay of the Ethiopian economy. The role that it plays in economic development is monumental. Agriculture meets the most essential needs of both human beings and small-scale industries. It accounts about 43 percent of the Gross domestic product, contributes over 80 percent of the country's export earnings and 85 percent of the population earns living from it (Seleshi, 2010). The country and its people have historically relied on rain-fed agriculture to meet their needs. This strategy has faced many challenges over the years, with the obvious short fall of food often arising from natural and economic disasters (MoFED, 2008). Poverty is pervasive and persistent in most developing countries.

To many, the root cause of the poverty trap is not the constraint on physical resources but the financial constraints or credit constraints that prohibit the acquisition of those resources to poverty-escaping scale (Calum, 2007). Various empirical studies have concluded that without the development and adoption of new agricultural technologies and the use of credit facilities, it is impossible to expect rapid growth of agricultural productivity. However, with the introduction of new production technologies, the financial needs of farmers increase manifold.

Steady agricultural development depends up on the continuous increase in farm investment. Most of the time, large investment cannot be made by the farmers out of their own funds because of their low level of incomes. Thus, here comes the importance and significance of the availability of rural credits to bridge the gap between owned and required capital (Gebrehiwot, 2007).

Agricultural lending involves giving out of credit (in cash and kind) to small scale farmers for the purpose of farming. There is no doubt about the crucial roles of credit in economic development. But the increasing default rate is one of the major problems of the lending institutions (Mohammad, 2009).. Therefore, this study analyzed the extent to which agricultural credit functions and repayment rates are associated with different demographic, institutional and socio-economic characteristics of farm households in lera town azernat district , Ethiopia. .

1.2 Statement of the Problem

Loan default problem has been tragedy as it leads to a system failure to implement appropriate lending strategies and credible credit policies. In addition, it discourages the financial institutions from refinancing the defaulting members, which put the defaulters once again into vicious circle of low productivity . lera town is one amongst the kebele that found in azernat woreda in this place, the regional government through relief society on micro finance and cooperatives.and have extended credit facilities to farming households to narrow the gap between the required and the owned capital to use improved agricultural technologies that would increase production and productivity. however, there is a serious loan repayment problem in the area. Therefore, this study was undertaken to analyze how non-default and default rates were associated with different loan characteristics as well as personal and socio-economic characteristics of farm households.

1.3 Objectives of the Study

The general objective of the research is to investigate the loan repayment of rural farmer in azernet destrict

The specific objectives are:

To assess the sources of credit for rural farmer in the area

To identify socio-economic and institutional factors affecting loan repayment;

1.4. Research Questions

What are the sources of credit for rural farmer?

What are the factors that affect loan repayment of rural farmer?

1.5. Significance of the Study

A study of the factors affecting loan repayment performance is vital because it provides information that would be enable effective measures to be undertaken to improve loan repayment performance of rural farmers. The study was used to enable lenders such as non-governmental organizations and policy makers to have knowledge as to where and how to channel efforts in order to minimize loan defaults. The study was also expected to contribute towards better credit administration with possible pay-off in improved loan repayment.

1.6 Scope and Limitations of the Study

The study aims at identifying factors associated with default and examining the relative importance of factors associated with loan repayment performance of rural farmers. However, not all the borrowers were included in the survey and all factors are not included due to limitation of resource, time, etc. the study was focused only in lera town azernat district other areas are not included in the study.

2. LITERATURE REVIEW

Definition

Beckman and Foster (2006) defined credit as the power or ability to obtain goods or services in exchange for a promise to pay for them later. In other words, it is the power or ability to obtain money, through the borrowing process, in return for a promise to repay the obligation in the future. According to these authors, credit represents the actual or prospective debtor's power or ability to affect an exchange by offering his promise for future payment. Credit is necessary in a dynamic economy because of the time that elapses between the production of a good and its ultimate sale and consumption. The risk in extending credit is the probability that future payment by the borrower will not be made. Futurity is thus a basic characteristic of credit and risk is necessarily associated with the time elements.

2.1 Financial Institutions in Ethiopia

There are 27 micro-financial institutions officially recognized by the National Bank of Ethiopia (NBE, 2010). These institutions deal directly with individual farmers who fulfill the loan provision criteria set by their management. Though figures on the amount of credit they provide are not available, it is believed that these institutions play an important role in narrowing the gap between the demand and supply of credit in rural areas. The advantage of these financial institutions is that farmers can get loan in cash and use it to purchase the most limiting production resources.

2.1.1 Formal financial institution

People living in poverty, like in Ethiopia, need a wide range of financial services for consumption smoothing, running their business and building assets. But due to collateral problems, poor people in most cases have no credit access from Banks. Micro finance offers financial services such as loans, savings and micro insurance to the poor people either in individual or in a group basis. Lending to the poor usually means that a lender will not be able to get any collateral to secure the loan (Njoroge, andEff 2009).

The formal financial institutions operate in areas where they perceive lower risks, where enforcement and transaction costs are least while the informal financial sector operates in areas and sectors where the former financial institutions fail to provide lending and deposit services. The formal financial institutions include the National Bank of Ethiopia (NBE), Commercial Bank of Ethiopia (CBE), Development Bank of Ethiopia (DBE), Construction and Business Bank of Ethiopia (CBB) and the recently proliferating private commercial banks like Dashen, Wogagen, Abysinia, Awash International, Nib International, etc.; and the non-banking financial institutions like the public and private insurance companies (Ethiopian Insurance Corporation (EIC), NICE, NYALA, Africa, Awash, etc.).

2.1.2 Informal Financial Sector

In addition Dejene (2003) argues in his study on the economic importance of the informal institutions in Ethiopia that the poor are often marginalized in the formal credit markets. This can be explained partly in terms of: 1) a lack of collateral, which makes lending to the poor a risky venture; 2) transaction cost of lending to and borrowing by the poor is often high; and 3) utility loss from repayment is higher for the poor as compared to the rich. So the poor don't have access to the formal financial sources. Lack of access to institutional credit is one of the crucial factors impeding the poor from involving in operating small business and in particular and economic development in general.

The informal financial sector in Ethiopia comprises mainly of iqqubs (rotating savings scheme), iddirs (traditional insurance scheme), arata-abedari (usurers), etc. This sector is neither regulated

nor counted for in the country's financial intermediation process. The sector, however, provides by far the greatest services to the bulk of the population with flexible financial innovation and terms to maturity. Though, the informal financial sector is important to most informal sector operators and the farming population, government support to the sector has been until recently very low. Nowadays, micro enterprise and informal sector promotion is getting serious consideration and support from policy makers as it is believed that the sector generates sizable self–employment and alleviates poverty.

2.2 The Need for Credit

Credit is the key input in every development program; this is particularly true for rural development because so long as sufficient credit is not provided to the development programs of poor sections of the society, the goal of development cannot be achieved. Access to capital in the form of either accumulated savings or a capital market is necessary in financing the adoption of many new agricultural technologies (Feder et al, 2004).

Likewise, Berhanu (2005) and Getachew (2005) pointed out the need for agricultural credit to increase productivity and accelerate adoption rates. Generally, credit removes a financial constraint and helps accelerate the adoption of new technologies, increases productivity, and improves national and personal incomes. In addition, it constitutes an integral part of the process of commercialization of the rural economy and a convenient means of redressing rural poverty (MOA, 2006).

2.3 Empirical Studies on Loan Repayment Performance

Loan repayment performance is affected by a number of factors, some of which are believed to negatively influence repayment while others have positive impact. Different studies have been carried out concerning loan repayment performance of borrowers in various countries by

different authors. In what follows, the findings of studies on loan repayment performance will be presented. According to a study made by Bekele et al. (2005), the socio-economic factors influencing repayment of agricultural input loan in Ethiopia using the logistic method of analysis were the amount of loan taken by households, total livestock holding, timeliness of input supply, off-farm income by member of the household, yield loss and grain production were became significant variables.

The study undertaken by Zemen (2005) revealed that there were four important factors which affect the borrowers' timely repayment of their debts in Amhara region by using Linear Discriminant Analysis. According to his findings, the variables that differentiated the sample borrowers into non-defaulters and defaulters were the size of cultivated land, the loan diversion behavior, membership condition and the amount of other credit borrowed during the study period.

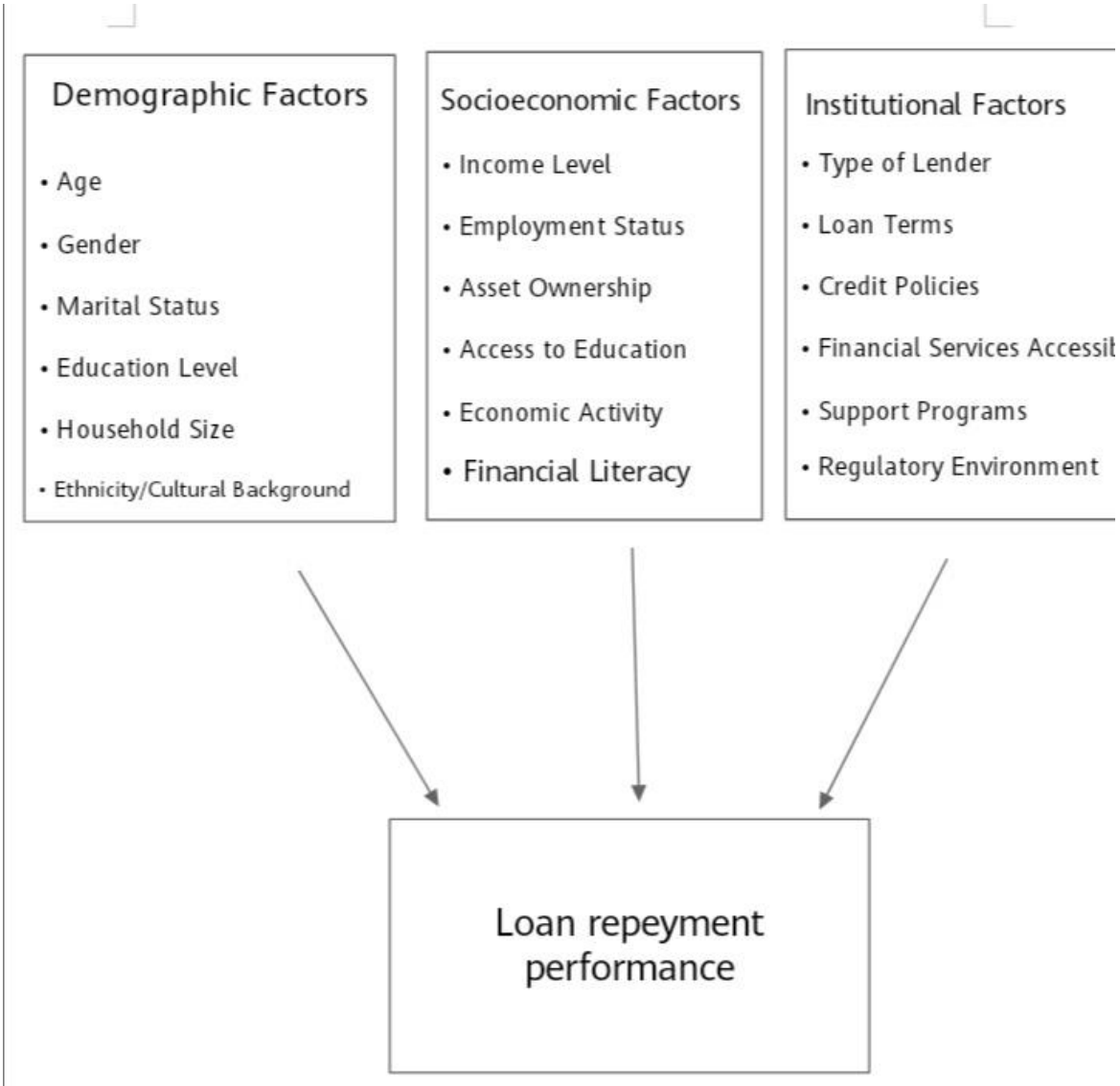
Berhanu (2005) studied on the determinants of loan repayment performance of small-holder farmers in Ethiopia. In order to analyze the factors that affect loan repayment, he employed the tobit model. A total of 17 explanatory variables were considered in the econometric model. Out of these seven variables were found to significantly influence the repayment performance. These were land holding size of the family, agro-ecology of the area, total livestock holding, number of years of experience, number of contacts, sources of credit and income from off-farm activities. The remaining variables (family size, distance between main road and household residence, purpose of borrowing, loan amount and expenditure for social festivals) were found to have insignificant effect on loan repayment performance of smallholder farmers.

Bhatt and Tang (2002) studied the determinants of loan repayment in microcredit evidence from programs in the United States. Their study showed that women has low repayment rate because some women entrepreneur in the study might have been engaged in high risk and low return activities. Godquin (2004) also examined the microfinance repayment performance in Bangladesh. His result is female borrowers did not proven to have a significant better repayment performance. The size of loan and the age of the borrower showed the negative impact on the repayment performance. On the contrast, Abreham (2002) showed in his study male borrowers are the undermining factors for repayment.

As mentioned above, various studies were conducted on the determinants of loan repayment performance in different countries. Most of these studies were focused on the credit associated with agricultural activities and they identified the socio-economic factors that affect the loan repayment rate of rural household. However, in the literature review nothing was indicated about the factor influencing the loan repayment performance of urban borrowers. Thus, this research could focus on the borrowers who made various types of business in urban area.

2.4 Conceptual frame work

It is conceptualized that loan repayment is influenced both directly and indirectly by various factors. Institutional and socio-economic factors are generally out of the control of farmers. Institutional and socio factors influence directly and indirectly the loan repayment. These relationships are presented in Figure 1 below.



3. RESEARCH METHODOLOGY

3.1,Description of the study area

Mirab Azernet Berbere is one of the woredas in the Central Ethiopia Regional State of Ethiopia. This woreda is named after the sub-groups of the Silt'e people. Part of the Silt'e Zone, Mirab Azernet Berbere is bordered on the southwest by the Hadiya Zone, on the northwest by the Gurage Zone, and on the east by Misraq Azernet Berbere. The administrative center of this woreda is lera

Based on the 2007 Census conducted by the CSA, this woreda has a total population of 59,289, of whom 27,011 are men and 32,278 women; 5,034 or 8.49% of its population are urban dwellers. The majority of the inhabitants were Muslim, with 96.57% of the population reporting that belief, while 2.81% practiced Ethiopian Orthodox Christianity.The major economic activity of the area was mixed farming system mainly crop production and livestock raring. The most commonly cultivated annual crop in the area was wheat,been,Maize,pee, and others.Their annual crops were cultivated by subsistence farming in the study area.

3.2 Sources and Data Collection Methods

In this study Both primary and secondary data was used. The primary data was collected from the small holder farmers benefiting from different credit service directly through interview. The questionnaire was developed and per-tested to evaluate for consistency, clarity and to avoid duplication and to estimate the time requirement during data collection. Secondary data are collected from , published and unpublished documents, Internet etc.

3.3 Research design

To undertake this study, cross-sectional research design was used to involve both qualitative to discover the understanding motive of desires and quantitative (mainly using questionnaires).Regression model was used in which the regress and evokes a yes or no or present or absent response are known as dichotomous, or dummy, dependent variable regression models. They are applicable in a wide variety of

fields and are used extensively in survey or census-type data. The dependent variable in this study was also a dummy variable, which takes a value of zero or one depending on whether or not the borrower defaults. However, the independent variables are of both types that are continuous or categorical. A binary logit model was used to analyze factors influencing loan repayment performance of rural farmers.

3.4 Sample size

The size of the sample depends on the desired precision, and there is no single rule that can be universally applied to determine sample size. However, larger samples are generally more likely to be representative of the population. In this study, the total population of credit user households in the Azernat woreda was approximately 2,450, consisting of 1,223 males and 1,227 females.

For this research, a sample of 334 borrowers was selected using a systematic two-stage sampling technique. The sample size was determined using the Yamane formula, which considers the total population and desired margin of error. The decision to select 334 households was influenced by various limitations, including time constraints, budgetary considerations, and logistical challenges.

The sampling process involved purposively selecting the Azernat woreda due to its relevance to the study objectives. From the total of 16 kebeles, four kebeles were randomly chosen: Lera, Jaramo, Duna, and Wogar. Within these selected kebeles, a simple random sampling method was employed to choose households from the identified credit user population of 2,450.

To ensure a comprehensive analysis, the sample was stratified into defaulters and non-defaulters based on repayment performance. This stratification allows for a detailed examination of the determinants influencing loan repayment within the selected households. Overall, while the sample size was delimited by practical constraints, it aims to provide meaningful insights into the borrowing behavior and repayment dynamics in the Azernat woreda.

3.5 Sampling technique

The subject of this study was via the head of the households, in the study area, which includes both male and female heads. The sampling technique plays a great role for accuracy and validity of information. The technique that used to select the study area was purposive sampling because of the

nearness of the study area to the campus, in order to gather data and other information relevant to my study. And to draw representativeness and to avoid biasness in sampling sampled farmers from the study population, simple random sampling technique was employed.

3.6 Methods of Data Analysis

3.6.1 Empirical Models

Binary logistic regression models were used in which the regress and evokes a yes or no or present or absent response are known as dummy, dependent variable regression models. They are applicable in a wide variety of fields and were used extensively in survey or census-type data. The dependent variable used to study was also a dummy variable, which takes a value of zero or one depending on whether or not the borrower defaults. The logit models were commonly used in studies involving qualitative choices.

Therefore, logistic probability model was econometrically specified as follow:

Where, y is the probability that an individual will make a certain choice (defaults or does not Default) given Xi;

μ denotes the error terms that are not observed.

Xi represents the ith explanatory variables; and

α and βi are parameters to be estimated

3.6.2 Descriptive analysis

For this study descriptive statistics was used to analysis socioeconomic characteristics (age, education, economic activity, etc). Quantitative data was analyzed to present in an organized manner from the information collected from informants. In the meantime, descriptive statistics such as mean, standard deviation, frequency distribution and percentages were used to describe institutional and socio-economic characteristics of the respondents.

3.7. Definition of variables

3.7.1. Dependent variable

Dependent variable: Was defined as the loan (L) repayment performance of borrowers, which is a dummy variable taking a value zero if the borrower is defaulter and one otherwise.

3.7.2. Explanatory variables of the study

The main explanatory variables of this study were: Sex of the borrower, Age of the borrower, Family size, Education level, Land size, Number of livestock owned, Amount of loan, Farm income and Source of credit.

Age of the borrower (age b): Was defined as the period from the respondent's birth to the time of the interview and was measured in years.

Education level of the borrower (edun b): Education may enable farmers to be more aware of the importance of formal loan and hence might reduce willful default. Therefore, ceteris paribus, education is expected to reduce the rate of loan default.

Family size (famil s): The number of family members residing with the respondent. The larger the family members, the more the labor force available for production purpose. Therefore, there is a possibility to have more alternative sources of income to overcome credit risks.

income of borrower (farm i): Was defined as the total income generated from crops production activities measured in Birr during a particular year. Higher revenue may result in the better repayment capacity of the borrower.

Land size (land s): It refers to the total cultivated land holding of the household. It was argued that farmers with large farm size have better chance of earning more income which in turn enables him/ her to use inputs and repay credits.

Number of livestock's (no livs): Was defined as the number of draught oxen owned per household during the survey period. Oxen were the most important source of traction power in the area. Therefore, borrowers who own more oxen would be in a position to undertake farm activities on time and when required. Ownership of more oxen power was expected to be positively related to repayment performance of the loan (Belay, 1998).

Source of credit (source c): The probability of being non-defaulter and the degree of loan recovery were also positively and significantly influenced by the source of credit. The formation of borrowers group, the use of group responsibility and peer monitoring are the core principles guiding financial transactions of micro finance. In group lending programs, the functions of screening, monitoring, and enforcement of repayment are largely transferred from the lender to the borrowers' group members.

Amount of loan(amount l): the loan size varied in accordance with the type of financial institutions. If the amount of loan was high the borrower's repayment performances become reduced.

4 RESULT AND DISCUSSION

This chapter presents the results from the descriptive and econometric analyses. The descriptive analysis made use of tools such as mean, percentage, standard deviation and frequency distribution. Econometric analysis was carried out to identify the most important factors that affect the loan repayment and to measure the relative importance of significant explanatory variables on loan repayment.

The study was investigating the source of credit where the farmer obtained the loan. The farmers get credit from micro finance and cooperatives. micro finance lend the money to the farmer by forming groups. In one group there were 5-7 farmers. The need of forming group helps to reduce defaulter, whereas cooperatives lend the money individually without forming groups.

4.1 Descriptive Results

4.1.1 Demographic characteristics of the borrower

Sex of the borrower; the Table 4.1 below indicates that 56 and 44 percent of the total sample respondent male and female respectively. It also indicates that 16%and 20% were female and male defaulters respectively, whereas 36% and 28% were male and female non-defaulters respectively. The table shows that majority of defaulters were males.

Age of the borrower; the average age of sample rural farmers was about 44.96 years. Most of the borrowers were within the age of 40^{th}.

Family size of the borrower

Accordingly, the average family size of the sample borrowers was found to be 7 persons. This was higher than the national average of 5 persons (CSA, 1994).With regard to their religion all the sample borrowers were Muslim.

Table,1 back ground of the respondents for discrete variable

Back ground of the respondent	Alternatives	Loan repayment				Total
		Non-defaulter	Percent	Defaulter	percent	
Sex	Male	18	36	10	20	56
	Female	14	28	8	16	44
	Total	32	64	18	36	100
Source of credit	Micro finance	21	42	11	22	64
	Cooperatives	11	22	7	14	36
	Total	32	64	18	36	100

4.1.2 Socio- economic characteristics of the borrower

Land size; the average land holding of the sample borrowers was 1.6468 hectare. The respondents have not much amount of land. Almost all respondents owned less than 3 hectares of land.

Number of Livestock of the respondent; the average number of livestock of the sample borrowers was 11.4

Amount of loan: The sample households on average borrowed Birr 2822(Table 4.3) However, the loan size varied in accordance with the type of financial institution.

Income of the borrower; the average income of the borrower was 10618.6. The income of the borrower was generated from livestock and crop production.

Source of credit; Farmers in the study area was got credit mainly from two institutions micro finance and cooperative. Table 4.1 indicates that the survey result show that 64% of sample respondents were borrowed from micro finance whereas, 36% of the sample respondents were borrowed from cooperatives. From the table shows that 64% of sample respondents were borrowed from micro finance and 42%of them are non-defaulter whereas, 36% of sample

respondents were borrowed from cooperatives and 22% of them are non-defaulters. On the other hand from 64% of sample respondents were borrowed from micro finance and 22%defaulters' whereas, from 36% of sample respondents were borrowed from cooperatives and14% of them are defaulters.

Table,2 socio-economic characteristics of the respondents for continuous variables

Mean estimation Number of obs = 50

	Mean	Std. Err.	[95% Conf.	Interval]
age	44.24	.3892012	43.45787	45.02213
TLUnoliv	11.402	1.60006	8.186559	14.61744
famils	6.52	.2831888	5.950911	7.089089
lands	1.6468	.0033005	1.640167	1.653433
amouloa	2822	39.61962	2742.381	2901.619
INCOMBO	10618.6	78.88872	10460.07	10777.13
edul	6.642	.3220989	5.994718	7.289282

4.2 Econometric Analysis

A binary logit model was employed to estimate the effects of the hypothesized explanatory variables on the loan repayment performance of rural farmer's credit beneficiaries in micro finance and cooperatives. In this section the model results will be presented and discussed.

Logistic regression

Number of obs	=	50
LR chi2(9)	=	9.82
Prob > chi2	=	0.3648
Pseudo R2	=	0.1533

Log likelihood = -27.139348

loanrep	Odds Ratio	Std. Err.	z	P>|z|	[95% Conf.	Interval]
sex	1.185876	.8473962	0.24	0.811	.292276	4.811558
age	1.027519	.131419	0.21	0.832	.7996901	1.320255
edul	.9788084	.176211	-0.12	0.905	.6877954	1.392952
familS	.8845922	.1598102	-0.68	0.497	.6208193	1.260436
lands	1.76e-11	3.32e-10	-1.31	0.190	1.41e-27	219383.5
sourci	3.339477	1.926185	2.09	0.037	1.078231	10.34296
TLUnoliv	1.123196	.9835029	0.13	0.894	.2018917	6.248738
amouloa	1.001705	.0012697	1.34	0.179	.9992199	1.004197
INCOMBO	.9993298	.0007643	-0.88	0.381	.9978329	1.000829
_cons	3.36e+17	1.02e+19	1.33	0.184	4.55e-09	2.48e+43

4.2.2 Discussion on the Significant Explanatory Variables

Out of the nine variables hypothesized to influence the loan repayment of borrowers, two were found to be statistically significant. The maximum likelihood estimates of the logistic regression model shows that, amount of loan and education level were important factors influencing the loan repayment of rural farmers in the study area. More specifically, the coefficients of , amount of loan and education level, were statistically significant at less than or equal to 5 percent probability level.

In what follows, the results of the model estimates were interpreted in relation to each of the statistically significant variables.

Amount of loan: amount of loan affect significantly and negatively loan repayment of rural farmers. Other things being kept constant, the odd ratio of non-defaulting was decreased by a factor one as the amount of loan increased by one birr. The farmer borrowed more amount of money difficult to repay the loan at the right time because the interest rates of the money for the borrower increase.

Education of respondent's; It was hypothesized that education level of households will have positive relation to the probability of loan repayment. The sign of this variable is consistent with the prior expectation that means positively and significantly influenced the probability of rural

household’s to be participant in loan repayment. Keeping other factor constant, the odds ratio of being participant in non-default by rural household increases by a factor of 7.425 as education increases by one year. This indicates that education attainment is proved one of the most important determinants of participation in loan repayment.

5. SUMMARY AND CONCLUSION

This study were conducted to identify socio-economic and institutional factors affecting loan repayment performance and to determine the extent of default in the repayments of loan offered to smallholder farmers in the study area. Both primary and secondary sources were used to carry out the study.

In the subsistence agriculture and low income countries like Ethiopia, where the smallholder farming dominates the overall national economy, small peasant farmers often face scarcity of capital (saving) due to low level of production to adopt new agricultural technologies. Hence, short and medium term credits with favorable terms for seasonal inputs like fertilizer, improved seeds, pesticide and herbicides would generally be favored because better return would be achieved quickly within the cropping season.

It is important, however, that the borrowed funds are invested for productive purposes and the loan be repaid to the lending institutions from the generated income to have sustainable and viable production process. However, increasing default rate is one of the major problems of the lending institutions.

This study was intended to identify and analyze the factors, which influence loan repayment of rural farmer who were beneficiaries of credit in the study area. The main objective was to analyze which, how and how much the hypothesized explanatory variables were related to the loan repayment of rural farmer. It was also assess source of credit in the study area.

Simple random sampling technique was employed to select a total of 50 sample borrowers were borrowed from TCSI (32) and cooperatives (18). The survey results revealed that 64% of the borrowers were non-defaulters, whereas the rest 36% were defaulters.

The most important explanatory variables affecting loan repayment were analyzed using binary logistic regression. The model results show that among nine explanatory variables, which were hypothesized to influence rural farmer loan repayment performance, two were statistically significant while the remaining were less powerful in explaining the variation in the dependent variable. The significant variables include education level and amount of loan. Out of this variables education level were affecting significantly and positively loan repayment of rural farmers, whereas amount of loan affected loan repayment performance significantly and negatively.

6. RECOMMENDATION

Based on the findings obtained from descriptive and econometrics analysis of the study, the following recommendations are derived.

Household education should be strengthened by diversifying the schools to the rural area, by doing new schools and satisfy the necessary requirement of the schools as education has positive effect on loan repayment.

The formation of borrowers group, the use of group responsibility and peer monitoring are the principles guiding financial transaction of lender. Loan extended to groups rather than individuals have high repayment rates due to many reasons. First, loans extended to groups reduce the information asymmetry between the lender and the borrower. Thus, adverse selection and moral hazard problems reduced in such cases. Secondly, the joint liability mechanism in-group lending means group pressure on members to repay loans timely would increase the repayment rate.

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8, APPENDECIES

RESEARCH QUESTIONNAIRES

Household Survey Questionnaire

The main objective of this questionnaire is to collect information for BSc thesis on

FACTORS AFFECTING LOAN REPAYMENT PERFORMANCE OF SMALL HOLDER FARMER : IN CASE OF AZERNAT DISTRICT, SILTE ZONE, CENTRAL ETHIOPIA

The study was undertaken for academic purpose. The information that you give will be confidential

By ABDILFETA SHAMSU

WOLKITE University, Department of Agricultural Economics

General Information of the Survey

Respondent ID NO_____ Name of the Keble's _____ Date_____

BACK GROUND OF THE RESPONDENT

1, Sex of the borrower male ☐ female ☐

2, Age of the borrower_____

3, Marital states A. single B. married C. divorce D. widowed

4, Educational levels _____(Schooling year)

5, Religion A. orthodox B. Muslim C. protestant D. others

THE MAIN RESEARCH QUESTION

1, How many numbers of families do you have? Female…… male……total…..

2, Do you have cultivated land? A. yes B. No

3, How much is your cultivated land size in hectares?

4, What are the main sources of income A. crop production B. livestock rearing

petty trade D. handicraft E. pottery F. Daily laborer

5, How many numbers of livestock's do you have?

No	Type of livestock	Number of livestock	TLU(Tropical Livestock unit)
1	Cattle		
2	Sheep		
3	Goats		
4	Donkey		
5	Others		
7	Total		

6, How many quintals of crop will you harvest in this year?

No	Type of crop	Amount in quintal
1	Teff	
2	Wheat	
3	Maize	
4	Chick pea	
5	Others	
6	Total	

7, How many times do you produce within a year? A. once B. twice C. three times D. more than

8, What is your source of money to use agricultural inputs?

A. credit B. Owen resource C. others

9, If your answer is credit where did you obtained this credit?

A. from formal source of credit B. from informal source of credit

10, Are you involved in group to get the loan? A. yes B. no

11, How many members dose the groups have?

12, Do you get enough amount of loan at the right time? A. yes B. no

13, How much amount of birr you borrow?

14, Do you repay the loan at the right time? A. yes B. no

15, If your answer is no why? A. lack of follower by loan officer B. weak legal enforcement for defaulters C. improper use of loan