

**DETERMINANTS OF WOMEN'S PARTICIPATION IN MICROFINANCE
THE CASE OF ADA'A WOREDA, EAST SHO'A ZONE, ETHIOPIA**

**A thesis Submitted in Partial fulfillment of the Requirement for
the Degree of Master of Arts in Development Economics**

At

Adama Science and Technology University



By

Getachew Mekete

Research Advisor

Dr. S.V RA'O

May, 2015

ADAMA SCIENCE AND TECHNOLOGY UNIVERSITY

S.V Ra'o (DR.)		
Major Advisor	Signature	Date

.....

Chairperson

.....

Signature

.....

Date

.....		
Internal Examiner	Signature	Date

.....		
External Examiner	Signature	Date

DEDICATION

I dedicate this thesis to my girl friend Bizunesh Deresse and my younger brother Kassahun Mekete for nursing me with affection and love and their dedicated partnership in the success of my life.

Acknowledgments

The Author acknowledged the development agents of the study sites for their cooperation during data collection. Great appreciation goes to women who spared their precious time to respond to the lengthy questionnaire willingly, without their cooperation, this study could not have been completed. I'm very much indebted to my thesis supervisor, Dr. S.V Rao for his invaluable comments. I'm also grateful to members of OCSSC staffs particularly Mr. Dereje for their cooperation during the data collection. My heartfelt gratitude also goes to my g.friend Bizunesh Deresse, who is always with me in all aspects of encouragement throughout the writing of the thesis.

Last but not least my special gratitude goes to my friend Megose Desalegn for his kind cooperation and moral encouragement throughout the study period.

STATEMENT OF THE AUTHOR

First, I declare that this thesis is my bonfide work and that all sources of materials used for this thesis have been duly acknowledged. This thesis has been submitted in partial fulfillment of the requirement for M.A degree at Adama science and Technology University and is deposited at the university library to be made available to borrowers under rules of the library. I solemnly declare that this thesis is not submitted to any other institutions anywhere for the award of any academic degree, diploma, or certificate.

Name: Getachew Mekete

Place: Adama Science and Technology University

Adama

Date of submission.....

Signature.....

ABBREVIATIONS

DESCI	Debt, credit and saving institution
GTP	Growth and Transportation Plan
HH	Household
ILRI	International livestock research institution
IMF	International Monetary Fund
LPM	Linear probability model
MDGS	Millennium Development Goals
MFI	Micro finance institution
MLE	Maximum likelihood estimator
NGO	Non-governmental organization
OCSSC	Oromia credit and saving share company
ODA	Oromia development assosation
OLS	Ordinary least square
OSHO	Oromia self help organization
ROSCAS	Rotating and credit assosation
SME	Small and medium enterprises
TLU	Tropical livestock unit
UN s	United Nations

Abstract

The present study was carried out in Ada'a woreda in East Shoa district to identify the factors significantly influencing rural women's participation in microfinance. For the purpose of the study from the total kebeles seven kebeles were selected using random sampling method. For the selected kebeles separate list of beneficiaries of microfinance was prepared. The study was carried out on a sample of 72 members and 48 non – member's respondents, having representation of woreda's population on proportionate basis. The estimation results of the descriptive statistics and the logit model was fitted to identify significant variables influencing participation in microfinance. Respondent's level of education, off-farm income source, land holding, other source of credit, family size (adult equivalent) and income from farming emerged as the variables significant influencing participation decision in microfinance service. Probability of participation decision increased with increase in respondent's level of education and family size (adult equivalent). However, non-farm income, large landholding size and total livestock holding (TLU) had negative influence on participation decision in microfinance service.

TABLE OF CONTENTS

Contents	Pages
Committee signature.....	I
Dedication.....	II
Acknowledgments.....	II
Statement of the author.....	III
Abbreviation.....	IV
Abstract.....	V
 CHAPTER I: INTRODUCTION	
1.1 Back ground of the study.....	1
1.2 Statement of the problem.....	3
1.3 Objective of the study.....	5
1.3.1 General Objective.....	5
1.3.2 Specific Objectives.....	5
1.4 Research hypothesis.....	5
1.5 Significance of the study.....	5
1.6 Scope and Limitation of the study.....	5
 CHAPTER II REVIEW OF LITERATURE	
2.1. Definition and concepts of Microfinance.....	7
2.1.1. What Is Microfinance.....	7
2.1.2 Microfinance and microcredit.....	7
2.1.3 The History of Microfinance.....	7
2.2 Models of microfinance intervention.....	11
2.3. Microfinance and its impact in development.....	13
2.3.1 The impact of microfinance on poverty.....	15
2.3.2 Impacts of microfinance at a household level.....	16
2.4. Empowering Women.....	18
2.5 The Micro – finance Experience in Ethiopia.....	19
2.5.1 Empirical studies on determinants of access to credit	21

TABLE OF CONTENTS (continued)

Contents	pages
CHAPTER THREE III: DATA AND RESEARCH METHODOLOGY	
3.1 Description of the study Area.....	25
3.2 Location of Ada’a woreda in the Oromia region.....	26
3.3 Data source and type.....	28
3.3.1 Data Type.....	28
3.3.2 Sampling Technique and Data Collection.....	28
3.4 Specification of the logit model.....	29
3.5 Definition of dependent and independent variables for the logit.....	30
3.5.1 Dependent variable.....	30
3.5.2 Explanatory variables of the study.....	31
CHAPTER IV RESULTS AND DISCUSSIONS	
4.1 Demographic and socio economic characteristics of respondents.....	36
4.2 Econometric model outputs.....	36
4.2.1 Family size.....	37
4.2.2 Land holding.....	37
4.2.3 Respondent’s average annual income from off-farm activity.....	38
4.2.4 Any source of credit other than ocssc.....	38
4.2.5 Number of livestock in TLU.....	38
CHAPTER V SUMMARY, CONCLUSIONS AND RECOMMANDATION	
5.1 Summary and conclusions.....	40
5.2 Recommendations.....	41
Reference	43
Appendix	46

CHAPTER I INTRODUCTION

1.1 Back ground of the study

The disadvantaged position of women due to higher poverty incidence and unequal power relationships with men and the wider community has been a source of debate over the past several decades. In many parts of the world (for example sub-Saharan Africa and south Asia) women are the main farmers of producers. (World Bank et.al, 2009).

Yet, their roles are largely Unrecognized and women's access to and control over resources is limited. Thus, while accounting for at least 50 % of the population, women posses only 1 % of world resources (ACCION, 2009)

Gender asymmetries in access to and control over assets (Social, physical, financial, natural and human), access to markets, access to information and organization dictate power asymmetries and negotiating power between men and women. (Aslong and Heinsohn, 2005). This lack of resources would mean that within the household , women often have a lower" fall-back position" in the event of a breakdown of marriage and therefore they would be obliged to be subservient to and accommodate the interest of men in order to save the marriage from breaking down (Osmani , 1998) .

Indeed, without leverage or legal protections disempowered women are thus very vulnerable to abuse and exploitation. According to the united nations populations fund, around the world as many as one in every three women has been beaten or coerced in to sex or abused in some way - most often by someone she knows, including by her husband or another male family member (ACCION , 2009) . The exiting unjust structure also determines the future of the women (i.e the girl child) who are often viewed as having little prospect of leading a successful life and supporting parents in future. But micro finance advocates and has come to play a major role in many gender and development strategies because of its direct relationship to both poverty alleviation and to the empowerment of women.

The idea of attempting to reduce poverty and empower the poor through micro financing has generated enormous enthusiasm among donors and non- governmental organizations as an instrument for empowering the rural Poor in a way that is self- sustaining. (Armendant and Morduch 2005)

Credit is a necessary input in various aspects of farm operation, in most developing countries; lack of credit facilities has been regarded as the major constraint farmer's face when they try to improve their economic activities and/or living conditions (Binswager et al 1993; Agbor 2004; Olaoye and Odeblyi, 2011)

Even if, several initiatives over time have been taken by various governments to improve farmers' access to institutional credit significant share of poor and marginal sections of the rural community still remain excluded from the formal credit delivery mechanism (Satysai, 2008). In spite of considerable efforts to streamline, reinforce, expand and institutionalize the agricultural credit system, the achievements fall short of proclamations, policies and programs.

In this context, better understanding of the decision making processes of the rural women is urgently required to guide policy decisions regarding scaling up the microfinance movement. As the credit off-take depends on the willingness and ability of the person to avail loans, there is a crucial need to address the problems from demand side (Karmakar 2007). It is expected that such analyses would provide information pertaining to ways of overcoming challenges in credit accessibility. Few studies are available that have dealt with primary data from farm households in order to documents the nature of demand for credit, it's determinants and constraints in accessing credit in developing countries.(Mpuga 2008' Guirking and Boucher 2008; Balogun and Yusuf 2011; Olaoye et al 2012;Zhao and Zhang 2012). However, the results as reported from these studies may not be generalized to other, especially poor regions. Further, scant research attention has to be given on analyzing the factors that influence women's participation in MFIS.

Micro-finance program in Ethiopia is growing rapidly and receiving increased attention from the financial institutions, non-governmental organizations (NGOs) and the government as an instrument that can transform lives of the poor.

Micro -finance gives quick and tangible results to the poor people, especially women. Indeed one of the great virtues of microfinance is bringing the service nearer to where the clients, particularly, poor clients, reside as distance is one of the most important determinants of transaction costs. In rural area couple with supporting activities like training, raw material supply and women may become entrepreneurs generates additional income to the family. Poverty is reduced and development takes place and women get self-confidence to go for engage in enterprising activities with social and economic empowerment. Ethiopia's development planning has always aimed at reducing poverty, and removing inequalities in the process of development. Recognizing that women lag behind due to several socio-economic, cultural, political factors and the like. The current five year GTP plan gives due attention to women's welfare, female education and their access to resource and empowerment. (According to 2000 FDRE PCC)

The government of Ethiopia supports micro-finance institutions as one of the means of addressing the poorest segment of the society to reduce poverty. To this end the government created a conducive environment for the development of micro-finance institutions by issuing proclamation No 40/1996 (the micro – finance law).

1.2 Statement of the problem

Women constitute about 50 percent of the Ethiopia population and they involve in different sectors of the economy. Even though women are major producers in the agriculture sector they never obtain proportionate earnings. In the rural parts of the country women involve in a highly time consuming workloads like in Crop-production and animal husbandry almost equally with their male partners. In addition to these activities they engaged in activities such as food preparation, fetching water, child rearing and caring etc. Even if this is the reality due to cultural problems, un participatory policies and lack of awareness women continue to be burdened with heavy workloads. (According to 2000 FDRE PCC)

Women who constitute half of the population constitute the unemployed segment of the population are the most affected by poverty and they have not been exposed to the economic Opportunities that would enable them practice in an alternative income generating activities. These all conditions made the rural women more economically dependent on their husbands,

relatives and family. According to the world Banks gender statistics data base, women have a higher unemployment rate than men in virtually every country. In general, women also make up the majority of the lower paid (Lower educational status), and participating in unorganized informal sector of most economies. These statistics are used to justify giving priority and increasing women's access to financial services on the grounds that women are relatively more disadvantages than men. ([www.genderstats](http://www.genderstats.worldbank.org) .world bank.org)

In this paper, investigate on the determinants of women's credit program participation. The main goal of this study is to know the factors influencing women's decision to borrow from OCSSC try to explain what justify the lower preference for credit or the lower demand for credit from OCSSC.

In general, the motivation of this study at several levels Firstly, since the objective of microfinance is to allow the poor women and low income people to access credit, higher rate of participation ought to be observed but a contrast exist between expectation and the realization of the objective, leading to lower rate of credit participation. Second, at the academic level where, in contrast to the large volume of theoretical research on credit markets, the empirical literature is surprising scarce. This situation it partly due to the lack of reliable micro-level data on borrowing and lending in Ada'a worda.

Some authors give as explanation that the credit products don't meet the demand for credit by households Meyer (2002).

In my points of view, they don't take in to account the presence of social networks and the socio-cultural environment of potential borrowers (poor women's).

1.3 Objective of the study

1.3.1 General Objective

The main objectives of the study are to identify determinants influencing rural women to participate in micro finance in Ada'a woreda.

1.3.2 Specific Objectives

- I. To identify and analyze the major determinants of women's participation in micro finance
- II. To identify the socio-economic characteristics of the women participating in micro-finance.
- III. To test if the number and type of women's assets and liabilities of the participants and non-participants determines women's participation in microfinance.

1.4 Research hypothesis

In order to achieve the research objective the following hypothesis are desired. Factors affecting women's participation in MFIS (OCSSC) are hypothesized based on practical experience.

- I. Age of women's/respondents, women's/respondents level of education, size of respondents land holding and decision making of women's in household on large cases will have a positive effect in increasing degree of participation in OCSSC.
- II. Women's/respondents average annual household income from farming, women's/respondents average annual household income from off-farm activity, loan from sources other than OCSSC and the size of total livestock holding will have a negative effect in increasing degree of participation in OCSSC.

1.5 Significance of the study

As explained earlier, targeting credit to the poor women is one of the several instruments of alleviating poverty. For these institutions to outreach the poorest women, they should know factors from the demand side that influence their participation.

Finally, this study help the policy makers in the reformulation of credit policies and microfinance managers will know key variables influencing the demand for loan by poor women and those explaining observed preference.

1.6 Scope and Limitation of the study

The study was undertaken in one of the 354 branches of OCSSC. Ada'a woreda is one of the districts found in the region (www.mixmarket.org/mfi/ocssc) There is also the problem of getting reliable information from respondents. Due to small sample available for the study, results may not be generalized beyond the specific population from which the sample was drawn.

CHAPTER II REVIEW OF LITERATURE

2.1. Definition and concepts of microfinance

2.1.1 What Is Microfinance?

Microfinance, according to Otero (1999, p.8) is “the provision of financial services to low-income poor and very poor self-employed people”. These financial services according to Ledgerwood (1999) generally include savings and credit but can also include other financial services such as insurance and payment services. Schreiner and Colombet (2001, p.339) define microfinance as “the attempt to improve access to small deposits and small loans for poor households neglected by banks.” Therefore, microfinance involves the provision of financial services such as savings, loans and insurance to poor people living in both urban and rural settings who are unable to obtain such services from the formal financial sector.

2.1.2 Microfinance and microcredit.

In the literature, the terms microcredit and microfinance are often used interchangeably, but it is important to highlight the difference between them because both terms are often confused. Sinha (1998, p.2) states “microcredit refers to small loans, whereas microfinance is appropriate where NGOs and MFIS supplement the loans with other financial services (savings, insurance, etc)”. Therefore microcredit is a component of microfinance in that it involves providing credit to the poor, but microfinance also involves additional non-credit financial services such as savings, insurance, pensions and payment services Okiocredit (2005).

2.1.3 The History of Microfinance

Microcredit and microfinance are relatively new terms in the field of development, first coming to prominence in the 1970s, according to Robinson (2001) and Otero (1999). Prior to then, from the 1950s through to the 1970s, the provision of financial services by donors or governments was mainly in the form of subsidized rural credit program. These often resulted in high loan defaults, high lose and an inability to reach poor rural households Robinson (2001).

Robinson states that the 1980s represented a turning point in the history of microfinance in that MFIs such as Grameen Bank and BRI2 began to show that they could provide small loans and savings services profitably on a large scale. They received no continuing subsidies, were commercially funded and fully sustainable, and could attain wide outreach to clients Robinson (2001). It was also at this time that the term “microcredit” came to prominence in development (MIX3, 2005). The difference between microcredit and the subsidized rural credit programmes of the 1950s and 1960s was that microcredit insisted on repayment, on charging interest rates that covered the cost of credit delivery and by focusing on clients who were dependent on the informal sector for credit (ibid.). It was now clear for the first time that microcredit could provide large-scale outreach profitably.

The 1990s “saw accelerated growth in the number of microfinance institutions created and an increased emphasis on reaching scale” (Robinson, 2001, p.54). Dichter (1999, p.12) refers to the 1990s as “the microfinance decade”.

Microfinance had now turned into an industry according to Robinson (2001).

The importance of microfinance in the field of development was reinforced with the launch of the Microcredit Summit in 1997. The Summit aims to reach 175 million of the world’s poorest families, especially the women of those families, with credit for the self-employed and other financial and business services, by the end of 2015 (Microcredit Summit, 2005). More recently, the UN, as previously stated, declared 2005 as the International Year of Microcredit.

By the end of the 20th century, the phrase “micro credit” was well recognized in many developing as well as developed countries. Micro credit is the most sensational anti-poverty tool for the poorest, especially for women (Micro-credit summit 1997). The formal institutions failed to provide credit to needy poor due to lack of collateral. Due to limited access of poor to the institutional credit, the impact of credit on small farmers has been much below the expectations of policy makers (Qureshi, 1996). The lack of credit opportunities kept the poor in a vicious circle of poverty. The availability of microfinance seems imperative because financial markets were prone to neglect the needs of the rural poor, simply due to the existing criteria of financial worthiness requiring contacts, collateral and accessibility (kashf, 1996). Micro finance

institutions attempted to overcome these barriers through innovative measures such as group lending and regular savings schemes, as well as the establishment of close links between poor clients and staff of the institutions concerned (Montgomery, 2005).

During 1990s, micro credit sector remained busy in providing borrowing opportunities to households constrained by the formal financial institutions (Black and Morgan 1999, Lindsey 1995, 1996, 1997; Yellen, 1996). At the same time, other financial developments lowered the costs of producing credit and encouraged lenders to take on more borrowers that were marginal and offered more credit. However the proportion of households that were constrained did not change over time. (Fissel and Jappelli, 1990; Zeldes, 1989). Atieno, 2001; Fredric, 2004 contradict the above situation and argued that credit was accessible at market determined rates sustainable finance institutions offer credit not only for agricultural production, but also for consumption smoothing and income diversification. The informal credit sources provide easier access to their credit facilities for small and micro enterprise and households. However, every potential borrower faced a credit limit because of asymmetries of information between borrowers and lenders and the imperfect enforcement of loan contracts. At the national level, access to bank credit was positively and significantly influenced by age, being male, household size, education level, household per capita expenditure (kavanamur, 1994; Okurut, 2004, 2006; Diagne and Zeller, 2000 and 2001). The ability to borrow will also alleviate the need for accumulation of assets that mainly serve as precautionary savings, yielding poor or negative returns (Deaton, 1991). Access to credit can significantly increase the ability of poor household with no or little savings to acquire needed agricultural inputs. Access to credit also reduces the opportunity costs of capital intensive assets relative to family labor, thus encouraging labor-saving technologies and raising labor productivity, a crucial factor for development, especially in many African countries (Delgado, 1995; Zeller, et al. 1997). A non-participating household that having access to credit will still be beneficial on the grounds of awareness that increased its ability to put up with risk, as it can be encouraged to experiment with riskier, but potentially high-yielding technology (Eswaran and Kotwal, 1990).

However, the impact of access to credit on household welfare outcomes did not support the idea that improving access to micro credit was always a potential means for alleviation poverty (Diagne, 2001). Small landholder farmers were too poor to benefit from and this kind of credit, and that, even if they had access to adequate credit and inputs, their land constraints were so severe that any increase in productivity would fall short of guaranteeing their food security (Fredrick, 2004). The increased access to credit could be an important tool for arresting current market failures faced by poor rural households to the extent that once liquidity constraints were relaxed households could hire extra labor to enhance their productivity (Simtowe, 2006).

To understand the mechanism underlying access to credit, two important aspects of rural credit markets were kept in mind. First, money lenders and other informal lenders coexist with formal lending institutions, such as government or commercial banks, and more recently, micro-lending institution; Second, potential borrowers presumably face considerable transaction costs obtaining external credit. The limited ability of banks to enforce contracts, more than transaction costs, was crucial in understanding the observed diversity of lender (Gine, 2002).

There were two different steps in the mechanism involved in credit program participation. First, people willing to borrow fix on their required amounts to apply for, from a particular agency/lender at the existing rate of interest, making demand side. In the next step lender decides to whom he had to fund and how much? It was the supply side. The access to formal and informal loan was determined by the interaction between supply and demand for loan. The access to formal credit sector was constrained due to the institutional limitations. The formal sector specialized in lending for production purpose where as the informal sector's lending was varied. The formal lenders adopt severe collateral pre requisites to minimize evasion, thus separating poor from the process. Reputation, the dependency ratio of households, and the amount of credit applied for by the household were identified as the determinants of credit rationing by the bank. The low level of returns, asset growth and limited formal lending for consumption smoothening, make the poor household unattractive and render a high-risk contour for formal lenders. So they move to the informal credit maker to meet their credit demands (Duong et al, 2002; pal, 2002; Barslund and Trap, 2007). Credit participation could model using socio-economic characteristic of households. It was possible that most who seek credit would be able to obtain it, but costs and conditions may be prohibitive for some high risk borrowers

(Atieno, 2001; Okurut et al, 2004). Household borrowing was determined in the long run by real spending, gross wealth and the repayment term for outstanding credits, which had a positive influence, and these were inversely related to the cost of loans and the unemployment rate.

Development in the short run was influenced by changes in long-term interest rates and in employment (Nieto, 2007). Younger households faced faster expected income growth and hence would like to borrow more than older households (Lehnert, 2004). Current trends in household credit markets largely reflected an equilibrium phenomenon, in which household credit was increased rapidly from extremely low initial levels, in the context of a relaxation of liquidity constraints. The rate of growth of credit responded to changing market conditions on the supply side and to good prospects for income growth. In such an environment, loosening credit market conditions could have considerable effects on consumption, which, in some cases may create macroeconomic imbalances, both in terms of current account deficits and inflationary pressures (Coricelli, 2006).

2.2 Models of microfinance intervention

It is clear that a wide variety of implementation methods are employed by different MFIs. The Grameen Bank (2000a) has identified fourteen different microfinance models for example Rotating, Savings and Credit Association (ROSCAs), the Grameen Bank and the Village Banking models.

I. Rotating Savings and Credit Associations

These are formed when a group of people come together to make regular cyclical contributions to a common fund, which is then given as a lump sum to one member of the group in each cycle (Grameen Bank, 2000a). According to Harper (2002), this model is a very common form of savings and credit. He states that the members of the group are usually neighbors and friends, and the group provides an opportunity for social interaction and is very popular with women. They are also called merry-grounds or Self-Help Groups (Fisher and Sriram, 2002).

II. The Grameen Solidarity Group model

This model is based on group peer pressure whereby loans are made to individuals in groups of four to seven (Berenbach and Guzman, 1994). Group members collectively guarantee loan repayment, and access to subsequent loans is dependent on successful repayment by all group members. Payments are usually made weekly (Ledgerwood, 1999). According to Berenbach and Guzman (1994), solidarity groups have proved effective in deterring defaults as evidenced by loan repayment rates attained by organizations such as the Grameen Bank, who use this type of microfinance model.

III. Village Banking Model

Village banks are community-managed credit and savings associations established by NGOs to provide access to financial services, build community self-help groups, and help members accumulate savings (Holt, 1994). They have been in existence since the mid-1980s. They usually have 25 to 50 members who are low-income individuals seeking to improve their lives through self-employment activities. These members run the bank, elect their own officers, establish their own by-laws, distribute loans to individuals and collect payments and services (Grameen Bank, 2000a). The loans are backed by moral collateral; the promise that the group stands behind each loan (Global Development Research Centre, 2005).

The sponsoring MFI lends loan capital to the village bank, who in turn lend to the members. All members sign a loan agreement with the village bank to offer a collective guarantee. Members are usually requested to save twenty percent of the loan amount per cycle (Ledgerwood, 1999). Members' savings are tied to loan amounts and are used to finance new loans or collective income generating activities and so they stay within the village bank. No interest is paid on savings but members receive a share of profits from the village bank's re-lending activities. Many village banks target women predominantly, as according to Holt (1994, p.158) "the model anticipates that female participation in village banks will enhance social status and intra household bargaining power".

2.3. Microfinance and its impact in development

Microfinance has a very important role to play in development according to proponents of microfinance.

UNCDF (2004) states that studies have shown that microfinance plays three key roles in development.

It:

- I. helps very poor households meet basic needs and protects against risks,
- II. is associated with improvements in household economic welfare,
- III. Helps to empower women by supporting women's economic participation and so promotes gender equality.

Otero (1999, p.10) illustrates the various ways in which “microfinance, at its core combats poverty” She states that microfinance creates access to productive capital for the poor, which together with human capital, addressed through education and training, and social capital, achieved through local organization building, enables people to move out of poverty (1999). By providing material capital to a poor person, their sense of dignity is strengthened and this can help to empower the person to participate in the economy and society (Otero, 1999).

The aim of microfinance according to Otero (1999) is not just about providing capital to the poor to combat poverty on an individual level, it also has a role at an institutional level. It seeks to create institutions that deliver financial services to the poor, who are continuously ignored by the formal banking sector. Littlefield and Rosenberg (2004) ,state that the poor are generally excluded from the financial services sector of the economy so MFIs have emerged to address this market failure. By addressing this gap in the market in a financially sustainable manner, MFI can become part of the formal financial system of a country and so can access capital markets to fund their lending portfolios, allowing them to dramatically increase the number of poor people they can reach (Otero, 1999).

More recently, commentators such as Littlefield, Murdugh and Hashemi (2003), Simanowitz and Brody (2004) and the IMF (2005) have commented on the critical role of microfinance in achieving the Millennium Development Goals. Simanowitz and Brody (2004, p.1) state, “Microfinance is a key strategy in reaching the MDGs and in building global financial systems that meet the needs of the most poor people.” Littlefield, Murdugh and Hashemi (2003) state “microfinance is a critical contextual factor with strong impact on the achievements of the MDGs...microfinance is unique among development interventions: it can deliver social benefits on an ongoing, permanent basis and on a large scale”.

Referring to various case studies, they show how microfinance has played a role in eradicating poverty, promoting education, improving health and empowering women (Littlefield, Murdugh and Hashemi ,2003).

However, not all commentators are as enthusiastic about the role of microfinance in development and it is important to realize that microfinance is not a silver bullet when it comes to fighting poverty. Hulme and Mosley (1996), while acknowledging the role microfinance can have in helping to reduce poverty, Concluded from their research on microfinance that “most contemporary schemes are less effective than they might be” (1996, p.134). They state that microfinance is not the end for poverty-alleviation and that in some cases the poorest people have been made worse-off by microfinance. Rogaly (1996,p.109/110) finds five major faults with MFIs. He argues that:

- I. they encourage a single-sector approach to the allocation of resources to fight poverty,
- II. microcredit is irrelevant to the poorest people,
- III. an over-simplistic notion of poverty is used,
- IV. there is an over-emphasis on scale,
- V. There is inadequate learning and change taking place.

Wright (2000,p.6) states that much of the skepticism of MFIs stems from the argument that microfinance projects “fail to reach the poorest, generally have a limited effect on income...drive women into greater dependence on their husbands and fail to provide additional services desperately needed by the poor”. In addition, Wright says that many development practitioners

not only find microfinance Inadequate but that it actually diverts funding from “more pressing or important interventions” such as health and education (2000, p.6). As argued by Navajas et al (2000), there is a danger that microfinance may siphon funds from other projects that might help the poor more. They state that governments and donors should know whether the poor gain more from microfinance, than from more health care or food aid for example. Therefore, there is a need for all involved in microfinance and development to ascertain what exactly has been the impact of microfinance in combating poverty.

Considerable debate remains about the effectiveness of microfinance as a tool for directly reducing poverty, and about the characteristics of the people it benefits (Chowdhury, Mosley and Simanowitz, 2004). Sinha (1998) argues that it is notoriously difficult to measure the impact of microfinance programmes on poverty. This is so she argues, because money is fungible and therefore it is difficult to isolate credit impact, but also because the definition of ‘poverty’, how it is measured and who constitute the ‘poor’ “are fiercely contested issues” (1998, p.3). Poverty is a complex issue and is difficult to define, as there are various dimensions to poverty. For some, such as World Bank, poverty relates to income, and poverty measures are based on the percentage of people living below a fixed amount of money, such as US\$1 dollar a day (World Bank, 2003)

2.3.1 The impact of microfinance on poverty

There is a certain amount of debate about whether impact assessment of microfinance projects is necessary or not according to Simanowitz (2001b). The argument is that if the market can provide adequate proxies for impact, showing that clients are happy to pay for a service, assessments are a waste of resources (ibid.). However, this is too simplistic a rationale as market proxies mask the range of client responses and benefits to the MFI (ibid.) Therefore, impact assessment of microfinance interventions is necessary, not just to demonstrate to donors that their interventions are having a positive impact, but to allow for learning within MFIs so that they can improve their services and the impact of their projects (Simanowitz, 2001b, p.11).

Poverty is more than just a lack of income. Wright (1999) highlights the shortcomings of focusing solely on increased income as a measure of the impact of microfinance on poverty. He states that there is significant difference between increasing income and reducing poverty (1999).

He argues that by increasing the income of the poor, MFIs are not necessarily reducing poverty. It depends what the poor do with this money, oftentimes it is gambled away or spent on alcohol (1999), so focusing solely on increasing incomes is not enough. The focus needs to be on helping the poor to “sustain a specified level of well-being” (Wright, 1999, p.40) by offering them a variety of financial services tailored to their needs so that their net wealth and income security can be improved.

2.3.2 Impacts of microfinance at a household level

Health and education are two key areas of non-financial impact of microfinance at a household level.

Wright (2000, p.31) states that from the little research that has been conducted on the impact of microfinance interventions on health and education, nutritional indicators seem to improve where MFIs have been working. Research on the Grameen Bank shows that members are statistically more likely to use contraceptives than non-members thereby impacting on family size (ibid.). Littlefield, Murdoch and Hashemi (2003, p.3) also acknowledge the sparse specific evidence of the impact of microfinance on health but where studies have been conducted they conclude, “households of microfinance clients appear to have better nutrition, health practices and health education than comparable non-client households”.

Microfinance interventions have also been shown to have a positive impact on the education of clients’ children. Littlefield, Murdoch and Hashemi (2003, p.4) state that one of the first things that poor people do with new income from microenterprise activities is to invest in their children’s education.

Robinson (2001) in a study of 16 different MFIs from all over the world shows that having access to microfinance services has led to an enhancement in the quality of life of clients, an increase in their self-confidence, and has helped them to diversify their livelihood security strategies and thereby increase their income.

Following a three-year study of 906 clients, ASA17 MFI working with 60,000 rural women in Tamil Nadu, India, found that their project had many positive impacts on their clients (Nojonen,

2005). The programme was having a “positive impact on livelihoods, social status, treatment in the home and community, living conditions and consumption standards” (2005, p.202). Compared with new members, some of the findings showed that long-term members were more likely to live in tile roofed and concrete houses, to have a higher percentage of their children in school, to have lower incidence of child labour, to be the largest income provider or joint provider in the home, and to make decisions on their own as regards major purchases (Noponen, 2005). Clients also reflected significant increases in ownership of livelihood assets such as livestock, equipment and land (ibid.).

In 2002 a microfinance networking organization in Bolivia, carried out impact assessments on eight of its partner MFIs focusing on economic and social impacts at an individual, household and community level on both clients and non-clients (Marconi and Mosley, 2004). Many of the impacts on income were positive for the less poor and negative for the poorer clients, a trend that we have already seen. Marconi and Mosley (2004) state that this should not be surprising as poorer clients are more risk adverse and less likely to invest in fixed capital and so are more vulnerable to having to sell productive assets in the event of a shock. However, it was found that social networks played an important part in helping clients escape from poverty. Access to social networks provided clients with defiance against having to sell physical and human assets and so protected household assets (ibid.).

2.4. Empowering Women

A key objective of many microfinance interventions is to empower women. Mosedale (2003, p.1) states that if we want to see people empowered it means we currently see them as being disempowered, disadvantaged by the way power relationship their choices, opportunities and well-being. She states that empowerment cannot be best owed by a third party but must be claimed by those seeking empowerment through an ongoing process of reflection, analysis and action (2003).

Kabeer, quoted in Mosedale (2003, p.2) states that women need empowerment as they are constrained by “the norms, beliefs, customs and values through which societies differentiate between women and men”. She also states that empowerment refers to the “process by which those who have been denied the ability to make strategic life choices acquire such an ability”, where strategic choices are “critical for people to live the lives they want (such as choice of livelihood, whether and who to marry, whether to have children, etc)” (Kabeer, 1999, p.437). Therefore MFIs cannot empower women directly but can help them through training and awareness-raising to challenge the existing norms, cultures and values which place them at a disadvantage in relation to men, and to help them have greater control over resources and their lives.

Littlefield, Murdugh and Hashemi (2003, p.4) state that access to MFIs can empower women to become more confident, more assertive, more likely to take part in family and community decisions and better able to confront gender inequities. However, they also state that just because women are clients of MFIs does not mean they will automatically become empowered. Hulme and Mosley (1996, p.128) also make this point when they refer to the “naivety of the belief that every loan made to a woman contributes to the strengthening of the economic and social position of women”. However, with careful planning and design women’s position in the household and community can indeed be improved.

According to Littlefield, Murdugh and Hashemi (2003), the Women’s Empowerment Program in Nepal found that 68% of its members were making decisions on buying and selling property,

sending their daughters to school and planning their family, all decisions that in the past were made by husbands.

They refer to studies in Ghana and Bolivia, which indicated that women involved in microfinance projects, had increased self-confidence and had an improved status in the community (ibid.).

Hulme and Mosley (1996) state that microfinance projects can reduce the isolation of women as when they come together in groups they have an opportunity to share information and discuss ideas and develop a bond that wasn't there previously. From studies of the Grameen Bank and BRAC they show that clients of these programmes suffered from significantly fewer beatings from their husbands than they did before they joined the MFI (ibid.). However, in a separate study of a BRAC project Chowdhury and Bhuiya (2004, p.383) found that violence against women actually increased when women joined the programme, as not all men were ready to accept the change in power relations, and so resorted to violence to express their anger. This violence did decrease over time. The study found that when the violence did rise, the members, because of their increased awareness, reported back to the group on their martial life and got support from the group (ibid.).

2.5 The Micro – finance Experience in Ethiopia

The time since which formal micro-finance services are provided is not long. On the other hand, the growth of micro-finance has been remarkable in the past some years. Accordingly, several studies show that the MFI industry is contributing to the improvement of the living standards of the poor.

Because of access to credit, women are encouraged to take economic and entrepreneurial risks at 30 percent higher than men (Meehan, 2001). In the same study the author indicated 60 clients (94 %) reported a significant increase in income as a result of access to credit although the income of some of the clients has dropped after a certain period of time. Also, the author indicated that access to micro-finance has contributed to greater usage on basic household food, increase in asset and smoothening consumption in the client's households. A Study conducted on the

dedebit, credit and saving institution (DECSI) found that DECSI program has had a positive impact on the livelihood of its clients. Compared to non-clients, clients have experienced greater improvement on their living standards. This situation has improved in terms of income, consumption and assets. They also seem to be more food secure and less vulnerable to shocks and have greater diversification in terms of income sources. The study found that the improvement in economic condition of the clients is necessary condition for DECSI's program that could lead to social and political empowerment for the marginalized groups. The study also concluded the economic empowerment leads to social and political empowerment.

The other study was conducted on OMO and SIDAMA micro-finance institution's Women clients in AWASSA town, southern nations and nationalities people's regional state. According to this study, a majority of the clients are involved in the making and trading of food and non-food related products. The study also witnessed there is no diversification in and related items. Trade involves less risk compared to other activities. The study further found that 92 % of them are not very much aware the savings are more important than credit to build their future. The study argued that there is a good influence of micro credit on the urban women working groups in terms of income and self employment generation. Furthermore, it also reflected in many cases in business improvements, decision making processes and asset formation at low levels, and it is believed not sufficient (PAdma and getachew , 2004)

As stated by Wolday (2002), not only the rural poor are excluded from the formal financial system, also small and medium enterprises (SME) lack access to financial services, due to the fact that formal banks are either unwilling or unable to serve SME. These banks face high risk and transaction costs, difficulties in enforcing contracts, and penalization by the central bank (NBE) for lending to enterprises that lack traditional collateral. They also lack reliable information on borrowers, appropriate information systems and instruments for managing risk. Empirical data in Ethiopia in the Amhara region, suggest that in 56 Woredas of the region in 2003, male-headed households have had higher access to use credit than female-headed households. The survey result shows that from all male respondents about 47.1 percent have got credit while from the total female respondents only 38.7 percent of the households have got

credit. It indicates that the female-headed households, who are relatively more vulnerable segment of the society, have less access to credit (BRD, 2003).

2.5.1 Empirical studies on determinants of access to credit

A number of factors explain why certain borrowers prefer to use credit. Factors related to the participation of credit users in the credits market were therefore investigated. Such factors can be divided into borrowers characteristics, and the loan terms and conditions imposed by lenders (Kashuliza and Kydd, 1996; Zeller, 1994). Schmidt and kropp (1987) revealed that the type of financial institution and its policy will often determine the access. Where credit duration, terms of payment, required security and the provisions of supplementary services do not fit the needs of the target group, potential borrowers will not apply for credit even where it exists and when they do, they will be denied access. In addition, Bigsten et al. (2003), and fliesig (1995), stated that in developing countries asymmetric information, high risks, lack of collateral, lender-borrower distance, small and frequent credit transactions of rural households make real costs of borrowing vary among different sources of credit.

A study by Atieno (2001), indicates that income level, distance to credit sources, past credit participation and assets owned were significant variables that explain the participation in formal credit markets. Hussien (2007), also indicated that farm households are more likely to prefer the informal sector to the formal sector with respect to flexibility in rescheduling loan repayments in times of unexpected income shocks. This was also supported by padmanabhan (1996), comparing the informal credit sector from the formal stated that proximity, comfortable atmosphere, quick credit, all times access, freedom of deployment, repayment flexibility and lower transaction costs are the advantages of the informal sector have made them almost indispensable, particularly to small farmers.

According to Hossain (1988), the Grameen Bank experience shows that most of the conditions imposed by formal credit institutions like collateral requirements should not actually stand in the way of smallholders and the poor in obtaining credit. The poor can use the loans and repay if effective procedures for disbursement, supervision and repayment have been established.

On the other hand, Getaneh (2005a), stated that group lending approach effectively ration out some groups of farm households (The poorest of the poor). That is co borrowers tend to self select themselves into a group of homogenous members that effectively discriminates against some others to reduce risk of carrying the burden of repayment incase of defaults of co-borrowers.

Access to formal credit can also be affected by household characteristics. As stated by Hussien (2007), the probability of choosing the formal credit sector was positively affected by gender, educational level, household labor and farm size. He further explained that education, credit information and extension visit are more likely to increase the information base and decision making abilities of the farm households including the ability to compare pros and cons of choosing appropriate credit and production technology.

In another study, based on the data from a sample survey of 699 randomly selected peasant farmers in Bolivia, Miller and Landman (1983), applied discriminate analysis to identify a set of socio-economic, physical and psychological factors that influence credit use among small farmers with a view to differentiate between borrowers, potential borrowers, and non-borrowers. The results of the study indicated that borrowers were characterized by higher resource base, farm size, higher level of education, large number of cattle, higher household incomes, higher level of market integration greater use of improved technology, larger operating costs and investments, higher risk ability, etc. potential borrowers were characterized by further distance from markets, low level of market integration, higher transaction costs, less number of cattle, etc. furthermore, non-potential borrowers were characterized by lack of interest to expand production, lower level of education, limited use of improved technology, shortage of labor and proximity to market.

Physical distance of farm households from formal lending institutions is one of the factors that influence access to formal credit. According to Hussien (2007), farm households are discouraged to borrow from credit sector if it is located farther. This is because both temporal and monetary costs of transaction, especially transportation cost, increase with lender borrower distance which raises the effective cost of borrowing at otherwise relatively lower interest rate in the sector.

A study in Egypt by Mohieldin and Write (2000), employing a probit model analysis of the formal credit sector shows the impact of the explanatory variables on the outcome of whether a person has a loan. Both the requirements of the individual (demand side) and of the lending institution (supply side) determined whether a loan is extant. The results of the study indicated that educational level, ownership of land, total assets, and sizes of the household were significant factors.

Assefa (1989) empirically tested a set of socio-economic and other important factors influencing agricultural credit use among small farmers aimed at differentiating borrowers from non-borrowers. Using discriminate analysis, Assefa found that large farm size, high investment, adoption of improved technology were significant variables in distinguishing borrowers from non-borrowers.

Hussien (2007), in his study also found out that the use of extension package, in effect, requires adequate labor supply, thus a positive effect of household labor on the choice of formal credit for the farm input. The choice of the formal sector increases with the number of productive members of the farm households. It was also indicted that the low level of education of the farm households has contributed for limited use of formal sector credit by farm households. Men tend to borrow more from the formal and semiformal sources than women do. That is being a female reduces the likelihood of borrowing from the formal and semiformal credit sectors where it increases the probability of borrowing from the informal credit sources.

Hence, based on the above explanations and the author's knowledge of the credit schemes of the study area the following conceptual framework depicted the most important variables expected to influence women's access to formal credit in the study area.

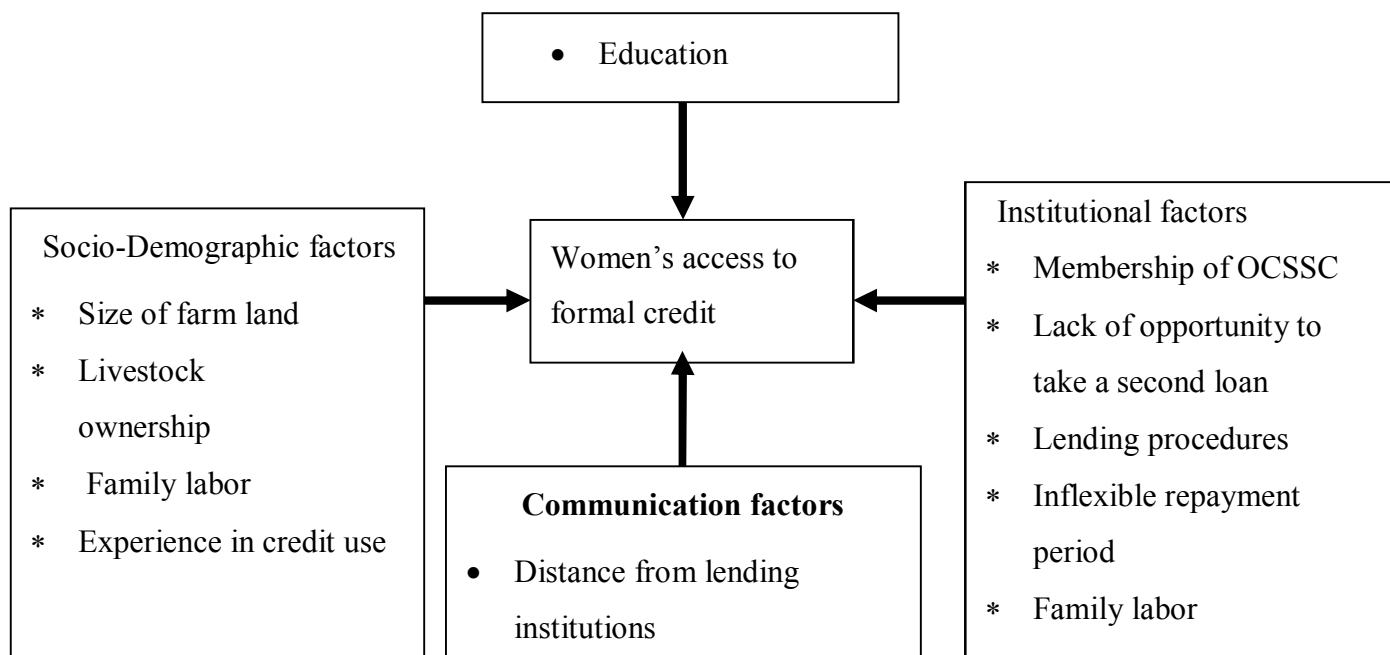


Fig. 1

Source : Sisay Yehuala (2008)

CHAPTER III DATA AND RESEARCH METHODOLOGY

3.1 Description of Area

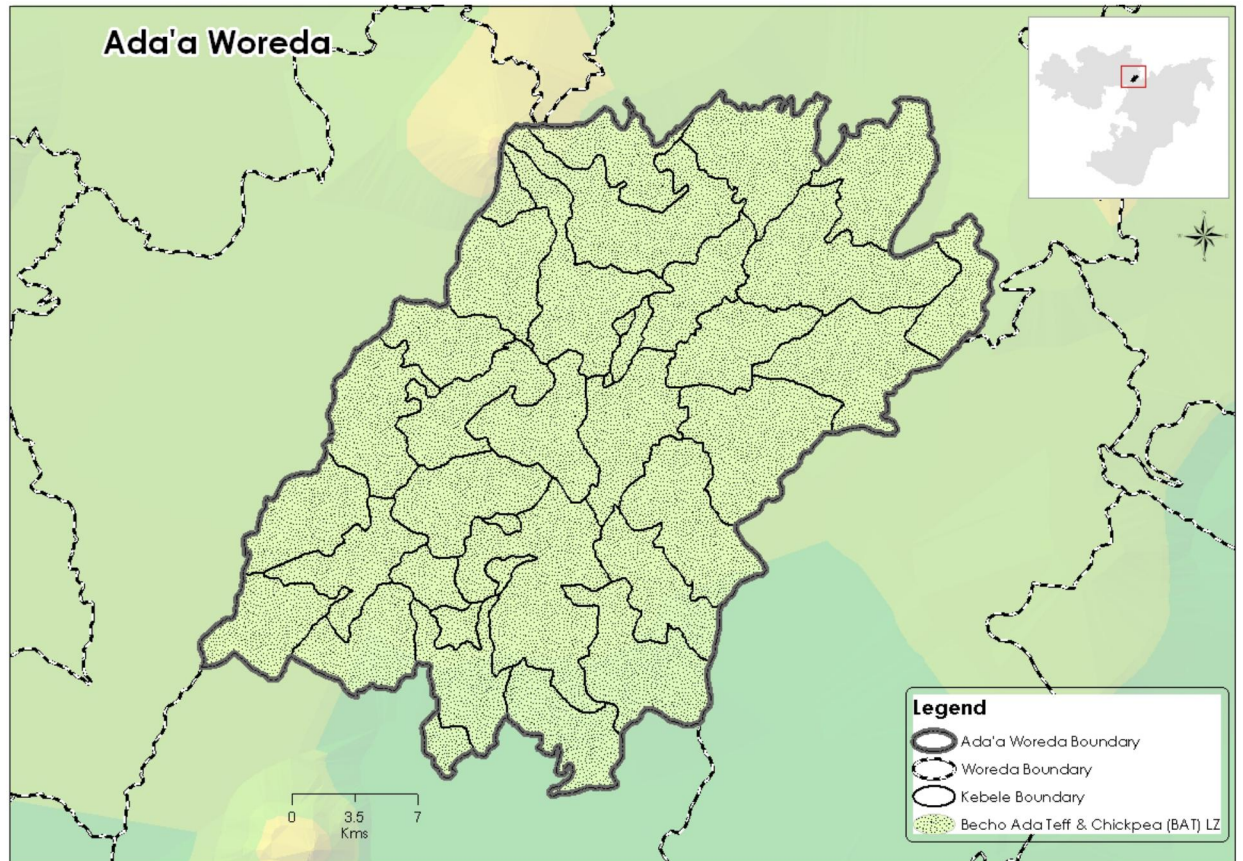
Ada'a is one of the woreda in the oromia region of Ethiopia. Ada'a is bordered on the south by Dugda Bora, on the west by the west shewa zone, on the northwest by Akaki, on the northeast by Gimbichu, and on the east by lome.

Altitudes in this woreda range from 1500 to over 2000 meters above sea level, 37km from Addis Ababa. A survey of the land in this woreda shows that 51% is arable or cultivable, 6.4% pasture, 7.4% in community, regional and natural forests, and the remaining 34.8% is considered as degraded or otherwise unusable. Ada'a produces the most test, wheat and legumes in shewa.

The long term (1953 – 2003) average rainfall recorded by ILRI Debrezeit and EARO Debrezeit research stations was found to be 839mm. Mean minimum and maximum temperatures recorded for 27 years ranged from 7.9 C⁰ to 28C⁰ respectively (www.mixmarket.org/mfi/ocsse).

3.2 Location of Ada'a woreda in the Oromia region

Figure 2



Population

The 2007 national census reported a total population for this woreda 130,321 of whom 67,869 were men and 62,452 were women and means 52.078% men and 47.92% are women's. The majority of the inhabitants said they practiced Ethiopia orthodox Christianity, with 89.15% of the population reporting they observed this belief, while 5.53% of the population practiced traditional beliefs and 4.7% of the population were protestant.

Farming system and land use (in east shewa zone)

Becho – Ada’a teff and chickpea (BAT) is a food secure livelihood zone that generally does not receive food aid except in the case of rarely occurring flooding or other hazards during the peak of the rainy season. East shewa zone is categorized as mixed farming and the main economic activities are crop production and livestock production.

It has dominantly mid land or woindega agro ecology characteristic with a few highland areas. A number of business towns Bishoftu, Sebeta, Alemgena, Akaki and Bacho are found in the zone. All wealth groups cultivate teff, wheat and chickpeas.

The significant annual incomes for all wealth come from own crop sale, including the sale of teff, wheat and self employment. All households earn income from brewing and selling ‘Tela’. All wealth groups purchase the staple food maize and sorghum just before the main harvest. The market access is relatively good. Main crops sold in the zone are teff, chickpea and wheat, goats, cattle and chicken and animal products are sold. In bad years households cope by increasing the sale of animals. Other coping strategies include switching expenditure from household items, such as clothes and ‘other’ expenditure to staple foods.

Rural finance

Oromia credit and saving Share Company (OCSSC) is a company that was established before 17 years to support implementation of poverty alleviation policies and strategies formulated by the government.

In 1997, the company was established by five share holders namely, oromia national regional state, oromia development association (ODA), oromia self help organization (OSHO), Dinsho plc and one natural person.

OCSSC has highly been devoting its effort to providing need based micro financial services to strengthen the economic base of the low- income rural and urban people in oromia through increased access to sustainable and cost efficient financial services (OCSSC news letter, 2012).

OCSSC becomes one of the largest microfinance institutions in Ethiopia in its accessibility, outreach expansion, product diversity and service delivery system. Its branch network has been rising since its establishment and currently the company has 294 branches across oromia (OCSSC, News letter, 2014).

3.3 Data source and type

For the purpose of achieving the Objectives of the research both primary and secondary data were used. Mainly the primary data was gathered by a means of a structured questioner that was responded by OCSSC clients and non – clients in rural kebeles of Adaa woreda . In addition, separate interviews were conducted with officials and experts of OCSSC. Discussions also held with female client, male partners, families, relatives and local money lenders whether those OCSSC women clients are empowered economically or not. In addition the study also augmented by secondary data obtained from various sources books, occasional papers, journals, reporters, official statistical abstract, bulletins , websites and researches undertaken in the area. The primary data was collected with the pre-tested and well structured questionnaire schedule.

3.3.1 Data Type

Both quantitative and qualitative data were collected. The quantitative analysis of the survey data in the present study were complemented by qualitative data that was gathered from focused group sessions, selected interviews with who have case histories and other relevant data.

3.3.2 Sampling Technique and Data Collection

Ada'a woreda has 27 kebeles. For the purpose of the study from the total kebeles, 7 kebeles were selected using random sampling method. For the selected kebeles, separate list of beneficiaries of microfinance was prepared. Total sample size was 120 and of which 72 were beneficiaries and the rest were not beneficiaries. It was selected using probability proportional to sample size. Its proportionality is 0.6 to 0.4. Structured interview schedule was used to collect data from primary source which mainly comprised to target households, microfinance service providers and key informants followed by review of the available secondary data sources.

3.4 Specification of the Logit Model

Descriptive statistics tools such as mean, standard deviation and percentages was used to analyze the quantitative data that were collected from primary sources. Independent test was used to test mean difference among continues variables, and Pearson's X² (Chi-square) test for categorical and dummy variables of interest.

There are several methods to analyze the data involving binary outcomes. However, for this particular study, logit was selected over discriminate and linear probability models. If the independent variables are normally distributed the discriminate – analysis estimator which follows ordinary least square procedures (OLS) is the maximum likelihood estimator (MLE) and therefore asymptotically more efficient than the logit model which requires maximum Likelihood method. However, if the independent variables are not normal the discriminate analysis estimator is not consistent, where as the logit MLE is consistent and therefore more robust (Maddala, 1983; Amemiya, 1981).

The linear probability model (LPM) which is expressed as a linear function of the explanatory variables is computationally simple. However, despite its computational simplicity, as indorsed by pindyck and Rubinefeld (1981), Amemiya (1981), and Gujarati (1988), it has a serious defect in that the estimated probability values can lie outside the normal 0-1 range. Hence logit model is advantages over LPM in that the probabilities are bound between 0 and 1. Moreover, logit best fits the non-linear relationship between the probabilities and the explanatory variables.

In the analysis of studies involving qualitative choices, usually a choice has to be made between logit and probit models. According to Amemiya (1981), the statistical similarities between logit and probit models make the choice between them difficult. The justification for using logit is its simplicity of calculation and that its probability approaches zero at a slower rate as the value of explanatory variable gets smaller and smaller, and the probability approaches at a slower and slower rate as the valve of the explanatory variables gets larger and larger (Gujarati, 1995) Hosmer and Lemeshew (1989) pointed out that the logistic distribution (logit) has got advantage over the others in the analysis of dichotomous outcome variable in that it is extremely flexible

and easily used model from mathematical point of view and results in a meaningful interpretation. Hence, the logistic model is selected for this study.

Therefore, the cumulative logistic probability model is econometrically specified as follows.

$$P_i = F(z_i) = F(\alpha + \sum B_i x_i) = \frac{1}{e^{-x} + 1} \dots\dots\dots (1)$$

- where, p_i is the probability that an individual decide to participate or not
- e denotes the base of natural logarithms
- X_i represents the n^{th} explanatory variables and α and B_i are parameters to be estimated

Hosmer and Lemeshew (1989) pointed out that the logit model could be written in terms of the odds and log of odds, which enables one to understand the interpretation of the coefficients. The odds ratio implies the ration of the probability (P_i) that an individual would choose an alternative to the probability ($1-P_i$) that she would not choose it.

$$P_i / 1-P_i = e^x \dots\dots\dots 2$$

$$\ln(P_i / 1-P_i) = Z_i = \alpha + X_1\beta_1 + X_2\beta_2 + \dots\dots\dots 3$$

If the disturbance term (μ) is taken in to account, the logit model becomes

$$Z_i = \alpha + \sum \beta_i x_i + \mu \dots\dots\dots 4$$

3.5 Definition of dependent and independent variables and working hypothesis for the logit

3.5.1 Dependent variable

The dependent variable for the logit analysis is of dichotomous nature representing women's access to formal credit. This is to distinguish between those users /participants or non-users of formal credit (OCSSC) in the study area. Y = household users credit from OCSSCO sources during the year. This is a dependent variable. It takes value of “1” for users “0” for non-users to formal credit.

3.5.2 Explanatory variables of the study

Review of literatures on factors influencing women's access to formal credit, past research findings and the author's knowledge of the credit schemes of the study area were used to establish working hypothesis of this study. In other words, among a number of factors, which have been related to women's access to formal credit, in this study, the following demographic, socio-economic and communication factors were hypothesized to explain the dependent variable.

1. **Age of womens (AGE):-** it is a continuous variable, defined as the farm household heads age at the time of interview measured in years. Those farmers (women's) having higher age due to life experience will have much better association with OCSSC (institutions), and it was hypothesized that farmer(women's) with higher age may have more experience to use credit.
2. **Literacy level (EDLVL)** it is categorized in to literate, grade 1-8, grade 9-12 and above grade 12. As farmers /household heads are exposed to education it is expected to have more exposure to the external environment and accumulate knowledge. They have the ability to analyze costs and benefits. The more educated the household head the more credit she will use for consumption purposes. According to Musebe et al, (1993), as the household gets more formal education, the probability of participation in credit market increases. Therefore, it was expected that those household heads with more education have better credit requirement that leads to access to use formal credit sources.
3. **Family labor (FAMILSI).** This refers to the total number of family members of the household who have the potential to work on the farm which was measured in man equivalent. The larger the number of family labor, the more the labor force available for production purpose. The more the labor force available, lower is the demand for hired labor, this means no or low cost for hired labor. If demand for hired labor decreases due to availability of family labor the need for credit decreases. Therefore, family labor was hypothesized to have negative impact on access to credit.
4. **Respondent's landholding (RLH).** It is the total land size cultivated (it is the sum of owned cultivated land and rented in land by the household. It is a continuous variable. The larger the cultivated land size the more the labor required that demands additional capital that might be obtained through credit. The main hypothesis was that the farmer who cultivates larger size

of land can utilize more capital and will demand for credit and therefore he/she will be more participated to credit from the formal sources.

5. **Total livestock ownership (TLO).** This refers to the total number of animals possessed by the household measured in tropical livestock unit (TLU). Livestock is considered as another asset which is liquid and a secured against crop failure. As the total number of animals in the household increases the household would be less likely to go for credit. This can be attributed to increase wealth and income base of farm households which makes more money available in the households that minimizes demand for credit. Hence this variable was assumed to have negative influence on the dependent variable.
6. **Respondent's average annual household income from farming (RAAHIF).** An increase in income from farming would be expected to have a negative influence on her participation decision in credit.
7. **Respondent's average annual household income from off-farm activities (RAAHIOA)**
Some respondents may have other sources of income like income from employment in government or private organization or pension,; etc such source of income are expected to have negative influence on her participation decision in credit.
8. **Number of children send to school (NCHSTS)**
 - It has a positive impact on microfinance participation decision
9. **Having any source of credit other than OCSSC/SCO/** It has a negative impact on participation decision in OCSSC.
10. **Having a decision making role in the household/ DMRHH/** It has a positive impact on participation decision in OCSSC.

The independent variables of the model: The independent variables hypothesized to have association with reduction of economic dependency status are selected based on available literature, are indicated, coded and described in the following table.

CHAPTER IV RESULT AND DISCUSSION

This chapter presents and discusses the results of the study and discusses them. The section deals with discussion of the descriptive part and the results of the econometric regression model. It analyzes each objectives of the paper using different methodology. Descriptive analysis is used to present the socio demographic characteristics of the respondent and other comparing variables of participants and non participants included in the study. Logit model is used to discuss the potential determinants of microfinance participation of women.

Table

Demographic and socio – economic characteristics of sample respondents (Continuous Variables)

No	Variable definition demographic issues	Participants (N = 72)		Non-participants (N = 48)		Total (N=120)		t-test
		Mean	SD	Mean	SD	Mean	SD	
1	Age in years	37.87	11.065	40.60	11.53	38.96	11.28	1.3
Resource endowments /expenditure								
1	Respondent land holding	1.42	1.11	2.015	1.45	1.66	1.29	2.5**
2	Total livestock ownership	3.33	2.56	5.224	4.55	4.09	3.59	2.9***
3	Respondents Average Annual household income from farming	9565	4003.24	14520.83	4930	11548	5010	6.049***

* ** and ** statistically significant at 1%, and 5 percent respectively, source: survey result, 2014.

Table 3**Demographic and socio economic characteristics of respondent (Categorical variables)**

No	Variable definition	Categories	Participant (N=72)	Non participants (N=48)	Total (N=120)	χ^2 test
1	Educational status	Illiterate	44	40	84	7.44**
		Grade 1-8	25	8	33	
		Grade 9-12	3	0	3	
2	Access of credit from other (SCO)	Yes	30	32	62	7.2080***
		No	42	16	58	
3	Respondents average annual household income from off-farm activity	Yes	27	19	46	0.0529
		No	45	29	74	

*** And ** statistically significant at 1% and 5% respectively, source: Survey result, 2014.

Table 4**Maximum likelihood estimates of logit model**

Variables	Coef.	P>/z/	ME
Constant	5-377	0.002***	0
Age	-0.02295	0.324	-0.0053
EDLVL	1.0490	0.044**	0.244
RLH	-0.380	0.071*	-0.0887
TLO	-0.1772	0.047**	-0.041
RAAHLOA	-1.357	0.028**	-0.316
NCHSITS	-0.0449	0.812	-0.0104
RAAHIF	-0.0003766	0.000***	-0.00008
FAMILSI	1.1195	0.073*	0.2610
SCO	-1.5348	0.003***	-0.3424
DMRHH	0.2925	0.560	0.06821

***, ** and * statistically significant at 1%, 5% and 10% respectively source: survey result, 2014.

4.1 Demographic and socio economic characteristics of respondents

The result of the study showed that the mean age of the respondent laid on productive age category which was 37 and 40 years for participant (user) and non participants respectively. Average mean age difference among participants (microfinance user) and non-microfinance users /non-participants) was statically insignificant.

The Average mean difference between finance participants and non-participants in relation to education was statically significant at 5% level (Table 3)

The result of the study (Table 3) show that 70% of sample respondents were illiterate and those who lies from grade 1-8 and from grade 9-12 constitute only 27.5% and 2.5% respectively.

On the other hand, microfinance participant (1.42 hectares) have lower average land holding as compared to non-microfinance participant (1.45 hectares) and the average mean difference was also statistically significant at 5% level (see table 2). The average mean tropical livestock unit (TLU) owned by microfinance participant (3.33 TLU) was less than non microfinance participants (5.22TLU) and the difference were also statistically significant at 1% level (Table 2)

The result of the study showed that the average annual household income from farming was 9565 Eth. Birr and 14520.8 Eth. Birr for microfinance participants and non-microfinance participants respectively and the mean differences were also statistically significant at 1% level (Table 2)

4.2 Econometric model output

In the preceding section, variables characterizing the women's and their difference among the user and non-user were identified. However, in the logit model analysis, we emphasize on considering the combined effect of variables between credit participant and non-participant in the study area. Therefore, the emphasis is on analyzing the variables together, not one at time. By considering the variables simultaneously, we are able to incorporate important information about their relationship.

4.2.1 Family size

Family size was one of the important characteristics of households that determine households involvement in different social and economic activities. Family size was converted in to adult equivalent to identify the productive family members who were capable and generating household income to be involved in microfinance services. The result of the study revealed that the household size of the respondents significantly affects the women's participation decision on microfinance services.

More conclusively, large productive family size in the rural household generates and enhances household income of rural women and enables them to be involved in microfinance services having large family size may imply that the household has enough labor supply for participation in different income generating activities. Like microfinance services.

The marginal effect of logit model (Table 4) shows that a unit increase of family size in adult equivalent increase probability of women's participation decision by 0.3, keeping the effect of other variables constant.

4.2.2 Land holding

Currently, land scarcity and lack of alternative non-farm employment opportunities are serious problems in rural areas. Severe land shortage, high levels of landlessness and unemployment and widening poverty are eroding peasant's ability to withstand environmental stresses and food shortages. Land is one of the important factors for farm production.

The possible explanation was that as women have land, she can produce more from her land holding, so that she needs to optimize for microfinance services. This statement supports the economic logic of the substitutability of fertilizer for land.

However, the result of the study revealed that respondents with large landholding significantly but negatively affects the women's participation decision on microfinance service. More conclusively, the house hold with large landholding rent to specific rich farmer and was lacked productivity and generates limited household income. This is the main reason for negative effect on microfinance participation decision. The marginal effect of the logit model (Table 4) shows

that a unit increase of landholding in hectare decrease probability of women's participation decisions by 0.08. This study is also consistent with studies by Anbes (2005), which revealed that "the level of women credit varied inversely with farm size".

4.2.3 Respondent's average annual income from off-farm activity

The expectation of microfinance use is to generate income, provide employment, and alleviate poverty and empowerment of women (sulimen et al. 2012). Non-farm income had negative influence on probability of participation decision in microfinance service, indicating that households which are more dependent upon agriculture for their livelihood are more likely to participate in microfinance service.

The result of the study revealed that sample respondent average annual income from off-farm activity was significantly but negatively affect women's participation decisions on microfinance services. This can be due to the fact that the annual income from off-farm activity capacitates individuals to finance for their expenditure from their income. The marginal effect of the logit model (Table 4) shows that access to income from off farm activity decrease the probability of women's participation decision in microfinance services by 0.3.

4.2.4 Any source of credit other than OCSSC

Source of credit other than ocscs was one of the important factors of household that determine involvement in microfinance service (ocscs). The result of the study revealed that having credit other than microfinance service for respondents significantly but negatively affects the women's participation decision on microfinance service (ocscs). This was further elaborated that a significant number of household shifts to other source of credit as the access get increased the marginal effect of the logit model (Table 4) shows that access to credit from other source decrease the probability of women's participation decision on microfinance services by 0.3.

4.2.5 Number of livestock in tropical livestock unit (TLO)

Number of livestock in tropical unit in the rural areas constitutes accumulation of wealth, security against emergencies, dowry and also used as a cultural privilege. They can also be easily converted in to cash when demand arises due to the reasons it was hypothesized to have a negative relationship with the dependent variable by justifying, as the total number of animals

increase; the women would be less likely to go for credit. This can be attributing to increase wealth and income base of women's which makes more money available in the women's hand. The result of the logit model also revealed that the variable has negative relationship that women's with lesser number of animals uses formal credit than with larger animals. The marginal effect of the logit model (table-4) shows that unit increases of animals in TLU decrease the probability of women's participation decisions by 0.04

CHAPTER V. SUMMARY, CONCLUSIONS AND RECOMMANDATION

5.1 Summary and Conclusions

Ethiopia is one of the countries where the smallholder farming dominates the overall national economy and its population is subject to extreme poverty. Small farmers of the country who do not have access to capital, encompasses the largest portion of the population. This lack of access to financial services is one of the reasons for rural households to live in the vicious circle of poverty for long period of time. The formal financial sector in Ethiopia is not well developed to provide these services to the rural poor farmers/women. Targeting credit to the poor women is one of the various instruments for poverty reduction. Microfinance is being practiced all over the world as one of the major strategies being used to reduce poverty through the delivery of financial services such as credit, saving and insurance. To meet this end, OCSSC was established in 1997 in oromia regional national state aiming at poverty reduction through provision of credit and saving mobilization to the poor/ women. In general, the motivation of this study at several levels first, since the objective of microfinance is to allow the poor women and low income people to access credit, higher rate of participation ought to be observed but a contrast exist between expectation and the realization of the objective, leading to lower rate of credit participation second, at the academic level where, in contrast to the large volume of theoretical research on credit markets, the empirical literature is surprising scarce. This situation it partly due to the lack of reliable micro-level data on borrowing and lending in Ada'a woreda.

Therefore, the present study was focused on the problems that affect women's participation decision in formal credit. The main objectives of the study were to examine determinants influencing rural women to participate in micro finance in Ada'a woreda. Both descriptive statistics and econometric analysis were carried out to accomplish the above mentioned tasks.

For the purpose of the study from the total kebeles, 7 kebeles were selected using random sampling method. For the selected kebeles, separate list of beneficiaries of microfinance was prepared. Total sample size was 120 and of which 72 were beneficiaries and the rest were not beneficiaries. It was selected using probability proportional to the size.

The descriptive results of the survey indicated that 70% of sample respondents were illiterate and those who lies from grade 1-8 and from grade 9-12 constitute only 27.5% and 2.5% respectively. On the other hand, microfinance participant (1.42 hectares) have lower average land holding as compared to non-microfinance participant (1.45 hectares) and the average mean difference was also statistically significant at 5% level (see table 2). The average mean tropical livestock unit (TLU) owned by microfinance participant (3.33 TLU) was less than non microfinance participants (5.22TLU) and the difference were also statistically significant at 1% level (Table 2)

The result of the study showed that the average annual household income from farming was 9565 Eth. Birr and 14520.8 Eth. Birr for microfinance participants and non-microfinance participants respectively and the mean differences were also statistically significant at 1% level

The econometric results of the survey indicated that women's lower status in their level of education and family size (adult equivalent) significantly contributes to the lower participation decision in microfinance service. The analysis shows that the probability of accessing credit from other source, total livestock in TLU, respondent's annual income from farming and respondent's landholding and number of livestock's in TLU negatively and significantly affects women's participation decision in microfinance service.

5.2 Recommendation

Based on the major findings of this study, the following recommendation to be brought to the attention of the institution and any other interested parties.

- Beyond the financial support, the contribution of micro-finance services to women's participation should be enhanced through a combination of more effective support services(technical, material capacity building, business development service and the like) or linkages should be made with services provider originations like TVET, micro and small scale organization, women children , youth affaires that work directly to enhance gender mainstreaming, challenge women's marginalization and subordination by helping to improve the socio-economic status of women.
- According to the logit analysis result family size in adult equivalent that women's have is positively significant along with women's decision in participation; this is due to the fact

that women's who have large productive family need more capital to invest on this labor. Therefore, based on this finding OCSSC should formulate means of encouragement in investing on large family (adult equivalent).

- According to the logit analysis result respondents with large landholding significantly but negatively affects the women's participation decision on microfinance service. This is due to the fact that the women's with large landholding rent to specific rich farmer and was lacked productivity and generates limited household income. Therefore, based on this finding OCSSC has to give awareness and training for women's who have large land size to invest on their land rather than renting.
- This study would ensure spontaneous participation of targeted women's in the participation of OCSSC and save time and effort of the personnel of concerned department. OCSSC is a feasible company and very much suitable for rural women to practice as a key financial source. The government agencies involved in farming and nurturing microfinance service would do well by giving awareness (education) focusing on households with non-farm income and having large land holding household, for household who have access credit from other source, for household who have high annual income from farming. The majority of rural household especially female headed households do not use credit from formal financial sources. Therefore, high emphasis should be given in screening potential borrowers and to address the very poor and female headed households in the formal credit market.

Reference

ACCION <http://www.accion.org>

Agbor RA 2004 An impact assessment of Cameroon Gatsky Trust Microcredit scheme in the Mile Four district Cameroon. Report of International project management for NGOs participants learning, December 2004, Sweden.

Amemiya, T. 1981. Qualitative response model : A survey journal of economic literature 19:1483-1536.

Atieno, R.2001. Formal and informal institutions lending policies and access to credit by small-scale enterprise in Kenya: An empirical assessment Africa Economics Research Consortium, Nairobi.

Balogun OL and Yusuf. S A 2011. Determinants for microcredit among the rural households in south-western states, Nigeria. Journal of Agriculture and social sciences. 7:41-48

Binswager H.P,et al 1993. How infrastructure and finance institution affect agricultural output and investment in India. Journal of development and economics. 24:57-65.

Diagne, A. Zeller, M and Sharma, M.2000. Empirical measurements of household Access To credit And credit constraints In developing countries : Methodological Issues And Evidence : international food policy Research Institute . Washington,D.C U.S.A

BRD,2003.Rural households socio-economic base line survey of 56 woreda in the Amhara region. Bahir dar, Ethiopia.

Fleisig, H. 1995. The power of collateral. View Point Washington D.C, the world b Guirking C and Beucher SR 2008 credit constraints and productivity in agriculture. Agricultural,Economics. 39:295-308

Getaneh Gobezie, 2005a. Livelihoods thought microenterprise services, Assessing supply and Demand constraints for microfinance in Ethiopia(with particular reference to Amhara region) ; paper presented at the 3th International Conference on the Ethiopian Economy, organized by the Ethiopian Economic Association June 2-4,2005. Addis Ababa, Ethiopia.

Gujarati, Damodar N. 1988,Basic Econometrics 2nd edition Mc Graw-hill book company. New York.

Hashami et al 1996, Study conducted on the debit, Credit and saving institution.

Hulme, D., and Mosley, P (1996). Finance Against poverty. London: Routledge

Hussien Hamda, 2007. Farm Household Economic Behavior in Imperfect Financial Markets, Doctorial Thesis, Swedish University of Agricultural Sciences, Uppsala.

<http://www.mixmarket.org/mfi/ocssco>

Hossain, M. 1988. Credit for the alleviation of rural poverty: The Grameen Bank in Bangladesh. IFPRI Research Report, 65.

Hosmer, D.W and Lemeshow, S. 1989. Applied logistic Regression. A Wiley-Interscience publication, New York.

Kashuliza, A.K and J.G. Kydd 1996. Determinants of bank Credit access for small holder farmers in Tanzania: A discriminate analysis application, saving and development, 3:285-97.

Kalmakar KG 2007. Trends in rural finance key Note paper presented at the 67th Annual Conference of the Indian Society of Agricultural Economics, Bankers Institute of Rural Development, Lucknow, 5th -7th November, 2007.

Littlefield, E., Murdoch, J, and Hashemi, S .(2003). Is microfinance an Effective strategy to reach the Millennium Development Goals? Focus Note series no.24. Washington: (GAP-consultative group to assist the poor.

Maddala G.S 1983, Limited Dependent and qualitative variables in Econometrics. Cambridge University press. New York.

MPuga P 2008 constraints in access to and demand for rural credit: Evidence from Uganda. In proceeding of Africa Economic Conference (AEC), 12th-14th November, 2008, Tunis, Tunisia.

Miller, Calvin J and Jerry R. Ladman, 1983, Factors Impeding credit use in small Farm households in Bolivia. The Journal of Development studies, 19(4): 523

Mohieldin S and Wright W. 2000. Formal and informal credit markets in Egypt. Center for economic policy research and University of Nottingham.

Olaoye OJ and Odebiyi OC 2011 Economic viability for the use of microfinance bank loan on aquaculture development in ogun state, Nigeria.international Journal of fishies and aquaculture 3:70-77.

Otero, M.(1999) Bringing development back in to microfinance . Retrieved July 14, 2012 from <http://www.accion.org/filedownload.asp?f=8>

Padma M, Getachew (2004),Women Economic Empowerment and microfinance : A review on experience of Awassa Women clients. A paper presented in the international conference on microfinance development in Ethiopia held at Awassa, Ethiopia. No 2 PP.32..

Simanowizz and Brody (2004). Realizing the potential of microfinance,id21 insights, December Issue 51.

Survey result of 2014.

Pindyck,Roberts S. and Rubinfeld, 1981 'Econometric Models and Economic forecasts,' 2nd edition, Mc Graw-hill Book Co. New York.

Schmidt, R.H and Kropp, E. 1987. 'Rural finance guiding principles'. GTZ, Eschborn.

World bank (2003) .Rural and microfinance Regulation in Ghana : Implications for development of the Industry, New York: World bank.

Zeller,M. 1994. Determinants of credit rationing: groups in Madagascar. World development, 22(12): 1895-1907.

.Zhao J and Zhang J 2012 credit constraint and non-separable behavior of rural households.Evidence from China.In: proceedings of Agricultural and Applied Economics Associations 2012. Annual meeting 12th -14th August,2012, Seattle, Washington.

APPENDICES

Appendix 1. Conversion factors

Appendix table 1: conversion factor used to compute man-equivalent (labor force)

Age group (years)	Male	Female
Less than 10	0	0
10-13	0.2	0.2
14-16	0.5	0.4
17-50	1.00	0.8
Greater than 50	0.7	0.5

Source: storck et al. (1991)

Appendix table 2: conversion factors to estimate Tropical Livestock Unit equivalents

Animal category	TLU	Animal category	TLU
Calf	0.25	donkey (young)	0.35
Weaned calf	0.34	camel	1.25
Heifer	0.75	sheep and goat (adult)	0.13
Cow and ox	1.00	sheep and goat (young)	0.06
Horse	1.10	chicken	0.013
Donkey (adult)	0.70		

Source : storck et al, (1991)

Household survey questionnaire

A. Interviewer's Name -----

B. Supervised and checked by -----

C. Finally checked by -----

Part I. General household information

1.1 Zone: East Sho'a Woreda: Ada'a

1.2 Name of Kebele ----- Code -----

1.3 Name of the household head -----

1.4 Sex of household head 1) male 0) female

1.5 Age of household in year -----

1.6 Date of interview -----

1.7 Status Ok ☐ Problem ☐

1.8 Marital Status ----- 1) single 2) married 3) divorced 4) widowed

1.9 Educational level ----- 1) illiterate 2) grade 1-8 3) grade 9-12 4) above grade -12

Part II Hand resources

2.1 Do you have land ownership certificate? 1) Yes 0) No

2.2 If your answer is yes, what is the total size of your land permanently owned?

a. $\frac{1}{4}$ of a hectare c. $\frac{1}{2}$ of a hectare

b. $\frac{3}{4}$ of a hectare d. others (specify)

2.3 If no, how do you earn your livelihood?

a. Work on rented land b. gift from relatives c. others (specify)

2.4 Do you possess livestock (currently)? 1) Yes 0) No

2.5 If yes, indicate the number of livestock you owned.

No	Types of livestock	Number owned
1		
2		
3		
4		
5		

Part III. Access to credit services.

3.1 Did you have a credit services from OCSSC? 1) Yes 0) No

3.2 If yes, how many times and how much money did you receive from these source during the past year? (OCSSC)

Year	Amount of Loan
2003	
2004	
2005	

3.3 Did you have any source of credit other than OCSSC? 1) Yes 0) No

3.4 If yes, what is your source?

a. Iddir/Iqub b. Money lenders c. Banks d. friends/relatives e. other

Part IV. Loan utilization

4.1 What was the purpose for which the loan was taken?

a. Purchase of farm oxen b. purchase of agricultural inputs c. fattening
c. Petty trade e. other (specify)

4.2 Was the amount of loan you took enough for the purpose intended? 1) Yes 0)No

4.3 If no, what was the amount you requested? Birr -----

4.4 Did you spend the entire loan on purposes specified in the loan agreement? 1)
Yes 0) No

4.5 If no, state those non-intended purposes and the amount spent on them

Purpose	Amount spent (birr)
1. -----	-----
2. -----	-----
3. -----	-----

Part V Income and wealth

5.1 Do you have other/new sources of income currently? 1) yes 0) No

5.2 If yes, what are these other sources and your annual income from them?

Source	Annual income
-----	-----

Part VI Employment and production

6.1 How many workers other than yourself helped you with your work currently?

6.2 Who are they? a. family members b. hired labor c. others

6.3 Do you use purchased inputs for your business currently (fertilizers, chemicals, improved seed, etc)? 1) Yes 0) No

6.4 Do you think that your overall inputs have improved following the program?

1) Yes 0) No

6.5 Would you explain why? -----

6.6 Do any members of your family have off-farm job after joining the program?

1) Yes 0) No

Part XII. EDUCATIONAL EXPENSE AND ACCESS TO EDUCATION

7.1 If you have children and other dependents,

- How many of them were going to school during the last academic year? -----
- How much was your total annual educational expense last year? Birr -----

7.2 Do you think that there is improvement of access to educational facilities of you and your family? ----- 1) Yes 0) No

7.3 If no, please indicate the main reasons? -----

1. Lack of educational facilities
2. Unaffordable cost of educational facilities
3. Low level of income
4. Distance of educational facilities
5. Other (specify) -----

Part XIII CONSUMPTION AND LIVING CONDITIONS

8.1 What is the average annual consumption expenditure of your household?

- During the last twelve months? Birr -----

8.2 If it has improved, do you think the nutritional status has improved after program participation? -- 1) Yes 0) No

Part IX INFORMATION ON OTHER ISSUES

N o	Topics	Score		
		Ag r e e	Neutr al	Disagr ee
1	Female headed are major targets of credit by OCSSC.			
2	The very poor are the main credit targets by OCSSC.			
3	The loan size from OCSSC did not satisfy women's needs.			
4	Individual's collateral is a constraint			

	for women to borrow from OCSSC.			
5.	Distance from lending instituti on (OCSSC)			

9.1 Did you have a saving account before participating in the credit scheme of
OCSSC? ----- 1) Yes 0) No

9.2 If yes, what is the average amount that you manage to save monthly? Birr -----

9.3 Do you have a saving account after program participation? ----- 1) Yes 0) No

9.4 If yes, what is the average monthly amount of your saving? Birr -----

9.5 What is your overall opinion about the credit scheme?

9.6 Do you have a decision making role in the household? 1) Yes 0) No

9.7 Do you have freedom of mobility? 1) Cannot go out 2) can go out but with permission 3)
can go out without permission

9.8 Do you have control over decision pertaining to accessing credit?

9.9 The family size of household is? 1) 1-4 2) 3) 5-12 4) more than 12