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THE IMPACT OF MICRO FINANCE ON POVERTY REDUCTION:

ACASE STUDY OF WASASA MICRO-FINANCING INSTITUTION IN EAST SHOWA ZONE OF OROMIA REGIONAL STATE, ETHIOPIA

PROJECT SUBMITTED TO THE INDIRA GANDI NATIONAL OPEN UNIVERSITY IN PARTIAL FULFILLEMENT OF THE REQUIREMENTS FOR THE AWARD OF THE DEGREE-MASTER OF ARTS (ECONOMICS). I HEREBY DECLARE THAT THIS WORK HAS BEEN DONE BY ME AND HAS NOT SUBMITTED ELSEWHERE.

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I would like to extend my heart-felt gratitude to my brother Dr. Abera Bekele for his moral, technical and financial support through out the study period.

I would like to extend my thanks to WMFI and staff members of WMFI for their cooperation in facilitating data collection.

I also extend my thanks to my friends and relatives Chala Bekele for his assistance during data compilation, Ebisa Diribe, Chala Diriba and Diriba Dhugassa for their material supports.

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Table of Contents **Page**

CHAPTER ONE: INTRODUCTION

1.1 Background of the study

First it very important to make explicit definitions of microfinance and poverty on which the study attempts to investigate the relationship. According to Dejene(1998) MFIs are often defined in terms of the following characteristics: (i) targeting the poor (especially women); (ii) promoting small business; (iii) building capacity of the poor; (iv) extending small loans without collaterals; (v) combining credit with saving; and (vi) charging market rate of interest.

Poverty could be conceived as a situational syndrome consisting of deficiency in food consumption, high mortality and morbidity levels, poor sanitary and housing conditions, low educational levels and the existence of widespread marginal population in all aspects of life (Hadgue 1995 as cited in Daba, 2004). Poverty is multidimensional concept. It includes inadequacy of income, deprivation of basic needs and rights and lack of access to production assets as well as to social infrastructure and markets.

Ethiopia is one of the World's poorest countries. Out of a population of around 80 million (CSA, 2008) people, 35 million people are living in abject poverty. In one of the world's poorest countries, where about 44 per cent of the population lives under the poverty line, more than 12 million people are chronically or at least periodically food insecure. Most of them live in rural areas with agriculture as their main occupation. Poverty in Ethiopia is more pronounced in the rural areas as compared to the urban areas. The situation worsened recently because of sharp increases in the prices of food and fertilizers on world markets, which made it more difficult for poor households in Ethiopia, as elsewhere, to secure adequate food supplies. According to Wolday (2001) poverty in Ethiopia is a multi dimensional problem and owing to poverty’s large scope and multiplicity of actors, there is no single guaranteed approach for its eradication. The solution to poverty is multifaceted as its causes.

Microfinance institutions (MFIs) provide financial services to low-income, economically active, borrowers who seek relatively small amounts to finance their businesses, manage emergencies, acquire assets, or smooth consumption. These borrowers usually lack credit histories, collateral, or both, and thus, do not have access to financing from mainstream commercial banks. For this reason, MFIs are seen as playing a role in the creation of economic opportunity, and in poverty alleviation. Recognizing the importance that a number of donors had placed on microfinance as a tool to achieve the millennium development goals (MDGs), the United Nations declared 2005 as the “year of micro-credit” (Morduch, 2000).

The capacity of the conventional banking sector in Ethiopia has been too weak to serve the need of the rural community. Few woredas in the country have bank branches. Even if there are banks in these woredas, due to high collateral requirements, the rural poor have limited access to the conventional banks. Making credit available, particularly to the rural poor, is thus considered essential to alleviate poverty and promote economic development. Therefore, the formal microfinance industry began in Ethiopia in 1994/1995 with the government’s the Licensing and Supervision of Microfinance Institution Proclamation designed to encourage Microfinance Institutions (MFIs) to extend credit to both the rural and urban poor of the country. Accordingly proclamation No. 40/1996 was enacted to provide for the licensing and supervision of the business of micro financing by empowering the NBE to license and supervise them. Since the issuance of this proclamation in July 1996, 28 MFIs have legally been registered and started delivering microfinance services.

These MFIs aim at poverty alleviation through targeting specific groups (reaching the poor) and group based lending. In a short period of time the MFIs have managed to reach a sizable portion of the rural and urban poor, and in so doing have gained significant experience. One of the MFI so established is Wasasa Micro-financing Institution (WMFI for short) which is operating in the Oromia Regional State of Ethiopia.

The general objective of WMFI is to alleviate poverty and promote economic development through provision of credit and saving services. The specific objectives of WMFI include: - achieving household level food security in Oromia, increasing household income, and improving the overall economic and social conditions of rural households.

1.2. Statement of the problem

A micro service has been provided since the 1970s. The reason behind is that the prevailing formal financial institutions in many poor developing countries such as Ethiopia is inefficient in providing sustainable credit facilities to the poor. The formal financial institutions like Banks and Insurances that could provide credit services for low-income entrepreneurs, handcrafters, pastoral and farmer’s families are very limited in Ethiopia. The majority of the poor access financial services through informal channels, Iqqub, mehabber, moneylender, relatives, friends etc (Wolday, 2002). Another most important reason is that there is assumption that by integrating the poor into productive economic activities, development would be promoted automatically through micro finance (Aguilar, 1999). It is general truth that saving has immense contribution for both clients and MFIs. For clients, savings help smooth consumption patterns during difficult times by covering cost of large expenses such as school fees, medicals. For MFIs, savings increase profitability. By mobilizing savings, MFIs gain access to funds and the potential to decrease their dependency on donor funds if the savings program is successful. Despite this fact, most micro-credit services delivered by Non Government Organization (NGO) and government initiated projects in Ethiopia did not give attention to the saving. There is strong belief that it was emanates from the notions of "the poor has nothing to save". However, this idea has been disproved after successful endeavors of Grameen Bank in Bangladesh. Usually poor small farmers are considered as high- risk borrowers by both formal and informal lending sources. Lack of rural financial institutions, which deliver financial services to the poor, is one of the most constraints on production in many developing countries. In the Ethiopian context, microfinance has been established and operating with ultimate goals of poverty reduction.

Several studies indicate that microfinance has positive impacts in reducing poverty (Berhanu, 1999; Daba, 2004; Holcome, 1995; Hossain, 1988 and Teferi, 2000). On the other hand, there are studies that indicate pessimistic kind of result on the impacts of microfinance program initiatives towards reducing poverty (Buckley, 1997; Montgomery, 1996; Rogaly, 1996). Specific to Ethiopian context, even though there is success in terms of outreach and size of clients weak management of information system, limited source of loanable fund, problem related with entrepreneurial quality of clients, limited technical and banking skills of staff, absence of separate unit in the NBE to address the problem and development of microfinance activities in Ethiopia, wrong perception of the community that loan disbursed by NGO and government are not collectable and limited research towards improving micro finance has been observed (Woldey 2000).

Therefore, the starting point of this is about whether the programmes of Wasasa Microfinance Institution are making positive changes on clients. This is further explained as the research questions.

1.3. Research Questions

This study attempts to answer the following key research questions:

1. Are there significant improvements in the wellbeing of the poor clients of Wasasa Microfinancing Institution?

2. Is Wasasa Microfinancing Institution at well performance to alleviate poverty?

3. Are disadvantaged poor grouped parts of society beneficiary from the credit shame of Wasasa Microfinancing Institution?

1.4. Objectives of the study

1.4.1 General objective

The general objective of the study is to assess whether the delivery of credit and saving service by WMFI has made a change socio-economic situations of its clients.

1.4.2 Specific objectives

The specific objectives of the research include:

i. To investigate the impact of WMFI on welfare of clients.

ii. To investigate the factors that influences the loan repayment performance of borrower financed by WMFI.

iii. To help MFI to improve the credit and saving scheme in order to meet clients' needs

1.5. Research Hypotheses

It is fact that credit has plausible contribution in increasing productive assets, income and facilities of employment. This is to mean that as the poor's access to lending increases, they have the chance to participate in income generating activates, and thereby improve their families' health, education and nitration. In addition, with availability of financial services, the poor can save from their earn, build fixed assets and income, and increase their production capacity. Hence, they can improve their social welfare. From this general assumptions, there are a number of hypotheses could be derived. These hypotheses are stated below:

1. Participation in microfinance program leads to improved income and food security.

It is obvious that this hypothesis emanates from the fact that surplus production from income generating activities enables households to feed themselves and their family members. In addition households are able to increase their saving rate so that they able to finance their livelihood especially during bad production period. Furthermore, as a result of increase in income, there is possibility of increase in food nutrition and asset accumulation. Variables to be used to test this hypothesis are mean expenditure on food and house durables. percent whose household income has increased over the last 12 months, percent of households having key household assets, percent of households whose diet has improved during the last 12 months, and percent of households who have experienced food shortages.

2. Participation in microfinance leads to increased in access to school and medical facilities.

This hypothesis originates from the fact that microfinance program increases income and thereby help the poor to send their children to school. It also widely believed that microfinance intervention help the clients to get access to medical facilities. Therefore, to test this hypothesis, percentage of clients reporting an improvement in access to education and medical facilities will be used.

3. *Participation in micro finance programs leads to improvements in personal well-being and empowerment for women participants*

This hypothesis claims that as clients become more financially self-sufficient and economically independent, their confidence decision making and bargaining power increase. They also increase their mobility and interaction at households and community level. Variables used to test this hypothesis are percentage of clients reporting as a member of associations or groups, and extent of women clients' involvement indecision to take and use loan.

4. Participation in microfinance programs leads to improvements in housing conditions.

This hypothesis is attempt to support that participation in microfinance will help the poor to accumulate capital and thereby invest either as permanent living or area or to generate income by renting it out. Regarding this, the percentage of clients who have made some form of improvements, expansion or repair will be used.

1.6. Expected out come of the study

Many studies argue that the best way to do something about poverty is to let the people do their own thing. Nobody will have more motivation to change his situation than the sufferer himself. Therefore, targeting credit to the poor is one of the several instruments in poverty alleviation. MFI engaged in providing credit to the poor so that they employ themselves and generate income. For those institutions to be able to render efficient service on a permanent basis, they should be viable and sustainable. The program managers and practitioners at WMFI are expected to have up to date information.

Therefore, the first and most WMFI practitioners are beneficiary of this research findings followed by policy makers, academician and the public at large. Practitioners may use the results of this study either to improve the services of their institution or to the existing problems. Policy makers can use the findings to influence the policy changes as well as resource allocations. Academicians may use the findings to answer some academic questions and/ or as reference for further studies.

1.7. Scope and Limitation of the study

This study was limited to the Akaki woreda East Showa Zone, Oromia Region. The sole reasons are time, logistic and financial limitations. Besides, due to limited resources (human, material and financial) the study was further restricted to 200 respondents of which 100 are mature clients of the institution and 100 are fresh-clients from the sample branches.

1.8. Organization of the study

The thesis is organized into five chapters. The first chapter comprises background of the study, statement of the problem, objectives of the study, research questions, research hypothesis, expected out come, scope and limitation of the study. The second chapter deals with literature review which comprises the conceptual frame work of the study. Chapter three describes the research methodologies applied in the study. Chapter four deals with the empirical analysis and findings of the study. Chapter five describes the conclusion and recommendation part of the study

CHAPTER TWO: REVIEW OF LITERATURE

2.1 Theoretical Review

2.1.1 The Emergence of MFIs

The formal financial institutions played little role in financing development efforts in the rural areas. Due to a number of reasons poor of the developing countries are kept out of the reach of formal financial services. First, formal financial institutions are clustered in urban areas, concentrate on funding large enterprises. Second, they require collateral and credit rationing. Third, the rural poor can't fulfill banking requirement to get loans. It means that the processes and procedures of providing loan are bureaucratic and lengthy. Fourth, the volume of loan demanded by small farmers is not appealing to banks. Such loans are difficult to manage and their processing not financially feasible (Morduch, 2000)

Several studies reveal that there is no exception in Ethiopia. For instance, Dejene (2003) argues in his study on the economic importance of the informal institutions in Ethiopia that the poor are often marginalized in the formal credit markets. This can be explained partly in terms of: 1) a lack of collateral, which makes lending to the poor a risky venture; 2) transaction cost of lending to and borrowing by the poor is often high; and 3) utility loss from repayment is higher for the poor as compared to the rich.

So the poor don't have access to the formal financial sources. Lack of access to institutional credit is one of the crucial factors impeding peasant agricultural production in particular and rural development in general. On the other hand credit from informal source is inadequate and moreover the interest rate charged is exorbitantly exploitative. Fidler and Webster (1996) note that although informal credit markets operate widely in rural areas, moneylenders typically charge very high interest rates, inhibiting the rural poor from investing in productive income generating activities.

Thus, failure of the formal financial institutions to fulfill the financial needs of the rural poor, on the one hand, and inadequacy and exploitative or costly nature of informal credit sources on the other, led to the establishment of specialized financial institutions known as MFIs with the purpose of extending micro-credit to the rural and urban poor.

2.1.2 Effect of micro-finance on poverty reduction

Bakhtiari (2006) concluded that micro credit and microfinance have received extensive recognition as a strategy for poverty reduction and for economic empowerment particularly in rural areas having poor population. Providing poor people the small amounts of credit at reasonable interest rates give them an opportunity to set up their own business at small scale.

Mawa (2008) conducted a research study focusing the issue under discussion and concluded that microfinance is an innovative step towards alleviating poverty. The author mentioned that microfinance facilities provided to the people help them to use and develop their skills and enable them to earn money through micro enterprises. Moreover provision of micro finance helps them to smooth their consumption level and manage unexpected risks. Micro finance helps the poor to built assets, educate their children and have a better quality of life

In Sub-Sahara Africa micro finance is performing well but cannot solve the problem of poverty because the problem is big and the weapon is very simple and lose. Micro finance should be given more support to yield some fruitful results. Currently we have demonstrated there is need for greater awareness, greater coordination, additional aid, and technological improvements for increased efficiency. Significant increases in micro financing is a critical first step in accelerating Sub-Saharan Africa‘s progress towards the Millennium Development Goals, but micro financing is only one pillar in the systemic approach needed to reduce poverty and hunger in the region. Microfinance can serve as a catalyst that enhances other programs and lifts the region out of impoverishment. The concept of micro finance is simple and allows people to determine their own future, to identify exactly how to prosper, and they will do it.

Seibel (2003) proved through the survey that micro finance is that chemical through which the germ of poverty can be killed. The study also showed that micro finance is equally profitable in the poor countries as in the rich countries. He rejects the concept that Microfinance is a poor solution for poor countries. If properly regulated and supervised, they have great potential in poverty alleviation and development, both in rural and urban areas.

Shastri (2009) revealed that there is no way better than micro finance in the war against poverty. Creating self employment opportunities is one way of attacking poverty and solving the problems of unemployment. The authors reported that there are over 24 crore people below the poverty line in India. The Scheme of Micro-finance has been found as an effective instrument for lifting the poor above the level of poverty by providing them self-employment opportunities and making them credit worthy.

According to Marguerite Robinson (2000), microfinance institutions are important for poor people in providing credit and mobilizing of savings. MFI can expand and diversify enterprises and helps to reduce risk, improve management, raise product, helps in increase household's income and provide credit at much lower cost than credit from informal commercial moneylenders. Monique Cohen (2000) concluded that access to microfinance is a key risk management strategy for clients, and MF services reduce vulnerability and contribute to poverty alleviation. Scholars and development practitioners have in recent years devoted considerable attention to lend successfully to poor people.

Considerable evidence now shows that an unconventional lender such as Grameen Bank lends to the poor people and so with the reasonable degree of financial self-sufficiency and repayment rates that is significantly higher than for comparable loans by conventional lending institutions (Ghatak and Guinnane, 1999). There are two distinct reasons for the success. First, many of these lending programs ask borrowers to form a group in which all borrowers are jointly liable for each others loan. Second, most micro lenders engage in intensive monitoring of clients and rely heavily on the promise of repeat loans for borrowers who perform well.

2.1.3 Assessing MFI's Microfinancing Scheme on Poverty Reduction

Assessing microfinance impact has been the main concern of development specialists in order to know whether or not providing financial services to the poor has reduced the poverty. The impact may be measured using indicators such as income, wealth, food security, child nutrition, employment, quality of life, or gender relations. Khandker (1999) argued that the immediate impact of having access to credit from a micro credit program is on employment and income in which these may have impact on other outcomes such as consumption, nutrition, contraceptive use, fertility and education. According to Meehan (2000), there are many supporters of micro credit provision who would agree that well designed lending programs could improve the income of the poor people.

Fidler and Webster (1996), however, stressed the existence of methodological difficulties associated with the measurement of the impact of the program towards poverty reduction. They proposed the descriptive approach in assessing the impact of microfinance on poverty reduction by comparing the beneficiaries' outcomes before and after loan or outcomes of clients and non-clients.

Joanna Legerwood (1999) stated the three broad categories of impacts of microfinance activities.

(1) Economic impacts (business expansion, income, accumulation of wealth and consumption).

(2) Socio-political or cultural impacts (changes in favor, changes from barter to monetized economy, hope for changes in power, redistribution of assets, nutrition and education).

(3) Personal or psychological impacts.

According to Joanna legerwood an impact from one of these categories can in itself cause an impact on one or more of the others. The poor participate in micro-credit programs in the expectation that borrowing will increase their income and sustain self-employment.

Khandker (1999) argued whether participation in micro-credit programs does in fact reduce poverty in terms of consumption and help increase income and employment on a sustained basis could be measured directly. The benefits of program participation can also be measured indirectly, by measuring changes in socio-economic outcomes. This implies that the effects of micro-credit programs on participants can be measured in terms of consumption, nutrition, employment, net worth, schooling, contraceptive use and fertility. The study argued that changes in income and employment among program participants might affect the living standard of the poor. There are two important factors that determine the overall impact of the program. These are the growth potential of activities financed by the micro credit programs and the extent of credit market imperfections that are resolved with enhanced availability of credit.

According to AIMS (2000), the purpose of an impact assessment is to answer the question of whether a project leads to change that is different from what would have happened without the intervention, or whether the program increases the probability of that change. In the context of the rapid growth and evolution of microfinance industry, impact assessment is a critical to classify whether or not the changes occur on the livelihood of the clients. Establishing impact is making a credible case that the program led to the observed or stated changes, meaning that the changes are more likely to occur with program participation than without program participation. It does not imply that the changes always occur from program participation. Rather, it increases the probability that the changes will occur.

The type of change we are looking for can occur for multiple reasons, many of which are not related to program interventions (AIMS, 2000). There are factors that enhance or constrain opportunities for change but are not directly linked to the program intervention such as gender of client, number of household members, price of business inputs and external factors. According to AIMS, searching for impacts requires lens on the full range of family/household economic activities because the micro enterprise is firmly embodied in the family/household especially among poorer families. How the micro enterprises fit into overall economic strategies depends on the following factors.

i) The composition of the family, which will vary in different locations and cultures.
ii) Decision-making within the family about investments and the selection of productive activities.
iii) How the family is linked extremely to larger social networks through which it gives and receives resources.
Ledgerwood (1999) argued that most microfinance institutions see microfinance as a cost effective means of poverty reduction, but the detailed intentions and expectations of microfinance programs can differ considerably. Impact of microfinace activities may fall at the level of the economy itself.

Hulme (2000) identified three elements of the framework for the study of impacts. The first is the specification of levels at which impacts are assessed. The second is the specification of the types of impact that are to be assessed. The third is models to be used for the study.

2.1.4 Assessment Levels

Impacts can be assessed at different levels. According to Hulme (2000), the common units of assessment are the household, the enterprise or the institutional environment within which agents operate. Khandker (1999) and Ledgerwood (1999) stated that impact can be assessed at household, enterprise, individual and community levels.

According to Yaron (1997), there are two major schools of thought that are prominent in impact assessment of microfinance programs. The first one purely focuses on the organization or company and its operation. This approach focuses on institutional outreach and its sustainability. The assumption is that if both outreach and sustainability have been enhanced, then the intervention is judged to have a beneficial impact as it has widened the financial market, which in turn extends the choice of people looking for credit and saving services. The second approach is the one, which focuses on the intended target groups or clients. This is the case that is developed by USAID's AIMS project that seeks to assess impact at household, enterprise, individual and community levels.

According to AIMS (2000), the framework posits that impact occurs at the levels of household, enterprise, individual and community. At the household level, microfinance contributes to net increase in household income, asset accumulation and labor productivity. Income invested in assets such as saving and education increases household economic security by making it possible to meet basic needs. This relationship clarifies paths of impact by which microfinance interventions can contribute to the goals of poverty alleviation and economic growth, and thus, households improve their economic security. To assess changes within this relationship, impact can be assessed in the movement of household's livelihood toward or away from greater economic security.

2.1.4.1 Impact at Household level

Assessing impact at the participant level requires adjustments to control for differences in unobservable household and village characteristics. That is, to measure the credit impacts of programs that are due to variations in individual level participation, it is necessary to control for differences in village level characteristics that attract a program to a particular village.

According to Yaron (1997), the impact of program placement on village level average income, employment and poverty is estimated by fitting a village level regression that measures the differential impacts of program placement at the village level while controlling for observable characteristics of the village. Group-based credit program may be efficient for joint production and consumption behavior of households. It may also be beneficial for such households to borrow from group-based credit program, which charges less than informal lenders, in order to make more efficient use of available resources, mainly family labor. In this case, the evaluation of the effects of program participation on households' resource allocation is based on this efficiency argument (Khandker, 1999).

Assessing the impact of credit involves one basic problem: unless households are shown to be credit constrained (meaning that households are constrained by a lack of liquidity and do not have access to credit to solve their credit problems), it may be difficult to show the impact of credit on behavioral outcomes such as income and employment.

Khandker (1999) recommended that rather than formally test whether borrowers of group based credit programs are credit constrained, he assumed that program participants were credit constrained by program design. This assumption seems valid for several reasons. First, in the case of group-based lending to the landless, the time path of credit allocated to members is part of the dynamic optimization problem of a group, and the level of credit provided to each individual in the group is tailored to fund a new self-employment project of certain size. Second, the cost of credit includes not only the interest rates but also the timing of repayment and the penalties associated with defaults. Third, group-based credit is packaged with both responsibilities (meeting attendance, forced saving, shared default risk) and benefits (training, insurance, and consciousness-raising), which are likely to make the cost of credit endogenously determined by household characteristics. Finally, the close monitoring aspects of group-based lending make group credit no fungible.

2.1.4.2 Sustainability of Microfinance Institutions

Hosain (1988) argued that the Grameen Bank approach has a fair chance of success in densely settled poverty stricken areas of Asia, but for Africa an appropriate delivery mechanism has to be worked out through trial and error. The Grameen Bank's approach of formation of small homogenous groups for group guarantee of loans and supervision of loan utilization, recovery of loans in small regular installments and institutions for collective saving could work well across different environments. However, elements like taking the bank to the poor people and intensive interaction of bank staffs with borrowers may not appropriate and could become too costly for sparsely settled people.

According to Mengistu Bediye (1997), to be successful in credit provision and savings mobilization, there are a number of strategies that can be adopted but there is no single approach, which is applicable for all countries. For example, Grameen Bank approach may not work for all in delivery of credit but one of the important lessons is that appropriate procedures can be developed only after considerable experimentation through thorough understanding of the physical and socio economic conditions.

Mengistu (1997) indicated that loan size, household income, level of education, supervising, borrowers' attitude to loan repayment, number of sources of income, loan diversion, household size, household dependents and value of assets, of the borrower are the major factors affecting loan repayment performance.

2.1.5 Models of Impact Assessment

In the case of microfinance impact assessment, one needs to conceptualize how microfinance leads to changes and what changes are reasonable to expect given the services provided and loan conditions. The assumption is that interventions will change human behaviors and practices in ways that lead to the achievement or raise the probability of achievement of desired outcomes. More specifically, impact is measured in terms of outreach and sustainability of MFI, and it is believed that if both are achieved then the program is beneficial (Hulme, 2000). In addition, as stated above, impact can also be measured at different levels of the economy. Therefore, models have to be identified to capture the explanatory variables.

A variety of multivariate statistical techniques can be used to predict a binary dependent variable from a set of independent variables. When one or more of the explanatory variables in regression model are binary, it can be represented as dummy variable and appropriate models are expected to be applied. However, the application of the linear regression model when the dependent variable is binary is more complex and /or even not efficient (Pindyck and Rubinfed, 1981). The dependent variable, which is dichotomous taking on two values, zero and one, requires the use of qualitative response models. In this regard, the ordinary least squares (OLS), descriptive analysis, multiple regression models, linear probability models, Logit, Probit and Tobit models are the possible alternatives.

However, several estimation problems can be raised from some of these alternatives. As Gujarati (1992), linear models or Ordinary Least Square (OLS) estimation methods have been used to see the effects of independent variables when the dependent variable is continuous. The author noted that using the linear probability models where the dependent variable takes either 0 or 1 is found to have several problems such as non-normality, hetroscedasticity of disturbance term, non-fulfilment of the criteria that the probability of the occurrence within the range 0 - 1 and lower value of coefficient of multiple determinants (R2) as a measure of goodness of fit. Using linear probability model may generate predicted values outside the 0-1 intervals, which violates the basic tents of probability. To alleviate these problems Gujurati (1992) argued that the most widely used qualitative response models are the Logit and Probit models. Comparing with descriptive analysis model Feder(1985) noted that the Probit and Logit models appear to be preferable to discriminate function in analyzing studies involving qualitative choices. An extension of the Probit model is the Tobit model. The Probit model is associated with the cumulative normal probability function, the Logit model assumes cumulative logistic probability distribution whereas the Tobit model assums censored regression model. Such models including the Logit model are usually estimated by the maximum Likelihood methods (MLM). Since the logistic regression model is non-linear, an iterative logarithm is necessary for parameter estimation (Gujarati 1992). More important, the advantages of Probit, Logit and Tobit models over the linear probability model are that the probabilities are bound between 0 and 1. Moreover, they best fit to the non-linear relationship between the probabilities and the explanatory variables.

Gujarati (1992), Maddala (1988) and Feder (1985) have recommended Tobit model for function forms with limited dependent variables that are continuous between 0 and 1, Logit and Probit models for discrete dependent variables. For this study, therefore, Probit and Logit models are used in addition of descriptive analysis using ratios & percentages.

2.1.6 Description of MFIs in Ethiopia

In Ethiopia the legal foundation for the microfinance industry was laid in the country with the issuance of Proclamation No.40/1996 on licensing and supervision of microfinancing institutions in 1996. The proclamation encouraged the spread of Microfinance Institutions (MFIs) in both rural and urban areas as it authorized them among other things, to legally accept deposits from the general public (hence diversify sources of funds), to draw and accept drafts, and to manage funds for the micro financing business.

The delivery of financial services by MFIs in Ethiopia has been viewed as the strategy to secure food, poverty reduction and development of the economy. Microfinance helps the unemployed become employed, thereby increasing their income and consumption and reducing poverty (Wolday Amha, 2002).

2.2 Empirical Review

Different studies in different disciplines used different approaches to assess impact.
Khandker (1999) studied the impact of three micro credit institutions in Bangladesh on selected household levels. The study found that the most important effect of borrowing from a micro-credit program is its impact on per capita expenditure. The study also pointed out that the participation in group-based microfinance shows positive and significant impacts for school enrolment, asset holdings, consumption, nutritional status and household net worth of borrowers in all three programs.

Two major studies have assessed the economic impact of Grameen Bank on rural households. First, the study was undertaken by Hossain (1988) in the mid 1980s. It was based on 33 structured survey of 975 borrowers in 15 villages. Household level information was collected from a random sample of 200 households in five villages and 80 households in two control villages. The study produced several types of evidence indicating the positive impact on the economic status of Grameen Bank borrowers. The loans had generated new employment, which reported that they were unemployed before joining the program. Incomes in member households were 43% higher than in target group households in the control villages. The study also reported increases in per capita food consumption in member households and more in housing and education. The second was by the World Bank in collaboration with the Bangladesh Institute of Development Studies used data on consumption, savings, asset ownership, and net worth to assess the effects of micro credit programs on poverty. The data were collected from members of the program and non-members.

In Indonesia, 90% of BRI clients surveyed on the island of Lombok had moved above the poverty line, with income increases averaging 112 percent (Panjaitan-Drioadisuryo and Cloud, K, 1999). In Zimbabwe, extremely poor clients of Zambuko Trust, a local MFI, increased their consumption of high protein foods at a time when food expenditures across the country as a whole were decreasing (Barnes, 2001). In Tanzania the income and assets values of borrowers are almost twice that of non-borrowers (REPOA, 2005). In India, in addition to increased economic wellbeing, SHARE clients have shown a striking shift from irregular, low-paid daily labour to more diversified sources of income, with a strong reliance on small businesses (Simanowitz and Walters, 2002).

Joanna Ledgerwood (1999) pointed that successful microfinance institutions contributing to poverty reduction are particularly effective in improving the status of the middle and upper segments of the poor. However, clients below the poverty line were worse-off after borrowing.

Even though operations of MFIs in Ethiopia are a recent phenomenon, not more than a decade and half, studies have been undertaken on different aspects including impacts of the services of the institutions. For example, Fiona Meehan (2000), Berahnu (1999), Teferi (2000), Tassew (2004); Woldy (2000); Daba (2004) and Bamlaku(2006) and concluded that microfinace scheme in Ethiopia has a positive impact on household nutrition, asset accumulation and net welfare of the program participants.

Meehan (2000) made impact assessment on the performances of DECSI. The study was based on both primary and secondary data to analyze the impacts of the services of the institution. Respondents were asked to assess the impact of DECSI financial services on their household income. According to Meehan (2000), majority of respondents reported a considerable, a few reported relatively modest increases in their household income, few said there had been no change in their economic status and very few reported they were worse off. The result of the study stated that women were more likely to have taken on new activities and more likely to complain that the loan size was insufficient.

Berhanu (1999), from his study of micro-credit and poverty alleviation in Ethiopia, identified that more than 70% of the respondents under his study reported the positive contribution towards employment creation, income generation, improved access to health and educational facilities as well as household nutrition. Teferi (2000) also argued the positive contribution on the average monthly total income of the program participants from his study of microfinance and the poor in Tigray.

Berhanu (1999) and Teferi (2000) found that the performance of saving mobilization from the clients was not satisfactory since the majority of the respondents have no saving accounts after the loan scheme even though there seems to rise the number of saving accounts of the clients. From the study of Berhanu (1999) and Teferi (2000), it is possible to estimate the performance of loan repayment rate of ranging between 79% and 98%.

Tsehay and Mengistu (2002) concluded that the credit and saving institutions intervention among poor women in Ethiopia has made some positive effects that made a difference on the socio-economic empowerment of the women clients.

Tassew (2004) in his study in Tigray indicated that Ethiopia has started giving attention to the establishment of MFIs in rural areas so as to help the poor get access to financial resources. He pointed out that the important consideration before providing credit to the poor is to examine whether the key factor for the poor to get out of their problem is finance. In this study, which was conducted in 35 watersheds in central Tigray, he showed that the most important and profitable activities the poor can engage within the existing micro-credit systems are petty trading, goat fattening, poultry and chicken farming. As far as oxen and goat fattening is concerned, there is a higher positive return to both labor and capital.The return to capital is, of course, higher than the return to labor according to this study. Therefore, finance is required for these activities and thereby to reduce poverty in the study area. This, however, depends on the price of livestock.

Wolday(2000) from his study of all MFIs in Ethiopia found that MFIs in Ethiopia have shown that significant improvement interms of loan outstanding and savings. The clientele served by the MFIs in Ethiopia are mainly the rural poor. About 44 percent of the clients of MFIs in Ethiopia are female, relatively higher out reach of MFIs by all standards of measurement. The two government supported MFIs are ACSI and DECSI, which account for 80% of total clients in the industry. MFIs in Ethiopia have high repayment rate, which varies from 94% to 100%

Bamlaku(2006) has employed both descriptive statistics and logistic regression model to assess the impact of ACSI. According to his study, ACSI has helped its clients to smooth their income, shield them against shock during lean periods and have some productive assets.

In addition, Daba (2004) used logit model and descriptive statistics to examine the relation between participating in micro financing and the improvement in living standards. Then, he indicated that OCSSO has made positive contribution towards improving the welfare of the program clients. He went on explaining that since the out reach is increasing as the years go by and the loan repayment performance has been 100% for several years, it is possible to argue that OCSSO is contributing to poverty alleviation. But, loan repayment performance cannot be taken as best indicator of improvement in levels of well being because there are people who intentionally commit default of repayment. In addition, people may be forced to pay the money they have borrowed although there is no improvement in their living standards. This is supported by several studies. For instance, Khandker (1998) pointed out that loan recovery rates couldn't be used as the sole determinant of a program's success since many microfinance programs rely on social, peer, and other forms of pressure to maintain high loan recovery rates. In addition, the study by Ledgerwood (1999) indicated that the willingness to pay proxy of impact assessment is a simple measure of impact and is found to have the following problems: it is very difficult to indicate the magnitude of the impact; it does not clearly indicate the intra-household effects and it hardly shows the long-term consequence of the micro finance institutions (i.e., poverty reduction).

CHAPTER THREE: METHODOLOGY

3.1 Description of the study area

The study was conducted in Akaki woreda. Akaki Woreda is one of the 180 Woredas in the Oromia Regional State of Ethiopia. Akaki woreda'a is one of the 11 woredas in East Shewa zone and it is the smallest Woreda in the same. The Woreda covers an area of 598.58KM^2. It is bounded by South west Showa zone in the south west, by Addis Ababa in the North West, by North Showa zone in the North, and by Ada'a Chukala in the East. The administrative center of this woreda is Dukem.

Based on the census carried out in May 2007, the total population of woreda is estimated at 87,462 of which 45,204 are female and 42,258 are male.

Akaki's latitude ranges between 1500 and 2300m, with the exception of the yerer mountain ranges. The woreda is divided into two agro-ecology zones; that is Woina Dega (98%) and Dega (2%). The woreda has potential for both crop and livestock production, which is mainly undertaken by small holder farmers. There are also relatively growing number of commercial farmers and agro-processing industries operating in the area.

3.2. Types and Source of Data

To assess the impact of the program both primary and secondary data were employed. First hand data, in simple terms is form the bedrock of explanations, generalizations, conclusion and recommendations for this research. Much emphasis was placed on the collection of accurate and reliable data so as to be able to come up with objective evaluations and to make informed conclusion and judgments. The main sources of primary data were from the clients under WMFI SC. using structured questionnaire. The household data was collected from frequent clients since their program participation. For those who are fresh-clients, information on the variables concern of for the last two years. The questionnaire was designed in English and translated into "Amharic and Afan Oromo" language on the basis of the assumption that it facilitates the interview process. Since, income, employment, consumption, education, loan repayment record, assets, savings, medical facilities, children's schooling and other related issues have positive relation with the program they were due attention during question design. Secondary data sources are the foundations on which the theoretical and conceptual framework of the research is built. The main sources of the secondary data are from different MFIs' reports, literatures, etc.

3.3. Method of data collection

3.3.1. Sample size

It is fact that the sample size highly matters the findings of the research. To avoid the sample error and come up with findings that represent the entire population under the study, taking representative sample is very plausible. Wasasa Micro-Financing institution has been providing credit and saving services for 2000 clients. The researcher is designed to take 20% of the total population.

3.3.2 Sampling Techniques

The researcher is interested to use multi-stage sampling procedure to select the sample. Because of proximity to the researcher, Akaki Woreda was purposely selected within the zone. At the second stage all 22 branches of WMFI were stratified into three based on the number of customers i.e. Large (which have more 300 clients), Medium (about 200 clients), and small (which have less than 100 clients). From the four which have more than 300 clients, the largest three which has more duration in the program were used as study branches. Thereafter, two cluster respondent groups were identified from the total population of sample branches. The first cluster is frequent borrowers who are clients at least for the last two years. The second cluster is from clients who have stayed in the program not more than six months. Finally, simple random sampling techniques were employed in each cluster. The total sample size was 200. Based on length of participation, 100 was selected from clients which have two years and above in the program. The remaining 100 was selected from non-clients.

3.4. Methods of Data Analysis

3.4.1. Descriptive analysis

After collecting the data, both descriptive statistics and econometric tools were employed so as to investigate the impact of credit on improving the life of the clients. Various statistical tools were used to investigate the difference in welfare between the clients who have been stayed more than two years in the program and fresh clients. A summary of statistics and tabulation of field data was used to examine the impact of WMFI's intervention towards improving the welfare of the clients.

The cross tabulations could highlight differences in the mean values of the hypothesized impact variables between frequent borrowers and their counter parts.

3.4.2. Econometric Analysis

3.4.2.1 Impact Assessment at house Hold Level

In addition to descriptive statistics, Logit Model was used to investigate the factors for the increase in welfare indicators such as income. But to measure some psychological impacts, mean values were considered. In the model, the status of income was treated as a dichotomous dependent variable by taking 1 for increase and 0 otherwise. The functional relationship between the probability of improvement in income and explanatory variables is specified as:

Y = F (RES, LS, VIS, Ui) -- (1)

Where: Y = Average yearly income of household

RES = Respondents (clients and non-clients)

LS = Loan size

VIS = Voluntary individual savings

Ui = Error term

Since the dependent variable is dichotomous, Logit Model was used as suggested by several studies for its manageability, simplicity and appropriateness (Alderic and Nelson, 1984). While specifying the distribution of the model, the steps followed by Gujarati (1992) was considered as shown below:

$$P_i = 1/(1 + e^{-z_i}) \text{ --------------------------------- } (2)$$

$$Z_i = \beta_0 + \beta_1 X_{1i} + \beta_2 X_{2i} + \text{ --- } + \beta_n X_{ni} \text{ -------------------- } (3)$$

$$P_i = 1/\left[1 + e^{-(\beta_0 + \beta_1 X_{1i} + \beta_2 X_{2i} + \text{ --- } + \beta_n X_{ni}}\right] \text{ ------------------- } (4)$$

Where Pi = Probability of improvement in income in relation with the explanatory variables

e^{zi} = Irrational number to the power of z_i

z_i = A function of n explanatory variables

β_s = parameters.

Thus, the probability of improvement in income in relation with the explanatory variables is explained based on the sign of the coefficients. The parameters tell how the economic status of the frequent borrowers and control groups changes as explanatory variables change. The positive sign of the parameters show the trend that the changes of the variable are greater in frequent borrowers than control groups.

Therefore, using descriptive statistics and the Logit model, the analysis of the assessment was based on the following variables.

a) Income: One of the immediate impacts of having access to credit from WMFI microfinancing is on income. The household is usually expected to benefit from the credit in terms of, among others, improvement in income. Income may have impact on other economic conditions. The clients' monthly income, which includes income from the loan and other sources side by side, were collected.

b) Program Participation: participation in microfinance program is expected to create or/and expand potential of activities financed by the program. It also reduces the extent of credit market imperfection that is resolved with enhanced availability of credit. Suing a participation dummy would allow the average returns to participation. Thus, the participants are expected to benefit from the program in terms of improvement in income.

c) Loan size: It is also expected to improve productive capacity of the intended activities, which inturn have a positive impact on income.

d) Voluntary Individual Saving: There are two types of savings in the MFI's scheme. The first one is a compulsory saving, which is normally enforced and starts simultaneously with the loan that is approved for an individual. On the other hand, voluntary savings is an individual savings, which depends on the willingness of the individual to save. Therefore, for this analysis, voluntary savings will be considered.

e) Educational Facilities: The second variable is access to educational facilities. Thus, enrolment of school-age children and the responsiveness of access to education will be considered.

f) Medical Facilities: Respondents were asked to recall their monthly average medical expenditures. However, similar to education, they may not able to estimate the medical expenditures. Information on the number of members who were ill or injured in the household and taken for medical treatment was collected. Thus, a response to medical facilities is considered.

g) Nutritional Status: The immediate impact of microfinance is on income, which is expected to have impact on consumption expenditure of households' diet. Thus, consumption expenditure is used to evaluate the effect of the access to credit. The increase in consumption expenditure is expected to improve household diet and living conditions. The number of meals per day and responsiveness of access to nutrition was also be considered in the analysis.

h) Employment Generation: To evaluate the impact of WMFI microfinancing scheme on employment, the number of employed people and status of employment generation were considered.

i) Women Empowerment: This is to identify how women clients have been empowered by their participation in the program. Information who controls and decides over the business activities within the household was collected.

3.4.2.2. Out Reach and Loan Repayment Performance

The outreach and sustainability of MFI approach is also another prominent tool to assess the impact of microfinancing scheme on poverty alleviation. The assumption is that if outreach has been expanded and institution is sustainable, then the program is judged to have a positive impact as it has widened the financial market. This, in turn, based on the assumption that credit and saving services led to improve household security and economic status of the clients.

Johnson and Rogaly (1997) argued that the repayment rate is the indicator most often used as a measure of the performance of credit scheme. The modelling of loan repayment performance incorporates both the borrower and lender characteristics. The repayment amount of 100 % is considered as full repayment and below it is taken as not fully paid within the specified loan repayment time. Thus, loan repayment performance takes the value 1 if borrowers repaid the loan in full and 0 otherwise.

Therefore, the Logit model is specified determine factors that affecting the loan repayment performance of WMFI based on the following functional relationship.

LRP = F (AYIL, AIOA, VA, LS, ED, ACD, AG, SX, UFR, TLD,
LSV, ALRT, LDR, U1) -- (1)

Where: LRP = Loan repayment performance

AYIL = Average Yearly Income from loanable activities

AIOA = Average yearly income from other activities

VA =Value of assets

LS = Loan size

ED = Education level

Illiterate = 1

Grade 1 – 6 = 2

Grade 7 – 8 = 3

Grade 9 – 12 = 4

Above grade 12 = 5

ACD = Attitude to cost of default

ACD = 1 if the borrowers feels high cost of default and 0 Otherwise

AG = Age

LDR = Loan diversion rate

LDR = 1 if a borrower diverts and 0 otherwise

SX = Sex

SX = 1 if male and 0 otherwise

UFR = Use of financial records

UFR = 1 if a borrower uses financial records and 0 otherwise

TLLD = Timeliness of loan disbursement

TLLD = 1 if the disbursement was on time and 0 Otherwise

LSV = Loan supervision

LSV = 1 if it was sufficient and 0 Otherwise

ALRT = Appropriateness of loan repayment time

ALRT = 1 if it was on appropriate period and 0 Otherwise

ND = Number of dependents

U1 =Error term

Therefore, the loan repayment performance of WMFI is analyzed based on the following explanatory variables.

a).Income from Activities Financed by the Loan: This variable may have a mixed impact on loan repayment. An increase in income from activities financed by the loan is expected to have a positive sign if the increase in income increases loan repayment capacity. On the other hand, it may have a negative impact if the success in income leads to decrease the need for further credit from the institution.

b) **Income from Other Activities:** Availability of other sources of income is expected to have positive contribution for loan repayment performance. On the other hand, however, this income may produce carelessness on the part of beneficiaries in meeting credit obligations since they may not need credit in the future from the same source and in that case it is expected to have negative impact.

c) **Asset Value:** Value of assets of the borrowers is expected to have a positive impact on loan repayment performance having the perception that the assets will be under liability in case of default.

d) **Loan Size:** If a loan amount is just enough for the intended purpose, it will have a positive impact on the productive capacity of the intended activities. But, for large amount of loan size, which is more than the capacity of the project, it is expected to have a negative impact because the excess of loan amount will have a burden.

e) Education Level: This variable is expected to have a positive impact. More educated clients are expected to use the loan fund effectively compared to less educated one.

f) **Clients' Attitude to Cost of Default:** Cost of default includes claims against personal wealth, claims against guarantees, social sanctions such as loss of social status, loss of future access to credit and other economic benefits. For those who are at least one of these factors is very important, the variable will have a positive sign. But, for those beneficiaries who undermine these costs, it will have a negative impact.

g) **Age:** It is usually believed that the increase in age will have business experience. Thus, it is expected to have a positive sign.

h**) Sex:** Many microfinance specialists believe that women are better loan payers than male clients. On the other hand, however, some empirical studies shows the opposite result.

i). The Use of Financial Records: If a borrower uses financial records, it will help to follow up his/her loan repayment position, which contributes for loan repayment. Thus, the use of financial records is expected to have a positive sign.

j) **Timeliness of Loan Disbursement:** If loan is disbursed on time from the point of view of the borrower, then it is likely that the probability of utilizing the loan proceeds on time. Thus, it is expected to have a positive sign. On the other hand, however, if loan is issued late from the point of view of the borrower, the client could not be able to employ the fund he/she planned to do on time.

k) **Loan Supervision:** Supervision will make borrowers observe their credit obligation. As a result, borrowers are encouraged to settle their duty by improving loan repayment performance. Thus, it is expected to have a positive sign.

l) **Appropriateness of the Loan Repayment Time:** It is expected that this variable will have a positive sign because the borrowers who find this repayment period suitable perform better.

m) **Loan Diversion:** If loan is diverted to non-income generating purposes (such as consumption, clothing), it is likely that the sign of this variable will be negative since it reduces repayment capacity. If, however, the loan is diverted to income generating purposes, the variable is expected to have a mixed effect. Loan diversion has the character of fungibility, which refers to the interchangeability of the uses of loan to which credit can be put. It may invalidate the target of the institution.

Estimation procedures

Assessing impact at the participant level requires adjustments to control for differences between frequent borrowers who are taken as clients and those who are looking for credit who are taken as non-clients. The variables used in regression are respondents who are clients and non clients, amount of loan, and voluntary individual savings. The dependent variable is variable which takes a value of 1 or 0 depending on whether the respondents income improved or not. The Logit model specifies the functional relationship between the probabilities of respondents being improved in program participants and indicated various quantitative and qualitative explanatory variables of each group. Thus, the impact is analyzed based on the following results of the model through the coefficients of each variable.

Table 3.1 List and description of independent variables in the model

Variables	Description
Y	Average annual income 1= improved 0=not improved
Res	Respondents 1= clients (frequent borrowers) 0= new-clients
Ls	Loan size
VIS	Voluntary individual saving

CHAPTER FOUR: RESULTS AND DISCUSSIONS

4.1 Descriptive Results

4.1.1 Characteristics of Respondents

From total 200 hundred respondents in the sample branch, 100 clients and 100 fresh clients were interviewed for the study. Out of the clients sample of the program, 84 (84%) are male and 16 (16%) are female. Out of the fresh clients 77 (77%) are male and 23(23%) are female. Out of the total respondents of sample 161(80.5%) are male and 39 (19.5%) female (See Table 4.1)

Table 4.1 Sample Respondents by Sex

Types of respondents	Sex		Total
	Male	Female	
clients	84	16	100
Non-Clients	77	23	100
Total	161	39	200

Source: Survey results, 2012

Considering the marital statuses of the sample respondents, 15(7.5%) are single, 165(82.5%) are married, 6(3%) are divorced, and 14(7%) are widowed. Out of the total client respondents 89(89%) are married and out of total fresh client respondents 76(76%) are married (see table 4.2)

Table 4.2 Sample respondents by marital status

Marital status	Types of respondents		Total
	Clients	Fresh Clients	
Married	89	76	165
Single	5	10	15
Divorced	1	5	6
Widowed	5	9	14

Source: survey results, 2012

With regards to age group, out of total sample respondents the age of 88(44%) lie in the range of 31 – 40 and 63 (31.5%) are in the range of 21- 30. From this it is easy to understand that the age of the most respondents lie in the range of age 21 – 40 (See table 4.3).

Table 4.3 Sample Respondents by age group

Age Group	Types of respondents				Total
	Clients		Fresh Clients		
	Male	Female	Male	Female	
15 – 20	4	2	3	1	10
21 – 30	26	8	20	9	63
31 – 40	35	5	38	10	88
41 – 50	11	1	9	2	23
51- 60	7	0	5	1	13
Above 60	1	0	2	0	3

Source: Survey results, 2012

Interims of educational back ground, from the total sample respondents 98(49%) can't read and write. 75(37.5%) are in the range of grade 1-6 and 27(13.5%) are in the range grade 7-12. From the total sample clients 47(47%) are illiterate, 38(38%) are in the range of grade 1-6 and 15(15%) are in the range of grade 7-12. On the other hand, from the total sample of fresh clients 51(51%) are illiterate, 37(37%) are in the range of grade 1-6, 7(7%) are grade 7 & 8 and 5 are in the range of 9-12(See table 4.4)

Table 4.4 Sample of respondents by level of educations

Level of education	Types of Respondents				Total
	Clients		Fresh clients		
	Male	Female	Male	Female	
Illiterate	39	8	38	13	98
Grade 1-6	33	5	30	7	75
Grade 7 – 8	7	2	4	3	16
Grade 9-12	5	1	5	0	11

Source: Survey results, 2012

Out of the total sample respondents, the number of household size ranges from 1 to 12. The average household size of clients and fresh clients are 6.2 and 3.1 respectively (see table 4.5).

Table 4.5 Household size of respondents

Household size	Types of respondents		Total
	Clients	Fresh Clients	
1	3	5	8
2	5	11	16
3	9	21	30
4	8	9	17
5	17	13	30
6	19	11	30
7	14	7	21
8	6	9	15
9	7	5	12
10	8	7	15
11	3	2	5
12	1	0	1

Source: Survey results, 2012

The following table shows the number of household dependants. The number of household dependants ranges from 0 to 7. The average household dependants for clients and fresh clients are about 4 and 5 respectively (See table 4.6)

Table 4.6 Household dependants

Number of dependents	Types of clients		Total
	Clients	Fresh Clients	
0	11	21	32
1	17	17	34
2	13	18	31
3	22	20	42
4	15	11	26
5	14	9	23
6	7	3	10
7	1	1	2

Source: Survey results, 2012

It is also observed that microfinance; Iqqub, Eddir, relatives, friends and individual money lenders are source of finance for sample respondents. From figure 4.7, it is observed that Iqqub and Eddir are the most dominant sources of finances next to micro finance to the poor. This implies that rural poor has the lack of access to formal credit market. Out of the sample clients only 5(5%) are reported Iddir and Eqqub are sources of finance while 49(49%) are for non- clients (See table 4.7).

Table 4.7 Source of Finance Respondents

Source of finance	Types of respondents		Total
	Clients	Non- Clients	
WMF	100	0	100
Iddir/Eqqub	5	49	73
Individual money lender	0	14	14
Relatives/friends	0	11	11
Conventional bank	0	0	0

Source: Survey results, 2012

4.1.2 Impacts of the Program at the Household Level

As the objective of the study is to assess the impact of Wasasa micro financing program in the sample cities, the impact of the intervention is observed in association mainly with income, household diet, access to education, responsiveness for medical care, employment opportunities, savings and women empowerment. The findings of the study are stated as follows.

4.1.2.1 Effects on Income

One of the immediate impacts of having access to credit from the microfinancing program is on income. This induced income may have impact on other outcomes such as household consumption, access to education and medical facilities, etc. Since most of the respondents do not keep records on their business activities, the income figures may not be accurate but the estimate yearly income of the respondents serves for the study. Since the respondents' yearly income may or may not be only from the loanable activities, income from the loanable and non-loanable activities of each respondent was collected. From the total sample clients, 49(49%) reported that their yearly income is in the range of 2001-3000 Birr while from the total sample non-clients only 15(15%) reported yearly income in the range of 2001-3000 which shows difference in the level of income between the two groups. It is also observed that 19 (19%) of clients and 10 (10%) of non-clients reported average yearly income of between 3001-4000 Birr (see table 4.8).

Table 4.8 Average Yearly income of the respondents

Income level(in Birr)	Types of respondents		Total (%)
	Clients (%)	Non-clients (%)	
Below 1000	6(6%)	47(47%)	53(26.5%)
1001- 2000	17(17%)	25(25%)	42(21%)
2001-3000	49(49%)	15(15%)	64(32%)
3001-4000	19(19%)	10(10%)	29(14.5%)
4001-5000	6(6%)	2(2%)	8(4%)
Above 5000	3(3%)	1(1%)	4(2%)

Source: Survey results, 2012

Table 4.8 also shows the positive contribution of the microfinancing scheme in income generating. If we compare the number of each group whose average yearly income is below 2000 Birr and above of Birr 2000, it is evident that only 23 (23%) of clients earned average yearly income of below Birr 2000 but 77(77%) of clients earned above Birr 2000. On the other hand, 72(72%) of non-clients reported average yearly income of less than Birr 2000, while only 28(28%) of non-client reported average yearly income of above Birr 2000. This implies the percentage of clients (77%) whose level of income above Birr 2000 is much greater than the percentage of non-clients (28%) whose level of income above Birr 2000.

Participation in microfinance service has an expectation that leads to increase household income, among others. Thus, the core impact study includes a question about relative changes in their household income status. Based on this question, the responsiveness of the two groups was collected. Out of total clients, 49 (49%) reported the trend that their overall level of income has been increased significantly since their participation in the program while from the total sample non-clients only 7(7%) reported significant increase overall level of income for the last two years. 48(48%) of the clients and 13(13%) of the non-clients reported the trend that their overall level of income has been increased. The percentages whose level of income has at least increased over the last two years are about 97% for clients and 20% for non-clients. The improvement in overall level of income is much more pronounced in clients than non-clients (see table 4.9)

Table 4.9 Trade of house holds income

Trend	Types of respondents		Total (%)
	Clients (%)	Non-Clients (%)	
Increased significantly	49(49%)	7(7%)	56%
Increased	48(48%)	13(13%)	61%
Remained the same	3(3%)	66(66%)	69%
Decreased	0(0%)	9(9%)	9%
Decreased significantly	0(0%)	5(5%)	5%

Source: Survey results, 2012

From the respondents of sample clients who reported the increase in their level of income, 97(97%) reported that access to working capital from microfinance credit services helps them to buy inputs, able to purchase business assets, expand existing business for agricultural activities and petty trade. On the other hand, from the sample of non-clients who reported the increment in their level of income, 20 (20%) of them reported that the causes for their income improvement are good agricultural season and petty trade from their own working capital.

Out of the sample clients who reported that the trend remained the same, crops failure, illness or death of the family were reported as main problems for their business activities. However, lack of credit, crop failure, unemployment, illness or deaths of the family were reported as the major reasons for the decrement of their level of income of non-clients. Out of total non clients, 53(53%) identified that lack of access to credit was the most significant reason for the problems in their business activities.

Therefore, the responsiveness achieved in relating with income from program participants shows a clear indication that microfinance credit has enabled the clients to generate disposable income that could be spent on better facilities which could improve the living standard of the households concerned.

4.1.2.2 Effects on Household Diet

Having access to microfinance credit has also impact on household nutritional status. This indicator is simply to capture the direction of a change in type and quality of household diet. Since the rural poor may not have records on their daily, monthly or yearly expenditure, type of meals or quality of meals, information on their average yearly expenditure on consumption, type of meals and their responsiveness in nutritional status and trends of consumption expenditure were collected. According to AIMS (2000), the two promising indicators proposed for food security at household level are numbers of eating meals per day and number of different types of food consumed. Based on this framework, the results of the collected data are represented in table 4.10.

From the total respondents, only 3(3%) of clients and 27(27%) of non-clients reported that they do have only breakfast and formal evening meal. Only 4(4%) of clients and 15(15%) of non-clients have only lunch and evening meal. 89(89%) of clients and 56(56%) of non-clients reported that they could get meals three times a day. The findings show that program participants have got more chance of getting meals three times a day than those who have not participated in the program (see table 4.10)

Table 4.10 Types of meal respondents

Meal Types	Types of respondents		Total (%)
	Clients (%)	Non-clients (%)	
Break fast & evening meal	3(3%)	27(27%)	30(15%)
Lunch & evening meal	4(4%)	15(15%)	19(9.5%)
Break fast, lunch & evening meal	89(89%)	56(56%)	145(72.5%)
Breakfast, between breakfast and midday, midday, between midday & evening meal, and evening meal	4(4%)	2(2%)	3(3%)

Source: Survey results, 2012

According to Teferi Zewdu (2000), the immediate impact of microfinance program is on income and this induced income is expected to have an impact on another outcome like increase in consumption expenditure that leads to better household diet and living condition. Thus, the average yearly consumption expenditure of each respondent was collected. This is also used to compare the consumption expenditure of clients and non-clients on household nutrition. However, the respondents could not estimate the expenses and it was not reasonable. As a result, consumption expenditure is dropped from the analysis. Instead, the trend of consumption expenditure is used (see table 4.11).

Table 4.11 Trends of Consumption Expenditures of Respondents

Consumption Expenditure (Birr)	Types of Respondents		Total (%)
	Clients (%)	Non-Clients (%)	
Increased	78(78%)	47(47%)	125(62.5%)
Non-Increased	22(22%)	53(53%)	75(37.5%)

Source: Survey results, 2012

Information on the trends of household diet and responsiveness of consumption expenditure were also collected. Concerning consumption expenditure, it is assumed that the improvement in consumption expenditure leads to better household diet and living condition. This concept tells us whether the status of household diet has been improved or not for the last two years. It is obvious that microfinance intervention is expected to support program participants in ensuring food security, which is the prime concern of all poor households.

The findings of this study in relation to this variable indicated that 78 (78%) of sample clients and 47(47%) of sample non-clients reported the trend that their household diet and consumption expenditure have been improved over the last twelve months. Only 22(22%) of clients and 53(53%) of non-clients reported that their type and quality of diet as well as their consumption expenditure have not been improved over the last twelve months.

This result indicates that more clients have enjoyed diet improvement than non-clients. Program participants have more chance of improving their diet in comparison to nonparticipants. Ability to produce and buy more cereals and staples are the major reasons for the improvement of their nutritional status (see table 4.12).

Table 4.12 Trends of house Expenditure and Consumption Expenditure

Trend	Types of Respondents		Total (%)
	Clients (%)	Non-Clients (%)	
Improved	78(78%)	47(47%)	125(62.5%)
Non-Improved	22(22%)	53(53%)	75(37.5%)

Source: Survey results, 2012

4.1.2.3 Effects on Educational Facilities

The other variable that is considered in the study is access to educational facilities. Information was collected on potential school-age children, children currently attending school and average yearly educational expenditure. Enrolment of school-age children is also considered to assess the impact of credit scheme in improving access to educational facilities. From the reported 271 potential school-age children of clients, 210(77.49%) are actually enrolled and attending their school this year. On the other hand, from the reported 210 potential school-age children of non-clients, 167(72.93%) are actually enrolled and attending their school. This suggests that enrolment of school-age children who are currently attending school of the two groups show difference and indicates that micro finance has positive impact on the number of school enrolment children (see table 4.13)

Table 4.13. Number of school enrolment children

Number of school- age children	Enrolment			
	Potential		Actual	
	Clients	Non-Clients	Clients	Non-Clients
1	5	12	1	4
2	18	21	9	15
3	43	34	37	29
4	103	47	96	41
5	41	33	36	29
6	32	29	26	24
7	29	34	24	25
Total	271	210	229(77.49%)	167(72.93%)

Source: Survey Results, 2012

4.1.2.4 Effects on Access to Medical Facilities

Respondents were asked to recall their monthly average medical expenditures and responsiveness to medical facilities. However, medical expenditures are based on the number of members of households who are ill or injured. Since a number of members of households who are ill or injured within a given year might be different, the responsiveness of respondents in financing to get medical facilities in case of demand for medical care is considered in the study.

The result shows that 91 (91%) of sample clients and only 43(43%) of sample non clients reported the trend that their responsiveness toward access to medical facilities has been improved for the last two years. However, only 9 (9%) of sample clients and 57 (57%) of sample non-clients reported the trend that their ability to get access to medical facilities has not been improved over the last two years. This result clearly shows that program participants have improved their ability to respond to the demand for medical care. The study finds difference in responsiveness of demand for medical care between the two groups. Therefore, we can conclude that program participants have been benefited from the micro financing scheme (see table 4.14 and table 4.15).

Table 4.14 Medical Responsiveness of Respondents

Response	Types of respondents		Total (%)
	Clients	Non-Clients	
Improved	91(91%)	43(43%)	134(67%)
Non-Improved	9(9%)	57(57%)	66(33%)

Source: Survey results, 2012

Table 4.15 shows that out of 67 (67%) client households who reported whose members were ill or injured during the last twelve months, 59 (88.1%) clients have taken their members who were ill or injured for medical treatment. Only 8 (11.9%) clients reported the inability to take their members who were ill or injured for medical care. On the other hand, out of 54 (54%) non-client households who reported whose their members were ill or injured, only 42 (77.77%) non-clients have taken their members who were ill or injured for medical care during the last twelve months. But 12 (22.22%) non-clients reported the inability to take their members who were ill or injured members for treatment. If we compare the results, about 88.1% of clients and 77.77% of non-clients have taken their members for medical treatment, which shows difference between the two groups.

Table 4.15 Ability of respondents in case of demand for health care

Trend	Types of respondents		Total (%)
	Clients (%)	Non-Clients (%)	
Number of house holds whose members ill or injured in the last twelve months	67(67%)	54(54%)	121(60.5%)
Number of house holds who have taken their members (who were ill or injured) for medical treatment during the last twelve months	59(88.1%)	42(77.77%)	101(83.47%)
Number of house holds who have not taken their members (who were ill or injured) for medical treatment during the last twelve months	8(11.9%)	12(22.22%)	20(16.53%)

Source: Survey results, 2012

4.1.2.5 Effects on Employment

The immediate positive impact of microfinancing scheme is on employment generation. Type of business activities and trends of employment opportunities were collected. The two basic types of business activities are farming and petty trade. Others include livestock production, local food and drink preparation. Since the respondents are rural poor, agriculture is the basic type of business activities for most of the respondents. However, the number of sample respondents who have been engaged in petty trade, retail trade and livestock fattening is much greater in clients than non-clients. Out of total sample respondents, 83(83%) of clients and only 17 (17 %) of non-clients reported the trend that their employment opportunities have been improved for the last twelve months. On the other hand, only 47(47%) of clients and 53(53%) of non-clients showed no improvement in job opportunities. This suggests that microfinancing services to the rural poor have positive effects on employment generation (See table 4.16).

Table 4.16 Trends of Employment Generation

Trends	Types of Respondents		Total (%)
	Clients (%)	Non-Clients (%)	
Improved	83(83%)	47(47%)	130(65%)
Non-Improved	17(17%)	53(535)	70(35%)

Source: Survey results, 2012

4.1.2.6 Effects on Savings

There are two types of savings: compulsory and voluntary. Compulsory saving is normally enforced and starts simultaneously with the loan that is approved for individuals who are program participants. Compulsory saving includes compulsory individual saving, compulsory group saving and compulsory center saving. These types of savings are used as collateral. Compulsory individual saving ranges from Birr 3 to 6 and compulsory center saving ranges from Birr 2 to 4 per month. Compulsory group saving is a saving of 10% from the loan size.

On the other hand, voluntary saving is an individual saving that depends on the willingness of the individual including clients and non- clients to save and withdraw at any time when the need arises. Since 2006/7 the annual saving of the selected sites are summarized as follows. (See table 4.17).

Table 4.17 Saving mobilization in sample branches of WMFI in (Birr)

Year	Types of saving				Total (%)
	Compulsory			Voluntary	
	Compulsory individual saving	Compulsory group saving	Compulsory center saving	Voluntary individual saving	
2006/7	3983	56210	3149	9854	73196
2007/8	15169	20317	9216	19046	63748
2008/9	10889	31730	6455	21302	70376
2009/10	18347	73635	10105	34190	136277
2010/11	30302	97208	18809	84036	230355

Source: WMFI, 2011

Out of the total sample respondents, the larger portions of clients have saving account in comparison with non-clients for the last two years. The voluntary savings are in the form of saving under WMFI, Iqqub, Iddir and Mahaber. From table 4.18, it is observed that 89 (89%) of clients have voluntary saving account under the WMFI microfinancing scheme. However, no one has reported as he/she has voluntary saving account under the WMFI microfinancing scheme. But it is observed that some of non-clients who have not been taken under sample respondents have saving account under WMFI microfinancing scheme in the sample branches (see table 4.18).

Table 4.18 Types of Voluntary savings of Respondents

Types	Types of Respondents		Total
	Clients	Non-Clients	
Saving under WMF	89	0	89
Iqqub	7	35	42
Iddir	4	29	33
Mehabber	0	3	3

Source: Survey results, 2012

Therefore, from the above two tables we can observe that the sample respondents have saving accounts. The reasons for their saving include loan repayment, to earn profit, to withdraw in case of urgent needs, to spend on education and medical care expenses and to improve household food security. The result shows that program participants have developed saving habits. The difference of savings between the two groups suggests that the program has brought and develops the habit of savings among the clients.

4.1.2.7 Effects on Women Empowerment

This is to identify on how women clients have been empowered by their participation in the program. Participation in microfinance program services expected to lead control over resources on the part of women clients. Information who control and decides over the business activities within the household was collected. Out of total sample respondents, 13(13%) of clients and 17(17%) of non-clients reported that there is a practice of only husband making decisions in household. This indicates men domination in making decisions. On the other hand, 79(79%) of clients and 81(81%) of non-clients reported that both husband and wife make decision on their business activities. eight of the clients and two of the non-clients reported that only wife is the decision maker in the household. Therefore, the result shows program participation has positive contribution on women empowerment. (See table 4.19**).**

Table 4.19 Trends of empowerment

Decision maker	Types of Respondents		Total (%)
	Clients (%)	Non-Clients (%)	
Husband only	13(13%)	17(17%)	30(15%)
Husband & Wife	79(79%)	81(81%)	160(80%)
Wife only	8(8%)	2(2%)	10(5%)

Source: Survey results, 2012

4.1.3 Outreach and Sustainability of the Sample Branches of WMFI

The Outreach and sustainability of microfinancing approach is also another prominent tool to assess the impact of microfinancing scheme on poverty reduction. It is assumed to have a positive contribution to the economic status of program participants. Information in relating the company's outreach and the performance of loan repayment from the sample branches were collected. The sample clients under examination are 100 which amount to about 5% of the total client population of the year 2010/11.The result shows the trend that the number of clients and amount disbursed have been increased since 2008/9.The repayment rate has been 100% for the year 2007/08, 2008/09, 2009/10 and 2010/11. Because of weak management and training of clients, arrears have been observed for the year 2006/07 (See table 4.20).

Table 4.20 sample branches' outreach and repayment rate

Year	Number of clients	Amount disbursed (Birr)	Amount Collected (Birr)	Rate Repayment (%)
2006/07	562	562,100	423,800	75.4
2007/08	870	207,477	207,477	100
2008/09	1430	317,100	317,100	100
209/10	1650	736,350	736,350	100
2010/11	2009	884,280	884,280	100

Source: WMFI, 2011

4.1.3.1 Determinants of Loan Repayment Performance

Since the loans provided to the borrowers are in a maximum of one-year maturity period, the loan repayment performance is measured as the ratio of repayments made to repayments scheduled at a particular time. The total repayment performance and repayment performance of each client are computed. Except for the year of 2007/8 in the sample branches, the result shows 100% of repayment rate. Thus, it is necessary to identify factors that help to repay the loan within a given period of time. The major factors are identified and explained using descriptive analysis as follows.

Timeliness of loan disbursement **(**TLD) has positive contribution to loan repayment performance. From the descriptive analysis, the result also shows that 92 (92 %) of sample clients who reported appropriate time of loan issue showed 100% of loan repayment within a given period of time. This indicates that loan is issued on time from the point of view of the borrower. It is likely that the borrower is able to employ the fund for the intended business activities; and then the borrower can repay the loan on time.

Use of financial records (UFR) was expected to show positive impact on loan repayment performance. However, the descriptive result shows that 64% of sample clients who don't have financial records have diverted the loan but they have repaid 100% of their loan in full during the maturity date. This implies that use of financial records has no impact on loan repayment performance. Even though the borrowers have no financial records for loanable business activities, they use the loan properly for income generating activities based on their past experience of knowing about the business.

Loan supervision (LSV) has also a positive relationship with loan repayment performance. About 99% of sample clients who reported sufficient loan supervision have paid 100% of their loan within a given period of time. This implies that loan supervision has a positive contribution to loan utilization and loan repayment.

Average yearly income from loanable activities (AYIL) and average yearly income from other activities (AIOA) have also direct relationship with loan repayment performance.

Education level (ED) was expected to have positive relation with loan repayment performance. It implies that higher educated borrowers are expected to show a higher loan repayment rate than relatively less educated borrowers. However, from the result of the study, whether the borrowers are educated or not, all borrowers have repaid their loan in full within a given period of time. Thus, it can be concluded that level of education has no impact on loan repayment performance.

Value of assets (VA) has direct relationship with loan repayment performance. 75 (75%) of sample clients believed the claims against personal wealth in case of default. This implies the perception that the assets will be under liability in case of default. Thus, we can conclude that borrower's asset has positive impact on loan repayment performance.

Attitude to cost of default (ACD) is positively related with loan repayment. Because of the believe of the claims against personal wealth (about 69%), social sanctions (about 45%), penalty (about 48%), and loss of future access to credit (about 48%), 97 of sample clients reported the trend that they do have believe in high cost of default. This also implies that having attitude of high cost of default from the borrowers side helps the company to collect the loan issued within maturity date, which also helps the company to be sustainable.

Appropriateness of loan repayment time (ALRT) has also direct relationship with loan repayment performance. 94 (94%) of sample clients reported the appropriate time of loan repayment. This implies that loan collection from the borrowers during their harvesting time and good market for their business has greater positive impact on loan repayment performance.

Since loan has a character of fungibles, loan diversion rate (LDR) was expected to have mixed impacts on loan repayment performance. It is expected to show positive impact if the loan is diverted to more income generating business activities. On the other hand, it is expected to have negative impact if a borrower diverts the loan to non-income generating activities. From the study, it is observed that 40 (40%) of sample clients reported the trend that they have used some of the loan for non-intended purposes, which include diversion of loan to more income generating business purposes (about 59%) and to non-income generating activities (about 41%) such as household consumption, service expenditures, etc. However, the study describes that all borrowers (diverters and non-diverters) have repaid their loan on time. Therefore, it is difficult to say loan diverters have negative impact on loan repayment performance.

Loan size (LS) was expected to have inverse relation with loan repayment performance based on the assumption that the higher the loan sizes the greater loan diversion to non-income generating activities. However, 71 (about 71%) of sample clients reported insufficiency of loan size. Therefore, it can be said that balanced loan size with the intended program of the borrowers has positive impact on loan utilization and loan repayment performance.

Age of clients (AG) was expected to have a positive impact on loan repayment performance. The expected positive sign was based on the assumption that adults use loan properly than others. But, the study shows that all borrowers whose age ranges between 15 and 70 inclusive reported full loan repayments within scheduled time. Thus, it implies that age consideration has no impact on loan repayment performance.

Considering Sex of clients (SX), it was believed that women pay their loan more than men within maturity date. However, the study describes that out of the total sample clients 84 (84%) male and 16 (15.74%) female, all of them reported full repayment of their loan within a given period of time. This also implies that gender consideration has no impact on loan repayment. This also suggests the trend that whether a borrower is husband or wife they are guaranteed to each other in loan utilization. Both of them have also equal accountability to repay the loan.

4.1. 4 Perceptions of Sample Clients

Perceptions of clients with the WMFI's microfinancing scheme in the sample cities were also collected to show the direction of change about the program. The perceptions are in relating with benefits they received from the program, their satisfaction and dissatisfaction about the program and recommendations.

4.1.4.1 Major Benefits of Clients from the Program

Mainly, the perceptions of clients regarding the benefits they received from the program were collected on house improvements, household diet, access to education, access to medical care, job opportunities and savings habit.

63 (63%) of the clients reported the trend that they improved their type of house with its furniture. 100% of them put the reason for the improvement as it was profit earned from the loan. 78 (78%) of clients reported the improvements of their household diet. They benefited from the program. 69(69%) and 59(59%) of clients also reported that they able to get access to education for their children and access to medical care when the needs raised. 83 (83%) of clients reported the trend of improvement of job opportunities for their household. It is also observed that 89(89%) of sample clients have voluntary saving accounts.

They have gained the habit of saving which helps them in case of loan repayment, to earn profit, urgent needs, education expenditure, medical expenditure, to improve household furniture, etc. The clients also reported that they have been benefited from the program such as advises in planning, production and trading (see table 4.21).

Table 4.21 Major Benefits of Clients

Benefits	Number of clients
Improvement in types of house	63(63%)
Improvement in house hold diet	78(78%)
Able to get access to education	54(54%)
Able to get access to medical care	59(59%)
Improvement in job opportunity	83(83%)
Improvement in saving habit	89(89%)

Source: Survey results,

4.1.4.2 Client Satisfaction/Dissatisfaction

Satisfaction/dissatisfaction of clients about the program was collected using open questions. Table 4.24 summarizes the responsiveness of clients regarding their satisfaction and dissatisfaction with the program. Majority of the clients appreciated appropriate time of loan disbursement, appropriate time of loan repayment, appropriate interest rate, sufficient advice and supervision. However, a few complained the existing interest rate. Majority of the clients complained the loan size and the loan term of one year.

From table 4.24, it is observed that most of the clients (about 92%) appreciated appropriate time of loan disbursement. About 94% of the sample clients reported that the timeliness of loan repayment is appropriate. However, 8(7.4%) of the sample clients reported that timeliness of loan repayment was not appropriate. The inappropriate loan repayment time may lead the borrowers not to repay the loan within a given period of time. Few respondents suggested that the program has not considered loan repayment time while failure of crops and marketing.

About 86% of sample clients reported that the interest rate on loan was appropriate but the remaining clients (14 %) argued that it was high. Arguing high interest rate may discourage clients from continuing with the program. Only 36(36%) of sample clients responded sufficient loan size but 64(64%) of sample clients complained the sufficiency of loan size. Only 28(28%) of clients argued sufficient loan length of one year but majority of the sample clients, 72(72%), reported that loan length of maximum one year is not sufficient. About 99% of sample clients reported the trend that advising and supervision of staff members were appreciated. This indicates that the borrowers may not divert the loan to non income generating activities. This helps borrowers to earn profit and helps the company to make sustainable.

Clients' attitudes to continue with the program were also collected .In this regard, 96(96%) of sample clients gave their opinion to continue in the program. However, 4(4%) reported not to continue with the program. Insufficient loan size, high interest rate, delay of loan issue, shortage of loan length, conflict among members, obtaining enough capital and decided to close the business were reported as the major reasons for the opinion of few clients not to continue with the program (see table 4.22).

Table 4.22 Clients Responses with the program

Activities	Responses	
	Yes (%)	No (%)
Appropriate time of loan disbursement	92(92%)	8(8%)
Appropriate time of loan repayment	94(94%)	6(6%)
Appropriate interest rate	86(86%)	14(14%)
Sufficient loan size	29(29%)	71(71%)
Appropriate loan length	36(36%)	64(64%)
Sufficient advice and supervision	99(99%)	1(1%)
Attitude to continue with the program	96(96%)	4(4%)

Source: Survey Results, 2012

4.2 Empirical Results

4.2.1 Assessment at household level

Assessing impact at the participant level requires adjustments to control for differences between frequent borrowers who are taken as clients and those who are looking for credit who are taken as non-clients. The variables used in regression are respondents who are clients and non clients, amount of loan, and voluntary individual savings. The basic analysis was done to know which of the explanatory variables appears to have strong association with the dependent variable. For each of the independent variable a test of association was carried out using the Pearson chi-square at 5% level of significance. High value of Pearson chi-square for a given independent variables indicates that there are strong association between independent variables and dependent variable keeping constant the effects of the other variables.

The dependent variable is variable which takes a value of 1 or 0 depending on whether the respondents' income improved or not.

$$logit\ (pi) = \beta_0 + \beta_{1xi1} + \beta_{2xi2} + \beta_{3xi3} + - - - + \beta_{nxin} \qquad i = 1,2,- - -,n$$

Where $\beta_0, \beta_1, --, \beta_3$ are parameters to be estimated using the maximum likelihood method in the logistic regression by defining the likelihood function. Xi1, Xi2, Xi3 are respondents (clients and non-clients), loan size, and Voluntary individual savings. n refers to number of observation which is equal to n= 200. $P_i =$ Probability of improvement in income relation to explanatory variables

The logit transformation is defined as the logged odds

$$Odds = \frac{P_i}{1 - P_i}$$

And therefore the logit (natural of the odds) of the unknown binomial probabilities are modelled as a linear function of the X_i

$$logit(pi) = Ln\left(\frac{P_i}{1-P_i}\right) = \beta_0 + \sum_{j=1}^{n} \beta_j X_{ij}$$

The logit model assumes that under stimulus index logit(P_i) is a random variable, which estimates the probability of improvement of income of house holds in relation with explanatory variables.

Chance of improvement = $P_i = \left(\frac{1}{1+e^{-\mathrm{Logit(pi)}}}\right) = \frac{e^{\mathrm{Logit(pi)}}}{1+e^{\mathrm{Logit(pi)}}}$

The above formulas have been used to calculate the probability of the respondents being improved in participating in the program.

Variables in the equation

Variable entered in step 1: Respondents, Variable entered in step 2: Loan size, variable entered in step 3: Voluntary individual saving. These variables are listed and described as the following in the table 4.20.

Table 4.23 List and Description of Variables of Impact at Household Level

Variables	Descriptions
Y	Average Yearly per capita income 1= Improved 0= Not Improved
RES	Respondents 1= Clients (frequent borrowers) 0= Non-Clients
LS	Loan Size
VIS	Voluntary Individual Saving

Variables Descriptions

Y Average Yearly per capita income

1= Improved

0= Not Improved

RES Respondents

1= Clients (frequent borrowers)

0= Non-Clients

LS Loan Size

VIS Voluntary Individual Saving

Table 4.24 Test of model Coefficients

	Chi-square	Df	Sig
Step	45.326	3	.000
Block	45.326	3	.000
Model	45.326	3	.000

Source: Survey results, 2012

Table 4.24 shows the chi-square goodness-of-fit test tests the null hypothesis and determines that the step is justified. Here the step is defined from the constant-only model to the all-independents model. When as here the step was to add a variable or variables, the inclusion is justified if the significance of the step is less than .05.

Had the step been to drop variables from the equation, then the exclusion would have been justified if the significance of the change was large (ex., over .10). Therefore, the likelihood ratio chi-square of 45.326 with a *p*-value of .000 shows that outcome model as a whole fits significantly.

Table 4.25 Analysis of Maximum Likelihood Estimates

Variable	B	S.E	Wald	Df	Sig	EX(B)
Respondents	-3.571	.95	13.145	1	.000	.028
Voluntary saving	.519	.397	1.712	1	.002	1.681
Loan Size	2.41	.685	9.776	1	.002	8.509
Constant	-7.543	3.295	5.422	1	.020	.001

Source: Survey result, 2012

Table 4.25 Presents the most important and applicable results for this study. The Wald statistic shown in the table and the corresponding significance level together, test the significance of each of the covariate and dummy independents in the model. The ratio of the logistic coefficient B to its standard error S.E., squared, equals the Wald statistic. If the Wald statistic is significant (Sig. less than .05) then the model has a significant parameter. Mathematically,

$$W = \left[\frac{\check{\beta}}{S.E(\check{\beta})}\right]$$

It is given in the column "Wald" and it has a chi-square distribution with one degree of freedom.

From the table 4.25, it is possible to drive the best fit of data which is given by

$$logit(Pi) = Ln\left(\frac{Pi}{1-Pi}\right) = -7.543 + (-3.571)X_{i1} + 2.141X_{i2} + .519X_{i3}$$

From the table 25 and the best fit data, it is observed that the probability of the improvement of income shows direct relationship with the explanatory variables. All the coefficients show the expected sign. However, the extent to which these variables relate with the dependent variable is different. The extent of the relationship is explained as follows.

Average yearly per capita income (Y) is positively related with program participant implying that the probability of the improvement in income increases with the increase in program participation. The coefficient shows the expected sign, which is statistically significant at 5% significant level. It implies that the program participants (frequent borrowers) show higher improvement of income than non-clients.

The income status of respondents also shows positive relationship with individual voluntary savings. The coefficient shows the expected sign, which is also statistically significant at 5% significant level. The probability of the improvement in income increases with the increase in individual voluntary saving. It can be said that the program introduces the saving habits to the poor. The probability of the improvement in income also shows direct relationship with borrowing. The improvement in income increases with the increase in loan size.

4.2.2 Testing Variables Affecting Loan Repayment Performance

Johson and Rogaly (1997) argued that the repayment rate is the indicator most often used as measure of the performance of credit scheme. The modelling of loan repayment performance incorporates both the borrower and lender characteristics.

Therefore, the logit model is specified determine factors that affecting the loan repayment performance of WMFI based on the following functional relation ship.

$$LRP = F(AYIL, AIOA, VA, LS, ED, ACD, AG, SX, URF, TLD, LSV, ALRT, LDR, U1)$$

The dependent variable is variable which takes a value of 1 or 0 depending on whether the respondents' income improved or not.

$$logit\ (pi) = \beta_0 + \ \beta_{1xi1} + \ \beta_{2xi2} + \beta_{3xi3} + \ - - - + \beta_{nxin} \qquad i = 1,2, - - -, n$$

Where $\beta_0, \beta_1, --, \beta_3$ are parameters to be estimated using the maximum likelihood method in the logistic regression by defining the likelihood function. Xi1, Xi2, Xi3,-----,Xin are Income from activities financed by the loan, Loan supervision, Income from other activities, Asset value, Clients' attitude to cost of default, Loan Size, Educational Level, Age, Sex, The use of financial records, Time of loan disbursement, Appropriateness of Loan repayment time, and Loan diversion respectively . n refers to number of observation which is equal to n= 200.

Table 4.26 Estimate for the logistic regression model

Item	B	S.E	Wald	df	Sig	Exp(B)
Income from activities financed by loan	-4.581	.958	14.416	1	.000	.0382
Income from other activities	2.143	.784	10.677	1	.029	1.596
Educational level	.919	.594	1.613	1	.195	2.384
Sex	.871	.603	4. 134	1	.284	4.451
Age of the respondents	.451	.191	1.541	1	.295	3.121
Loan size of the respondents	.877	.812	4.172	1	.015	6.921
Asset Value	-3.341	1.031	10.561	1	.001	.039
Clients Attitude to Cost of defaults	2.031	.694	9.131	1	.048	1.491
The use of financial Records	.814	.593	.989	1	.175	2.051
Time of loan Disbursement	.719	.549	1.531	1	.186	2.348
Loan Supervision	2.310	.912	11.047	1	.0195	.0341
Loan Repayment time	.781	.491	1.991	1	.489	.294
Loan diversion	1.778	.721	6.071	1	.014	5.910
Constant	-7.435	4.329	4.522	1	.031	.001

Source: survey result, 2012

$$logit(Pi) = Ln\left(\frac{Pi}{1 - Pi}\right)$$

$$= -7.435 + (-4.581)X_{i1} + 2.31X_{i2} + 2.143X_{i3} + (-3.341)X_{i4} + 2.031X_{i5}$$

The logistic regression analysis showed that all coefficient of simultaneously are statistically different from zero and the test of significance helped in explaining variables that affect loan repayment. The parameter estimates for the model were evaluated at 5% level of significance. Logistic model for the table 4.23 showed that the effect of the five independent variables namely Income from activities financed by loan, Loan supervision, Income from other activities, asset value and Clients’ attitude to costs of default which is significant 5% level of confidence.

The findings of this study are in line with justifications given above as they show the negative signs and significance level of income earned from activities financed by the loan. It indicates that the probability of loan repayment rate increases with increasing income generated from activities financed by the loan. It confirms results obtained from descriptive analysis.

The findings indicate that another source affecting the loan repayment rate is loan supervision. The loan supervision variable has a positive impact on loan repayment rate performance. The positive sign and significance of the loan supervision variables in the study imply that loan supervision is a second major factor according to magnitude of coefficient that will promote loan repayment performance which will result in sustainability of institution and poverty reduction.

The significant result for income generated from other activities in this study shows that this is the third important factor encouraging loan repayment rate. It indicates that the probability of loan repayment performance increases with increasing income from other activities other than activities financed by a loan.

The fourth variable that positively affects the loan repayment performance is asset value. This indicates that the probability of loan repayment performance increases with increasing the asset value of participants. This finding match with results observed from descriptive analysis. It strengthens that the asset will be under liability in case of default.

Clients' attitude to cost of default is another fifth factor that encourages loan repayment performance. The significant result of the study indicates that clients' attitude to cost of default has positive impact on the loan repayment performance.

In contrary to the above mentioned independent variables, Educational level, Sex, Age of the respondents, Loan diversion, The use of financial records, Loan size, Time of loan disbursement, and loan repayment time have no significant association with improved loan prepayment performance. Findings obtained from descriptive analysis also confirm the same.

CHAPTER FIVE: CONCLUSIONS AND RECOMMENDATIONS

5.1 Conclusions

This study is mainly aimed at examining the financial intervention of the program by focusing on the situation of stated variables of clients and non-clients at household level. It tries to examine the impact of the program on socio- economic activities of the poor using non-clients as control group, which is used in comparison of the changes of the living standard of the two groups.

The study found out that program intervention leads to change that is different from that would have happened without the intervention. The program increases the probability of improvement in economic status of the clients. The changes more likely occur with program participation than without program participation. The study indicates about 95% of sample clients reported that their live conditions have been improved because of program participation while only 20% of sample non-clients reported the trend that their living conditions have been improved because of good agricultural season and petty trade using their own income for the last two years.

Microfinance has enabled the clients to generate income that could be spent on better facilities, which could improve the living standard of clients. Clients have got more chance of getting meals per day than non-clients. The result indicates that more clients have enjoyed diet improvement than non-clients. Clients have got more chance of improving their diet in comparison to non-clients. Considering school-age children and actual enrollment, the result does not show significant difference between the two groups. The program has improved ability of clients to respond the demand for medical care. The study found difference in responsiveness of demand for medical care between the two groups. Microfinance program improves job opportunities. It creates and expands business activities.

The program has brought and develops the habit of savings among its clients. It extends the choices of people who are looking for saving services. Microfinance program was expected to empower women clients over business activities of household. However, it is difficult to suggest the impact on women empowerment since the result does not show much difference between the two groups.

Considering outreach and sustainability of the company in sample branch, the result indicates the trend that the numbers of clients and amount disbursed have been increased. About 100% of loan repayment within a given maturity date has been observed for the last four years. Loan issue on time, supervision, income, asset, having high attitude to cost of default and loan repayment time are the most factors that help loan repayment within a given period of time. This implies the fact that the intervention is judged to have a positive impact as it has created financial market to the poor and the company itself to be sustainable. The outreach and sustainability of the company have been enhanced. The interventions showed beneficial impacts to the clients. It has improved the financial markets by reducing the extent of credit market imperfection that is resolved with enhanced availability of credit and savings habit. The institutional impact extends the choices of people looking for credit and saving services.

The group-based credit delivery system has also created opportunity for clients to come together, discuss their problems and exchange ideas about their roles. It gives the program participants a chance to make contact and to learn from experiences of each other. The program makes the clients to understand each other's need and problems very closely. The company is engaged in not only providing credit but also in mobilizing saving from any interested individuals. It is also observed that voluntary individual savings have been increasing overtime. About 89% of sample clients have voluntary saving accounts. This also implies the contribution of the program in training and giving advice in improving saving habits among the program participants. The company has been directing its efforts towards poverty reduction and has showed success in terms of advice and supervision of clients in loan utilization.

5.2 Recommendations

It is clear that WMFI is contributing to improve the living standard of the poor. The result indicates the trend that the program improves their live conditions implying microfinance is becoming a tool for poverty reduction. It implies that program participants have been benefited in improving their basic needs including improving in type of house, employment generation and savings. As stated in the study, the services of the program are found to be encouraging with the needs of the poor. It is expected to have positive contribution to clients in relation to income, nutrition, access to education and medical care, employment generation, savings and resource empowerment. Therefore, the following comments are forwarded depending on the out come of the survey and various comments given by respondents under study:

- Registered clients, number of staff, number of offices, amount disbursed, savings mobilized and sustainability are considered as some of performance indicators of the program. In spite of the improvement in these issues, a number of respondents who are non-clients are still looking for the program services. It indicates that the WMFI is at its infant stage to meet the needs of the poor. Shortage of loanable fund is considered as one of the obstacles to reach large number of people. Therefore, the company has to work hard to reach large number of poor people over the long term through: (i) mobilizing savings from the public having clear and accountable ownership structure and governance and make adjustments with inflation (ii) appropriate institutional organization and excellent management (iii) interest rate that enables profitability (iv) leverage equity to access capital market with regional government, NGOs, and individuals and (v) looking for donor agents.

- Savings have been mobilized from clients and non-clients. However, saving mobilized from non-clients is too weak or unsatisfactory. Therefore, the company has to work hard to promote savings habit. Savings can be mobilized through offering attractive returns take small deposits, doorstep services, offer discipline, etc. In such away that company can reach large numbers of poor people who are looking for credit.

- Considering lending methodology, the center size criteria needs 5 to 10 groups members. Since the rural poor are sparsely settled over the region, it is difficult to form a center on their self-initiation. Members may not trust on each other. Therefore, the company has to look for this issue and reduce center size based on the distribution of the rural poor in the region.

- Since large amount of loan goes to agricultural activities, which are based on weather conditions, the company has to look for the diversification of business activities. Households relying on agriculture are likely to reduce the effects of seasonality of agriculture by diversifying in to rural non-farm activities that can be undertaken at home without high transactions costs.

- Level of education was expected to have positive relationship with loan repayment performance indicating that more educated client has better loan repayment performance than illiterate i.e. the higher educated borrowers the higher the probability of repaying loan in full within maturity date. However, all clients whether they are educated or not have paid their loan in full. It is also observed that most of the clients who do not use financial records have paid their loan on time. Therefore, considering level of education as lending strategy may not be a fair and absolute decision since most of the clients are illiterate while they are the target group. The company should be accompanying packages to give training the poor on their business activities including the importance of credit, loan utilization, market situation and savings mobilization. These help the clients in proper use of loan for their intended purposes which could reduce diversion of loan for non-income generating activities and help the company in repayment performance which makes the company sustainable.

- Size of loan has no impact on loan repayment performance. It was expected that the higher the loan sizes the lower the probability of loan repaid. However, the descriptive analysis indicates that though different size of loan to different clients, all have paid their loan in full in time.

- Loan disbursement time shows positive impact on loan repayment performance. Since the loan is time and purpose sensitive, it contributed to the performance. Therefore, the company should provide the loan on time and has to ignore loan issue if late loan application is applied. Since most of the business activities of clients are time sensitive, loan issue at needed time reduces diversion of loan from intended purposes and helps the borrowers to use the loan properly for their intended purposes.

- It is observed that some of the sample clients diverted their loan to non-intended non-income generating activities. Therefore, adequate advising and supervision are required for the clients. Credit to the poor without collateral must follow community participatory to follow up each other in loan utilization. Understanding client use of financial services is important in market expansion and product development. Avoid failure to understand the local culture, practices, systems, processes and client perspectives are key to understanding the nature of risk, responses to shocks and reduce vulnerability.

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APPENDIX 1 SURVEY QUESTIONARIE

INDIRA GANDH NATIONAL OPEN UNIVERSITY

SCHOOL OF SOCIAL STUDIES

Questionnaire for the survey on "*THE IMPACT OF MICROFINANCE ON POVERTY REDUCTION:* The case of Wasasa Microfinancing Institution S.c. in East Showa Zone of Oromia National Regional State, Ethiopia".

NAME OF INTERVIEWER: ______________ SIGNATURE:_____________

TYPE OF RESPONDENT: ________________KEBELE: _________________

1. PERSONAL & HOUSEHOLD DATA

1.1 Name: ____________________________ Age: ______Sex: M _____ F ______

1.2 Marital Status: Single _____Married ______Divorced ______Widowed _____

1.3 Household size: M ______ F _______ Total _____Household head: M ___F____

No. Name Relation to HH Sex Age Current main Occupation Education level

1. ___________ ____________ _____ _____ ____________ _________
2. _____________ ____________ _____ ______ ____________ ________
3. ________________ ____________ ____ ______ ____________ ________
4. __________________ ____________ ____ ______ _____________ _______
5. ___________________ ____________ ____ ______ _____________ _______
6. ___________________ ____________ ____ ______ _____________ _______
7. ___________________ ____________ ____ ______ _____________ _______
8. ____________________ ____________ ____ ______ _____________ _______

1.4 What is the total number of dependents who are school-age children, disabled or/and old enough? ________________

2. INCOME AND ASSET INFORMATION

2.1 What is the average monthly income of your business for the last two years? _______________

2.2 For the last two years, what has been the trend in the level of your overall income?

a) Increased significantly _______b) Increased _______c) Remained the same ______

d) Decreased ______________e) Decreased significantly ___________

2.3 Why did your income increased (if increased)?

a) Able to buy inputs ______ b) Able to purchase of business assets __________

c) Working capital from credit _____d) Expand existing business ______________

e) Got jobs _________ f) Good agricultural season ________

g) Others (specify) _________________

2.4 Why did your income stayed the same or decreased (if stayed same or decreased)?

a) Lack of credit _______b) Crop failure __________c) Family member lost employment ________d) Illness or death in the family ______ e) Others (specify) ___________

2.5 Do you have livestock? Yes _______ No _______

If yes, list their type, number and average price per unit as follows:

Type	No.	Price per unit	Type	No.	Price per unit
a) Oxen	_______	_____________	f) Sheep	______	__________
b) Cows	_______	_____________	g) Mule	______	__________
c) Calves	_______	_____________	h) Horses	______	__________
d) Bulls	_______	_____________	I) Donkey	______	__________
e) Goats	_______	_____________	j) poultry	______	__________
k) Others	________	______________			

2.6 Does the number of your livestock for the last two years is increased?_______ Stayed same? _________________ Decreased? _________

i) If increased, why?

a) ____

b) ____

c) ____

ii) If stayed same or decreased, why?

a) ____

b) ____

c) ____

2.7 Do you have plants now? Yes _____ No __

If yes, list their type, number and average estimated values as follows:

Type	No.	Estimated value (in Birr)
a) Coffee	________	______________
b) Banana	________	______________
c) Enset	________	______________
d) Chat	_________	______________
e) Gesho	__________	______________
f) Others (specify)______		_____________

2.8 Did you make expansion or improvement of your crop production? Yes __no ___

i) If yes, why?

a) Access of credit _______

b) Sold the assets _________

c) Others (specify) ____

ii) If no, why?

a) Lack of access to credit _______

b) Lack of land ________________

c) Low level of income __________

d) Others (specify) ____

2.9 Do you own land? Yes _____ No ______

If yes,

i) Is it sufficient for your activities? Yes ____ No ____

ii) Land (ha):

a) Your own cultivated land per hectare__________

b) Your own grazing land________________

c) Uncultivated land ____________

d) Rented land __________

iii) If your own land was under cultivated or rented, why?

a) Unable to work _________

b) Lack of working capital _________

c) Excess land ____________

d) Unable to buy inputs (oxen, fertilizers, herbicides, etc) _______

e) Unable to purchase business assets _______________________

f) Others (specify) _______________________________________

iv) Have you shortage of farm oxen to plough your land for the last twelve months? Yes ________No ____________

If yes, what options do you have to plough your farmland?

a) Hiered ________b)Dabo ___________c)Relatives ________

d) Exchange ________e) others (specify) ______________________

2.10 What type of house do you have for the last two years?

a) Roof with iron sheet _____b) Roof with grass ______c) Others (specify) ________

2.11 Did you make improvement of your type of house (from grass roof to iron sheet roof) for the last two years? Yes ______ no _________

i) If yes, why? a) Access to credit ______b) Improved income ___________

c) Gift or aids ________d) Others (specify) _________________________

ii) If no, why?

a)____________________________________

b) ____________________________________

c) ____________________________________

d)____________________________________

2.12 What is the estimated market value of your house? Amount in Birr __________

2.13 What are the types, numbers and estimated value of your purchases assets for the last twelve months?

Type	No	Total value in Birr
Chair	_________	_________________
Table	_________	_________________
Radio	__________	_________________
Tape-recorder	______	_________________
Others	_______	_________________

2.14 Has your purchasing power to buy these items improved over the last two years?

i) If yes, why?

a) Increase in income from loanable activities _________

b) Increase in income from non-loanable activities _______

c) Gifts or aids ___________

d) Others _________________

ii) If no, why?

a) Lack of credit ____________b) Lack of working capital ________

c) Crop failure _________________d) Others ____________________

2.15 What are the major sources of your income for the last twelve months?

a) Receiving loan (specify sources) __________b) Selling livestock __________

c) Selling crops ______________ d) Selling household furniture ____________

e) Selling fire-wood _____________f) Selling straw and cow dung ___________

g) Others (specify) _____________________

2.16 What are social obligations that forced you to sell your produce?

a) Purchase of improved seeds ________

b) Purchase of fertilizers ______________

c) Purchase of herbicides ______________

d) Consumption _____________________

e) Others (specify) ____

2.17 What are the items and total estimated value of your sale for the last twelve months?

Items Total amount (in Birr)

Crops ____________________

Livestocks ____________________

Selling firewood, straw & cow dung ____________________

2.18 What were your average annual expenses to buy inputs for production for the last twelve months?

Types Total amount (in birr)

Inputs ___________________________

Feeds for livestock's ___________________________

Others (specify) ___________________________

3. **NUTRITION AND CONSUMPTION EXPENDITURE INFORMATION**

3.1 Types of meals did you have for the last twelve months:

a) Breakfast ________

b) Between breakfast and middy meal ________

c) Middy meal ___________

d) Between middy meal and evening meal ______

e) Evening meal __________

3.2 Does the number of types of your meals for the last two years improved ________stayed same ___________increased _________________

3.3 What is the approximate monthly consumption expenditure of your household for the last twelve months? Amount in birr _____________

3.4 Who was the bearer of the expenditure?

a) Yourself _____

b) Other family member _________

c) Yourself and other family members ________

d) Donors _________

e) Others (specify) __________

3.5 Is there an increase in consumption expenditure or household diet of your household for the last twelve months? yes _________ no ______________

i) If yes, why?

a) ______________________________

b) _____________________________

c) ______________________________

ii) If no, why?

a) ______________________________

b) _____________________________

c) ______________________________

3.6 If your household diet is improved, what have been the major improvements?

a) Able to buy more cereals and staples such as teff, maize, etc.___________

b) Able to buy vegetables and fruits__________

c) Able to buy dairy products such as milk, meats, etc.________

d) Able to eat three meals a day _________________

e) Others (specify)_________________

3.7 If your household diet has not been improved for the last twelve months, what are your major reasons?

a) _________________________________

b) _________________________________

c) _________________________________

d) _________________________________

3.8 Have you faced shortage of food for the last twelve months? yes _____no ______

If yes, for which month(s)? __________________________

4. **ACCESS TO EDUCATION INFORMATION**

4.1 If you have children and other school-age family dependents, how many of them are currently attending school?_____________________

4.2 What is your average educational expenditure per year? Amount in birr ___________

4.3 Does the number of your family attending school for the last two years is increased ________________ stayed same ________________ decreased _________________

i) If increased, why?

a) Income improvement ____________

b) Building school_________________

c) Others ________________________

ii) If decreased, why?

a) Low level of income ______________

b) Too far school ___________________

c) No need of attending school ________________

d) Others (specify) __________________________

4.4 If there are school-age children, not attending school, why?

a) Needed for help in the business activities ________

b) Needed for help in non- business activities __________

c) Too far school ______________

d) Insufficient money _________

e) Disabled ____________

f) Lady child _________

g) No need of school ________

h) Has attained enough (specify his/her grade) _________

5. **ACCESS TO MEDICAL FACILITIES INFORMATION**

5.1 Could you respond yourself financing to get medical facilities to your family for the last two years? Yes ______No _______

If yes, who could the bearer of the expenditure?

a) Yourself _______b) Relatives ______c) Donors ______Others ________

5.2 What is the average annual household medical expenditure for the last twelve months?

Amount in birr _____________________

5.3 In the last twelve months, was any ill or injured member of the household not taken for medical attention or treatment because the household lacked the money to pay for it?

Yes _______No ____________

5.4 Do you think that your access to medical facilities or your responsiveness has been improved for the last two years? Yes _______No _________

If yes, what are the main reasons?

a) Access of money from the loan able activities _________

b) Better local treatment __________

c) Borrowed from other sources ____________

d) Sold the assets from the loan activities __________

e) Others (specify)____

6. EMPLOYMENT AND BUSINESS ACTIVITIES

6.1 What are the major type of activities you engaged for the last two years?

a) Agricultural activities ________

b) Animal husbandry __________

c) Food production ___________

d) Local drink preparation __________

e) Retail trade ______________

f) Wood or metal work _____________

g) Others (specify) _______________

6.2 Do you think that your employment opportunities have been improved for the last two years? Yes ________No _______

6.3 Have you improved number for your business activities? Yes ____No ____

6.4 Do you think that your income has been improved because of improvement in job opportunities, which is financed from the loan? Yes ______No __________

6.5 Have you used hired labor in your business activities? Yes ______No _________

6.5.1 If yes, a) How many _______b) Is it seasonal or permanent? ___________

c) For which activities? ___________________________

6.5.2 If no, why?

a) _____________________________

b) _____________________________

c) _____________________________

6.6 For the business, which gives you the greatest earnings, who in your household decides?

a) Husband only ____b) Mostly husband ____c) Husband and wife equally ___

d) Mostly wife ______ e) only you (for single) _________

7. SAVINGS INFORMATION

7.1 Do you have a personal saving account since two years (alone or jointly with spouse)? Yes ____No ______

If yes, a) what type of savings?

i) Compulsory _____

ii) Voluntary ________

iii) Saving and credit association ________

iv) Iqqub ______

v) Iddir ______

vi) Others ___________________________________

b) Specify the average monthly saving amount in Birr:

Compulsory _______ Voluntary ___________

c) For what purpose did you save?

i) Loan repayment ______

ii) To earn profit _______

iii) To withdraw incase of urgent needs _________

iv)Others (specify) __________________________

d) Have your personal cash savings Increased? ___Decreased? ____Same? ___

e) What have been your major uses of savings during the last twelve months?

i)Re-invested _______ ii) Household expenditure _______

iii) Ceremonies (weeding, holidays,) ___ iv) Urgent needs __________

v)Bought basic items ____ vi)Made improvement to the house _____

vii) Buy animals __________ viii) Have not used savings yet __________

ixOthers (specify) _____________________________

f) Rank the first three main reasons of using your savings?

1st ________________________________

2nd _________________________________

3rd __________________________________

8. LOANS FROM ANY FINANCIAL INTITUTIONS EXCEPT MFI (WMFI)

8.1 Did you have access to credit from other formal or informal financial institutions for the last two years? Yes _________No __________

8.1.1 If yes,

i) Was it from: a) Banks ______b) Relatives / friends _________ c) Individual money lender _________d) Iddir ______ e) Others (specify) ________________

ii) Why did you borrow?

a) Greater security __________

b) Easier to get ____________

c) Seems more friendly ______________

d) Cheapest ______________

e) Others (specify) ____________________________________

iii) For what purposes did you find the loan?

a) Food consumption _________

b) Clothing ____________

c) Business activities _____________

d) Purchase agricultural inputs _______________

e) Medical or health services ________________

f) Others (specify) ______________________

iv) Amount in birr _______________Interest rate __________

v) Did you get the amount you requested for your business?

Yes _____ No _____

vi) If repayments are in arrears, what are the major causes of the problem?

a) Loan activity was not profitable ___________

b) Profitable but used some of the loan for household expenditures __________

c) Profitable but the output was sold in credit and did not get paid back _______

d) Used for non-intended purposes __________

e) Loss of assets __________

f) Crop failures ______________

g) Profitable but theft/damage _________

h) Others (specify) ____________

vii) Did you use production credit for consumption purpose? Yes _______No ______

viii) Loan size:

a) Enough for the intended purpose? Yes ______No ________

b) Not enough for the intended purpose? Yes ____No ________

c) More than the capacity? Yes ______No ___

ix) Is there any of your property under liability?

If yes, a) What? _____________________________________

b) Under what agreement? ________________________

8.1.2. If you do not have any access to credit, what was the main reason(s):

a) Lack of near institution ______

b) High interest rate ____________

c) Collateral requirement _________

d) No information of loan _________

e) Others (specify) ____________________________________

8.2 Is there any member of your family in other credit group or received loan from any one of financial institutions or moneylenders? Yes _________no _______________

9. Loan from WMFI (only for clients)

9.1 What was the amount of loan received from and repaid to WMFI after the program participation (in Birr)?

Loans Applied date Date of received Amount of received Amount repaid

(MM/YY) (MM/YY) within due date

Loan 1 _______________ _______________ _______________ _____________

Loan 2 _______________ _______________ _______________ _____________

Loan 3 _______________ _______________ _______________ _____________

Loan 4 _______________ _______________ _______________ _____________

Loan 5 _______________ _______________ _______________ _____________

9.2 Did you get the amount you requested for your business? Yes _____ No ________

9.3Was the amount of your loan size:

a) Enough for the intended purpose? Yes ______No ________

b) Not enough for the intended purpose? Yes ____No ________

c) More than the capacity? Yes ______No ___

9.4 Have you been trained about loan utilization? Yes ____ No ___

If yes, has it been satisfactory? Yes _____No ________

9.5 If repayments are in arrears, what are the major causes of the problem?

a) Loan activity was not profitable ___________

b) Profitable but used some of the loan for household expenditures __________

c) Profitable but the output was sold in credit and did not get paid back _______

d) Used for non-intended purposes __________

e) Loss of assets __________

f) Crop failures ______________

g) Profitable but theft/damage _________

h) Others (specify) ____________

9.6 Main intended purposes:

Item	Amount in Birr
1. ____________________________________	________________________
2. ____________________________________	________________________
3. ____________________________________	________________________
4. ____________________________________	________________________
5. ____________________________________	________________________

9.7Actual use of loan on purpose specified in the loan agreement

Item Amount in Birr

1. ____________________________________ _________________________
2. ____________________________________ _________________________
3. ____________________________________ _________________________
4. ____________________________________ _________________________
5. ____________________________________ _________________________

9.8 Actual use of loan on non-intended purpose specified in the loan agreement

Item Amount in Birr

1. ____________________________________ _________________________
2. ____________________________________ _________________________
3. ____________________________________ _________________________
4. ____________________________________ _________________________
5. ____________________________________ _________________________

9.9 Did you use production credit for consumption purpose? Yes _______No _____

9.10 If you spent some or all of the loan on non intended purpose:

i) Specify your reasons:

a) Excess loan _________b) To create additional source of income ________

c) Because of personal problem _________d) others (specify) __________________

ii) Was it on income generating? Yes _____No _______

iii) Was it on non-income generating? Yes ____No ______

9.11 Was the repayment period appropriate for your point of view? Yes ____No ____

If no, specify the reason and recommend an appropriate period:

i) Reasons a)____

b) ____

c) ____

ii) Recommended appropriate period ____________________________________

9.12 Do you believe that loan should be repaid? Yes _______No _______

9.13 Do you believe that cost of default is high? Yes _______No _______

If the cost of default is high, to which cost of default do you give more emphasis?

a) The claims against personal wealth _________

b) The claims against guarantees _____________

c) Social sanctions _________________________

d) Loss of future access to credit _____________

e) Others (specify) _________________________

9.14 What do you think about the timeliness of loan issue? i.e was loan issue timely? Yes ____ No _______

a) If no, has it negative impact on your business? Yes ____ No ____

b) If no, what was the impact of it?_____________________________________

9.15 Do you keep financial records for your business? Yes ________No _________

If yes, does it help you in your loan repayment? Yes ________No _________

9.16 What do you think the transaction costs of the program in relative to formal banks?

Fair _____________ Same _________ High ____________

9.17 What do you think the distance from institutional credit in relative to formal banks?

Less _____________Same __________High _______

10. SUPERVISION AND ADVISING (ONLY FOR CLIENTS)

10.1 Have you had any training or consultancies from WMFI for your business activities? Yes _________No ____________

If yes, what type of training or advice did you get?

Management ________ b) Marketing ___________c) Production _____________Loan utilization _________e) Book-keeping ______f) Others (specify) ________

10.2 Was any supervision on loan utilization and loan repayment? Yes ____No ____

If yes, a) Satisfactory ___________b) Not satisfactory __________

If not satisfactory, do you believe that it has contribution for your loan default?

Yes ___No___

10.3 Do you believe that supervision whether it is from WMFI staff or kebele administration has advantage on loan utilization and repayment? Yes ____No __

10.4 How many times you have been visited per one loan duration of time?

11. OTHER INFORMATIONS (ONLY FOR CLIENTS)

11.1 How many members does your group have? ___________

11.2 Did you know all of your group members before joining it? Yes ____No ______

11.3 Do you feel that you might be sued in case of failure to repay the loan? Yes ____No _

11.4 Do you monitor whether a member of your group uses the loan for the intended purposes or not? Yes _________No ___________

If yes, what actions do you take in case of diversion or not to use the loan for the intended activities? ____

11.5 Please list the major products produced from your business activities financed by the loan:

a) ____

b) ____

c) ____

d) ____

11.6 How was the demand for your products? High ____Average ____Low _______

11.7 What was the price of your products? Increases __Decreases ___No change ____

11.8 Did you use purchase inputs for your business?

a) Before loan? Yes ______No ______

b) After loan? Yes _______No ______

c) Has it been improved after loan? Yes _______No _______

11.9 Overall, has your live been better after loan than before the program participation?

Yes ______No ___________

11.10 What is your overall opinion about the program? ____

11.11 Please suggest if any means of more appropriateness for the program____

11.12 During your participation period, what have been the major constraints in operating your business?

a) Insufficient fund _______

b) Insufficient or lack of land

c) Lack of business knowledge _____________

d) Lack of market for output ________________

e) Lack of knowledge of using the loan ___________

f) Loss or damage ______________________

g) Weather conditions ________________

h) Lack of capital ________________

i) Others (specify) _______________________________

11.13 From your answer above rank the three most constraints:

1st ____

2nd ____

3rd ____

11.14 What issues have been raised during meetings?

a) ____

b) ____

c) ____

d) ____

e) ____

11.15 Do you think that you will continue in the program? Yes _____No ______

If yes, why?

a ____________________________

b ____________________________

c ____________________________

If no, why?

a) Too small loan amount ___________ b) Too short loan length __________

c) Inappropriate time of loan repayment ____d) Conflicts with members ________

e) Obtaining enough capital ___________ f) Unable to repay the loan _________

g) Decide to close the business ___________ h) Others (specify) ____________