Mekelle University

Department of Management

College of Business and Economics

Determinants of Rural Households' Access to Formal Credit in Muslim Communities:

(The case of Dewa-Chafa Woreda, Oromiya Zone, Amhara Region)

By

Mohammed Ahmed Endeshaw

A Thesis

Submitted in Partial Fulfillment of the Requirements for the

Master of Arts degree

In

Development Studies

Advisor: Zaid Negash(Ph.D)

Co-advisor: Bihon Kassa (MA)

February, 2010

Mekelle, Ethiopia

Declaration

This is to certify that this thesis "Determinants of Rural Households' Access to Formal Credit in Muslim Communities: The case of Dewa-Chefa Woreda, Oromiya Zone, Amhara Region" submitted in partial fulfillment of the requirement for the degree of MA, in Development Studies to the College of Business and Economics, Mekelle University, through the Department of Management, done by Mr. Mohammed Ahmed Endeshaw, Id. No. PR0014/00 is an authentic work carried out him under my guidance. The matter embodied in this project work has not been submitted earlier for award of any degree or diploma to the best of my knowledge and belief.

Name of the student Mohammed Ahmed Endeshaw   Signature & date _____________

Name of Advisor Zaid Negash (Ph.D)   Signature & date ____________________

Name of Co-advisor Bihon Kassa {MA}   Signature & date ____________________

ABSTRACT

The provision of credit has increasingly been regarded as an important tool for raising the income of the rural population, mainly by mobilizing resources to more productive use. However, in Ethiopia, among other things, lack of finance is one of the fundamental problems impeding production, productivity and income of the rural households in general and food insecure household in particular. The Federal and Regional governments have been making different efforts to address the overwhelming problem of food insecurity by providing food security package based credit and other complementing services. Although credit facilities are available to rural households in the study area, in practice, some Muslim households made use of the facility while many others have not. The purpose of this study is to assess the factors that determine rural Muslim households' access to formal credit in the study area. A two stage sampling method was employed to select two out of eighteen rural peasant associations and 150 Muslim rural households (80 credit user and 70 non users). Both quantitative and qualitative data were collected from the households using a structured questionnaire, focus group discussions and field observation. Descriptive statistics and binary logistic regression model were employed to analyze the data. The result revealed that, 65.7 percent of the non credit user households displayed the need for credit. Some 40 percent of those who confirmed the need for credit indicated the presence of interest, which is not supported by Islam, as the main impediment for not borrowing from microfinance institutions. Moreover, rural households who participate in extension package program have significantly more access to microfinance loans than non participants. Besides, problems related to group formation and lack of own cultivated land significantly affected participation in formal credit. While access to credit is quite crucial for poverty alleviation, the findings of this study show that policy makers as well as governmental and non-governmental development actors need to pay due attention to promote and enhance access to credit of rural Muslim households.

ACKNOWLEDGEMENT

This study engaged many individuals, households and institutions. With the usual disclaimer, I would like to extend my words of gratitude to a few of the many that rendered me support directly or indirectly during my study.

I would like to extend my heartfelt thanks to my advisor Dr. Zaid Negash for his valuable advice, insight and guidance starting from proposal development to the completion of the research work. I am again thankful to my co-advisor, Mr. Bihon Kassa, for his willingness to advise me as well as his valuable guidance and support throughout my research work.

I would like also to express my sincere appreciation to Oromiya Administrative Zone for giving me a chance to pursue my post graduate study and financial support for my research paperwork. I would like also to thank Mr. Hussen Adem and staff members of Oromiya Zone Finance and Economic Development department for their hospitality and kindly cooperation in all aspects. In connection with this my thanks are due to Oromiya Zone Road Transport Office, Food Security Office, Dewa Chefa Woreda Rural Development and Agricultural Office; supported me with the necessary stationary materials and copies. My special gratitude and deepest thanks also goes to Mr. Hassen Yesuf, Hussen Mamo, and Selemon Seifu for their support by giving Laptop to facilitate my work.

Very exceptional thanks go to Mr. Kidane Tafa and Woldu G/Silasie for their generous assistance, moral support and helpful encouragement during my graduate study, with all their kindness, affection and editing the thesis. I am grateful to farmers of Goro dindin and Goda Kebele who responded to all questions with patience and gave necessary information for this research work.

Last but not least, I would like to express my deepest thanks and appreciation to my wife Foziya Endris for her encouragement, love, and patience to withstand with situations during my absence.

Acronyms

ACSI	Amhara Credit and Saving Institution
ARDO	Agriculture and Rural Development Office
CGAP	Consultative Group to Assist the Poor
CGC	Credit Guarantee Corporation
CSA	Central Statistics Agency
DBE	Development Bank of Ethiopia
DECSI	Dedebit Credit and Saving Institution
FDRE	Federal Democratic Republic of Ethiopia
FEDO	Finance and Economic Development Office
GDP	Gross Domestic product
GTZ	German Technical Corporation
HGI	Harar Global Institution
HMFP	Hodeimah Microfinance Program
ICDB	Islamic Cooperative Development Bank
IDP	Islamic Development Bank
IFSP	Integrated food Security Program
ISMF	Islamic Microfinance Institution
KFW	Kreditoinstalt Fhr Wiederaufbau (German Financial Corporation)
MFI	Microfinance Institution
NBE	National Bank of Ethiopia
NGO	Non-governmental Organization
OIC	Organization of Islamic Countries
PA	Peasant Association
SACCO	Saving and Credit Corporation
SPSS	Statistical Package for Social Sciences
TLU	Tropical Livestock Unit
UNDP	United Nation Development Program
UNESCO	United Nations Educational, Science and Cultural Organization

TABLE OF CONTENTS

Contents **Page No**

List of Tables

List of Figures

CHAPTER 1: INTRODUCTION

1.1 Background of the Study

Through out the world, poor people are excluded from formal financial systems. Exclusion ranges from partial exclusion in developed countries to full or nearly full exclusion in lesser developed countries (LDCs). Lacking access to formal financial services, the poor have developed a wide variety of informal; community- based financial arrangements to meet their financial needs (Karlan, 2001). The provision of credit has increasingly been regarded as an important tool for raising the income of the rural population, mainly by mobilizing resources to more productive use. A good understanding of the determinants of households' access to credit is an integral part of poverty reduction efforts in poor countries (Gamal, 2007).

Rural credit markets in developing countries are often described as repressed imperfect and fragmented. It is common that different societies have different levels of access to certain type of credit institutions (Neguyen, 2007). In some markets potential borrowers may find themselves excluded from formal financial services. A number of empirical studies mentioned various reasons for these constraints; limited availability of formal rural credit, risky and uncertainty of rural credit market, asymmetric information problems between lenders and rural borrowers, weak enforcement and poorly developed economic infrastructure (Bending et al, 2009). Moreover, some specific financial products are not attractive to some customers on ethical or religious grounds; non usage in this case cannot be attributed to lack of access—although access might be an issue here if acceptable alternatives are not being offered. The case of *Shariah*-compliant financial products can be relevant here (Udry, 1991).These factors also apply to Ethiopia.

Ethiopia is one of the largest countries in Africa covering a total area of 1.12 million square Kilometers. According to 2007 Population and Housing Census it has a total population of 73,918,505, and the second most populous country in Africa. It is a very diverse country in many aspects including ethnicity, religion, geography and economy. In terms of religion, the Ethiopian population is Orthodox, 43.5%, Muslim 33.9%, Protestant 18.6%, Traditional beliefs 2.6% Catholic 0.7% and others 0.6% (CSA, 2008). In rural areas in particular Muslim account for 35% of the population compared to 40.5% of that of Orthodox (CSA, 2008). According to the 2007 census, 84 percent of the Ethiopian population is living in rural areas and its livelihood depends on agricultural and allied activities. In the past decades, agricultural production and allied activities have been discouraged for various reasons. Inappropriate policies and strategies severe environmental degradation, recurrent drought and high population growth have been among the key factors that have been affecting the performance of the sector (Itana, 1994).

According to the National Bank of Ethiopia (NBE, 2008) the Ethiopian economy grew at an annual rate of 11.5 for a period of four years. Sector wise agriculture remained the major constituent of the economy with about 44.1% followed by the service sector and industrial sector each accounting for 42.9 and 13.0% respectively. Generally, the overall economic growth of the country has been highly associated with the performance of agricultural sector. Agriculture remains as the mainstay of the economy. Even though the economy has shown healthy growth rate, income level of most rural households remain very low to satisfy their basic needs and input requirements. Chronic food insecurity has remained serious development challenge to Ethiopia in general and where this study concentrates in Amhara region in particular (Alemnew, 2007).
The problems of food security and poverty were believed to be the result of the compounded effect of multiple factors. Lack of access to productive assets, appropriate agricultural technologies and inputs, poor infrastructure, lack of appropriate financial services, poor access to extension and trainings have proven to be key barriers to the Ethiopia is food security and poverty reduction endeavors (Hussein, 2007).

In developing countries like Ethiopia, **i**mproved access to financial services is supposed to have significant contribution in addressing poverty through improving people's ability to increase their productivity, income and well being. The rural poor need a means to escape out of the vicious circle of poverty. Thus rural poor need to invest on and involve in various economic activities so as to improve their productivity and livelihoods. It is believed that rural credit plays a vital role to increase productivity and alleviate poverty (Akram, 1994).

In Ethiopia, the rural financial system is dichotomous (formal and informal) in nature (Sisay, 2008). The formal and informal sectors co-exist with difference in accessibility. Even though, the extent of access to rural households is different, the two sources continue to be the major sources of rural credit, and they are imperfect substitutes. In particular, formal credit, when ever available reduces, but not completely eliminates informal borrowings (Diagne & Zeller, 2000). This suggests that the two forms of credit fulfill different functions in the household inter temporal transfer of resources. Commercial banks and other formal institutions fail to cater to the credit needs of the rural poor mainly due to their lending conditions (Collateral) and high transaction costs (Zeller et. al. 1998).

In recognition of the role of financial service in tackling poverty and food insecurity, the government of the Federal Democratic Republic of Ethiopia has issued proclamation No. 40/96, entitled "proclamation to provide for the licensing and supervision of the business micro financing institution", that allows the establishment and operation of microfinance institutions. Consequently, 28 microfinance institutions (MFI) have been registered and made their financial services available for their clients (NBE, 2008).

The main objective of MFIs is to address the financial and /working capital shortages of the poor, rural and urban regardless of geographical, ethnicity or religious differences. However, availing rural credit services to the community alone may not guarantee equal participation of eligible individuals or social groups. Even though over 2 million clients are served by the microfinance industry in Ethiopia, outreach still remains low (Getanh, 2005; Zaid, 2008). Moreover, there are no formal credit institutions that provide financial services in accordance with the requirements of the *Quran.*

As we have already discussed above, Ethiopia is a diverse country in many aspects and different proportions. In terms of religion, Muslims constitute the second highest proportion of Ethiopian population next to that of Orthodox (CSA, 2008). Likewise, the proportion of Muslim farmers in the country is considerable. According to the information obtained from Dewa-Chefa Finance and Economic development office, 99 present of the rural population is Muslims. On the other hand no specifically designed financial services exist for such communities. According to Khan

(2008) Muslims' need for financial services is tremendous as long as Islamic finance principles are maintained. However, only few microfinance institutions adhere to the principles of Islamic finance even in the Muslim countries. Like in the other part of the world, formal microfinance institutions in Ethiopia have been charging interest which is considered not compliant with the principle of Islamic religion. This limits the demand for financial services in the Muslim dominant area of Amhara Region, (Getaneh, 2005). All formal microfinance initiatives involve a predetermined interest rate which is not permissible in the religion of Islam (Dhumale and Sapcanin, 1999; Khan, 2008; Obaidullah, 2008). Many Muslim Scholars noted that interest is one form of Riba which is prohibited in Islam. With in Oromiya Zone, before 7 to 8 years ago Amhara credit & saving institution (ACSI) opened its branch in Dewe Harewa Woreda of the Zone. After a while, the branch was closed. Although, a systematic study was not conducted as ACSI annual report indicates, the reason for closure of the branch was that the Muslim communities in this area did not want to participate in the interest bearing credit and saving. This study is undertaken to make a systematic analysis of the challenges and opportunities with regard to financial services in the study area.

1.2. Statement of the Problem

Credit provision is one of the principal components of rural development, which helps to attain rapid and sustainable growth of agriculture and allied activities. Rural credit is a substitute for personal savings, which catalyses the process of agricultural production and productivities. It plays a vital role in poverty alleviation (Atieno, 2001).

The rural credit markets in developing countries are often described as repressed, imperfect and fragmented (Neguyen, 2007). Evidence shows that small rural producers have very limited access to formal rural credit (ibid). In most developing countries formal credit has not reached more than 20 percent of all farmers. Roughly 5 percent of all farmers in Africa (including Ethiopia), 25 percent in Asia 15 percent in Latin America have access to formal credit (Padmanabhan, 1996). A study in Indonesia shows that many poor households, including those with savings account but not loans, are adverse to take debt and do not seek credit even though they are credit worthy (Honohan 2007).

Several studies in Ethiopia also indicate that farm households operate under constrained financial market conditions (Hussien, 2007). For example in Amhara Region ACSI, the largest MFI in the country has 10 branches and 179 sub-brunches (Alamnew, 2007). In terms of outreach, as of 2007 there were over 550,000 poor clients with an active credit balance, and another 320,000 voluntary savers (Getaneh, 2007). Moreover ACSI and other smaller MFI and saving and credit cooperatives (SACCOS) in the Region only manage to reach between 10 and 12% of the demand (Alemnew, 2007).There are many economically active poor people still not reached by microfinance institutions (Getaneh, 2005). Not only this outreach constraint, but also like in the other part of the world, formal financial institutions in Ethiopia have been interest based which is considered by the Islamic society not compliant with the principle of Islamic religion. This is the demand constrains for financial services in the Muslim dominant areas of Amhara Region (Getaneh, 2005). Similarly in countries like Pakistan, Afghanistan, Egypt, and certain other Muslim countries, MFIs have found religion to be a factor that has led to relatively lower demand for micro credit and MFIs are more cautious about expanding (Zamen, 2004).

When we come to the study area (Dewa- Chefa Woreda) Muslims make up almost 99 percent of the rural population. Before 7 to 8 years ago Amhara credit & saving institution (ACSI) opened its branch in Dewe Harewa Woreda of the Zone. After a while, the branch was closed. Although, a systematic study was not conducted as ACSI annual report indicates, the reason for closure of the branch was that the Muslim communities in this area did not want to participate in the interest bearing credit and saving. In the principle of Islamic finance, paying or collecting interest rate from money is not acceptable. That is financial services having predetermined interest rates are forbidden in the Islamic financial principles (Dhumale and Sapacnin 1999, Obaidullah, 2008). In the study area ACSI and Cooperative provide credit services accompanied by interest to all members of community. Some rural households have taken the credit from these MFIs while others did not. Yet, study is not made in the area concerning the factors that affect rural households' access to formal credit. This study is made to fill the gap.

.

1.3. Study Objectives

The main objective of the study was to assess determinants of rural households' access to formal credit in Muslim communities in the study area. And the specific objectives are:-

- To identify factors that affect rural households' access to formal credit in Muslim communities.
- To assess sources of credit in the study area.
- To identify the mode of credit that is acceptable by community in the study area.
- To assess the impact of demographic (age, sex, and education) and location characteristics (nearness to microfinance institutions & extension contact) on households' access to credit.

1.4. Research Questions

A number of studies on poverty indicate that the reason poor households are unable to participate in the development process is their exclusion from the financial system. According to Kempson et al (2000), the financial service exclusion is five types (access, condition, price, market and self exclusions). Among the factors that contribute to financial exclusion, in Muslim society is the presence of interest or Riba in conventional as well as micro finance (MFI) contracts. In general, the study is intended to deal with the following research questions.

1. What are the determinant factors that are affecting Muslim rural households' access to formal credit?
2. Is interest bearing on microfinance institutions real problem in the study area?
3. What are the social and cultural factors that affect rural households not to use formal credit?

1.5. Significance of the Study

Many previous studies have shown that financial market conditions affect economic growth and development of the countries (Morduch, 1999). The lack of capital and absence of attractive investment opportunities are considered to be important reason behind inadequate economic development in many developing countries. Currently food security and poverty alleviation is a prime objective of the country as well as the region. Then the government has been making different efforts to reduce poverty, and food insecurity at household level, through development policy measures, capital formation as well as the supply of financial means in the form of credit through official institutions (MoFED, 2006). However, still research was not made in the study area with regard to what factors that affect rural households; access to formal credit in relation to Muslim communities.

Therefore, the study on determinants of rural households' access to formal credit in Muslim communities, It may help policy makers to understand the possible areas of intervention which are supposed to improve Muslim rural households access to credit facilities in particular, and the whole society in general. The study also gives information about the situation of demand for formal credit by the rural people. Moreover, the findings might benefit organizations, civic societies, NGOs and other development actors, who are engaged in the provision of credit facilities to the rural people. The document also serves as reference for further researchers.

1.6. Limitation and Scope of the Study

Time and financial resource limitations forced the researcher to limit the sample study on two Kebeles. It cannot be generalized in to other Kebeles and Woredas.

The scope of the study is limited to Amhara Region Oromia zone Dewa-Chefa Woreda Muslim communities of rural households. The study is also focused on formal credit institutions especially micro finance institutions such as, ACSI, Cooperatives and Others those give services in rural areas. The results could not be generalized to the regional or national level. However, the recommendations and policy implications of the study can be used for other areas of similar contexts and as a basis for further studies.

1.7. Organization of the Paper

The research is organized in to five chapters, chapter one is constituted the introduction, which focuses mainly on the background, statement of the problem, objective, research question, scope and significant of the study. Review of the theoretical and empirical literature pertinent to the concern of the thesis is presented in chapter two. Chapter three described the research methodology that includes a description of the study area, data collection procedures, and analytical techniques. The discussion and recommendation part elucidate in chapter four and five, respectively.

CHAPTER 2: LITERATURE REVIEW

2.1. Credit and Rural development

2.1.1. Rural finance

Rural development is a complex phenomenon. It involves changing the life style of people living in rural areas on a sustainable basis by raising their productive abilities and earning capacities (Padmanabhan, 1996). As a typical profile of poor people living in rural areas of the developing countries indicates; they do not have access to improved technology, irrigation water, improved seeds, fertilizers, agricultural machinery and pesticide (they are too poor to buy or hire) (Akram, 1994). Rural finance is a crucial input towards mitigating the financial problems of rural households. The primary objective of rural finance is to improve the living conditions of the rural poor in developing countries (Schmith and Erhard, 1987). MFIs can play active role in improving the conditions of the poor in mobilize savings of the poor segment of the population, which have hitherto remained untapped (Atieno, 2001). It is obvious that in developing countries the main business in rural sector is agriculture, which supports a large labor force and contributes substantially to national income, to export to domestic food and raw materials supply, and to the purchasing power of a national market for industry (Padmanabhan, 1996).

Financial institutions are private or governmental organization, which serve the purpose of accumulating funds from savers and channeling them to the individual households and business looking for credit. Financial institutions are composed of deposit type institution (bank and non-bank contractual saving institutions), personal and business financial companies, government and quasi-government agencies, and miscellaneous lenders (Greanwal & Associates, 1983). The rural credit markets in developing countries are fragmented and imperfect market conditions. Financial markets can be categories into two segments; formal and informal (Diagne et.al. 2000). Formal credit market institutions provide intermediation between depositors and lenders charge relatively low rates of interest that usually are government subsidized. Private individuals, professionals, moneylenders, traders, commission agents, landlord, friends and relatives, constitute informal financial services (Mohiedins and Write, 2000).

It is common that segments of borrower have different levels of access to certain types of loans and certain types of credit institutions. In some markets, borrowers may find themselves dissuaded or excluded from formal creditor sector. Problems associated with financial services included, the limited availability of formal credit, the problems of asymmetric information between borrowers and lenders, weak enforcement system, lack of developed infrastructure, the risk and uncertainty of rural credit market (Zeller et.al.1998).

In contrast to formal finance, informal finance provides much easier conditions for access to loans. Borrowers and lenders often live in the same area and easily get to know each other. Lenders usually do not require any collateral or documents; they treat each other through informal agreement and by laws (Nguyen, 2007).

As discussed above in developing countries formal and informal financial institutions exist side by side. Diagne (1999) noted that each section of the financial institution offers financial services that differ from one another with respect to interest rates, transaction costs, loan duration, target group, amount of loan, and its use.

2.2 Rural financial system in Ethiopia

Rural finance in Ethiopia, as in other developing countries has dualistic features. There exist both formal and informal credit institutions in the country (Sisay, 2008).

2.2.1 Formal financial institution in Ethiopia

In the Ethiopian context formal financial sector includes National Bank of Ethiopia (NBE), Commercial Banks (owned by private and public), Development Bank of Ethiopia (DBE), credit and saving cooperative and micro finance institutions (owned by regional governments, NGOs, associations and individual) (NBE, 2003). Banking in Ethiopia started in 1905, with the establishment of the bank of Abyssinia that was owned by the Ethiopian government in partnership with the national bank of Egypt then under British rule (Getachew & Yishak, 2006). But a well structure banking system started to evolve starting the1940s after the Italian departure.

The state bank of Ethiopia was established in 1942 and a number of foreign bank branches and private bankers were operating in competition with the government owned commercial bank until they were nationalized and merged into one government owned mono bank in 1976 during the Derg period (ibid).

Following the overthrow of the Derge regime in 1991, changes in economic policies as well as political, administrative and institutional structures began to be introduced by the new government. Among the measures taken, the financial market was deregulated. A proclamation number 84/94 was issued to provide for the deregulation and liberalization of the financial sector and a number of private banks and insurance companies were established following the proclamation. Directives issued in subsequent years further deepen the liberalization mainly including the gradual liberalizations of interest rate, foreign exchange determination, and money market operation (Itana, 1994). The number of banks operating in the country reached 11 with the total number of branches increasing to 562 (NBE, 2008). At the same time, the number of insurance companies increased 10 and their total branch rose to 172. However, the high people bank branch ratio (1:188,000) indicate that Ethiopia remain as one of the under banked economies even by sub Saharan Africa standards (Getachew & Yishak, 2007). Many of their branches are located in the city and major regional towns of the country. With regard to microfinance, 28 MFIs have been established as of 2007 (NBE, 2008). These MFIs in Ethiopia are playing a remarkable role in alleviating poverty and creating wealth at the grass root level especially at rural areas.

2.2.2 Microfinance institutions (MFI)

A micro finance institution is an organization that offers financial service to the low-income people. Most of these offer micro credit and only take back small amounts of savings from their borrowers and from the wider public. Examples of MFI are NGOs, credit unions, cooperatives, private commercial banks, and non bank financial institution and part of state owned banks (Baktiar, 2008). Although it is not a new concept, the current popularity of microfinance has its origins in 1976 when the economist, Muhammad Yunus, began lending small amounts of cash ("micro credit") to rural women in Bangladesh to start or expand their businesses. The recipients of these small loans repaid them promptly and ran successful enterprises; this in turn encouraged

Yunus to formalize his lending program into what has become the now-famous Grameen Bank (Khan, 2008). It is an outstanding example of a successful microfinance institution. The award of the Nobel Peace Prize in 2006 to the Grameen Bank and its founder, Muhammad Yunus, brought microfinance to international attention. With 6.91 million borrowers and 2,319 branches throughout Bangladesh, Grameen Bank has achieved remarkable success (Wilson, 2007). Originally based on traditional form of community financing microfinance movement began in the early 1980s in places like; Bangladesh and Bolivia and has over the last 20 years captured the interest of the multi-lateral donor agencies and private sector bankers (Enugu Forum, 2006). Thus microfinance industry now has global outreach, with more than 92 million clients reported in developing countries (David & Moore, 2006).

Over view of micro finance in Ethiopia

The microfinance industry in Ethiopia initially started as a micro credit scheme motivated by government and non-government organization. Following the 1984/ 1985 severe drought and famine, many NGOs start to provide micro credit along with their relief activity, although this was on a limited scale and not in a sustained manner (Wolday, 2002). The micro credit schemes were donor driven rather than an outcome of a clear policy direction and development strategy. Their outreach and impact was thus very limited (Befekadu 2007). The provision of savings facilities, which is essential for a sustained credit service delivery, was completely ignored. The failure of the normal banks to provide banking facilities on the one hand, led the government to issue a legal framework for the establishment and operation of micro finance institutions (Gebrehiwot, 2002; Getachew & Yishak, 2006).

In spite of the significant developments, microfinance in Ethiopia is in its early stage. Based on data of 2006, the industry's outstanding loan to GDP was 1.7 percent and its share to loan and advances of lending banks and MFIs was 1.6 percent (Befekadu, 2007). Savings Mobilization by MFIs had reached 3.6 percent of gross national savings (ibid). About 28 micro finance institutions exist in Ethiopia that have been established following the proclamation of 40/96 issued and licensed by the government of Ethiopia (NBE, 2007; NBE, 2008). Among the best known MFIs in Ethiopia we have Amhara Credit and Saving Institution (ACSI), Dedebit Credit and Saving Institution (DECSI), which are some of the biggest in Africa in terms of client as well as the number of poorest they reached (Zaid, 2008).

According to Khan (2008), access to small loans creates a virtuous cycle of investment and increased income that break the vicious circles of poverty in which poor people are trapped. This is because accesses to credit creates opportunities for self-employment for the poor borrowers and in turn increase their income, which can increase level of consumption and investment (Zaman, 2004). The inability of subsistence farmers to invest in modern inputs and technologies or develop alternative income generating business is exacerbated by lack of affordable and appropriate credit service (David and Moore, 2006).

Provision of appropriate microfinance services particularly micro credit, would be one of the most important policy tools in alleviating poverty (IFSP, 1997). Many studies also show that credit access helps the poor to increase income, build viable business, and reduce their vulnerability to external shocks (Nguyen, 2007; Obaidulalh, 2008). In addition, it enhances women empowerment (Ghatak, 1999). Microfinance enables women to control over resources and income, savings, self-esteem, respect from others, and future orientation by an individual (Getaneh, 2007b).

In Ethiopia, the rural financial landscape essentially remains dominantly semi formal financial services, such as '*Equib'* (rotating saving scheme), '*Iddir'* (traditional insurance scheme), as well as money lenders, traders, friends and relatives (Alemayehu et al., 2006). Supply of formal services to the rural communities are still very weak or inexistent and virtually no saving mobilization particularly that of traditional banks. Another constraint is that, all the existing microfinance institutions in the country deliver similar types of loan products to clients. That is, MFIs have not attempted to develop various products based on market analysis. All involve in collecting or paying predetermined interest for credit and saving (HGI, 2009). This collecting and paying on predetermined interest for money is prohibited in Islamic principles (Obaidalah et al., 2008; Khan, 2008). Studies indicate the need to develop a multiplicity of financial intimidation product to satisfy the needs and diversity of Ethiopia's multi ethnic population (HGI, 2009). CGAP (Consultative Group to Assist the Poor) emphasizes *"diverse approaches* *are needed a one size fits all solution will not work. Diverse channels are needed to get divers financial services in to the hands of a diverse range of people who are currently excluded"* (Mohammed et al., 2008).

2.3 Islamic Financial System and Principles

2.3.1 Islamic financial system

Islamic finance was practiced predominantly in the Muslim world throughout the middle Ages, fostering trade and business activities with the development of credit (Khan, 2008). In Spain and the Mediterranean and Baltic States, Islamic merchants became indispensable middlemen for trading activities. In fact, European financers and businesspersons later adopted many concepts, techniques, and instruments of Islamic finance (Schmith, 2005).

According to Asyraf (2008) explanation Islamic financial system is relatively new, appearing only in mid 1980s. In fact, all the earlier references to commercial or mercantile activities conforming to Islamic principles were made under the umbrella of either interest free or Islamic banking (Alam, 2003). However, describing the Islamic financial system simple, as interest free does not provide a true picture of the system as a whole (Sideqi, 2004). Undoubtedly, prohibiting the receipt and payment of interest is the nucleus of the system (ibid). But it is supported by principle of Islamic doctrine advocating risk sharing, individuals rights and duties, property rights, and the sanctity of contracts. It is not also limited to banking but also covers capital formations, capital markets, and all types of financial intermediaries (Iqabal, 1997).

2.3.2 Principles of Islamic financial system

The Islamic financial sector is mainly characterized by some key principles deriving from the *Shariah* or Islamic law (Khan, 2008). Riba is Arabic word that may be translated as "increase" or "excess", but which actually refers to any form of interest (Obaidullah, 2008). Since for Islamic law "money is not an asset in and of itself," riba (interest) is strictly forbidden (Sideqi, 2004). Islam does not allow to profit from a financial activity unless the financial capital is also exposed to risk (Wilson 2007). Any positive, fixed, predetermined rate tied to the maturity and the amount of principal (i.e. guaranteed regardless of the performance of investment) is to be considered as riba and prohibited (Gaimberti, 2008).

As outlined by Iqabal (1997), "the basic principles of an Islamic financial system is prohibition of interest (Riba) which is based on argument of social justice, equality and property rights". Islam encourages the earning of profits but forbids the charging of interest (Asyraf, 2008). Obaidullah (2008), and Asyraf (2008), explained that,

One, profits, determined ex- post, symbolize successful entrepreneurship and creation of additional wealth coming from business operations and may not create wealth if there are business losses. Social justice demands that borrowers and lenders share rewards as well as losses in an equitable fashion and that the process of wealth accumulation and distribution in the economy be fair and representative of true productivity. Second, risk sharing; the provider of financial capital and the entrepreneur share business risks in return for share of the profits. Third, money as potential capital becomes an actual only when it joins hands with other resources to undertake a productive activity. Islam recognizes the time value of money, but only when it acts as capital, not when it is potential capital (ibid). Money is also a community resource and should be used for the benefit of the community and not for the personal gain of one or a small number of individuals (ibid). Fourth, prohibition of speculative behavior- an Islamic financial system discourages hording and prohibits transactions featuring extreme uncertainties, gambling and risks (ibid). Fifth, sanctity of contracts; Islam upholds contractual obligations and the disclosure of information as a sacred duty. This feature is intended to reduce the risk of asymmetric information and moral hazard. Sixth, investment should only support practices or products that are not forbidden or discouraged by Islam. An Islamic bank would not finance trade in alcohol, tobacco, gambling: a casino, business or other practices that are not allowed or discouraged under Islam. Furthermore, an Islamic bank would not lend money to other bank for return of interest (ibid)

To sum up, an Islamic financial system can play a vital role in economic development by mobilizing dormant savings that are being kept out of interest based financial channels and by facilitating the development of capital markets (Mohammed et. al. 2008). It also enables savers and borrowers to choose financial instruments compatible with their business needs, social values and religious beliefs (Wilson, 2007).

2.4. Islamic Banking

Islamic banking has started ever since the Muslims established relations with the Modern interest based banking system (Ridza, 2008). The theory of Islamic finance gives rise to the development of Islamic banking where the functions of a bank do not vary between conventional and Islamic banks (Khan, 2008). However, the operations, philosophy, and objectives differ significantly between the conventional and Islamic Banks. Conventional bank operates its business in the capitalist system where the root of the system is based on interest. On the other hand, the Islamic bank provides the solution to the Muslims in terms of principles, instruments and issues in dealing with banking business activities where the operations of the activities are based on the principles of the *Shari'ah or Islamic law* (Abdulrahman, 2007). On behalf of that, the discussion developed in to an effort made by many scholars to propose an alternative banking system which will be just and free from interest. In 1955, an extensive model of an Islamic Bank was proposed (Ridza, 2008). However, it was only in the late 1960s that a more comprehensive model of interest free banking appeared (Wilson, 2007).

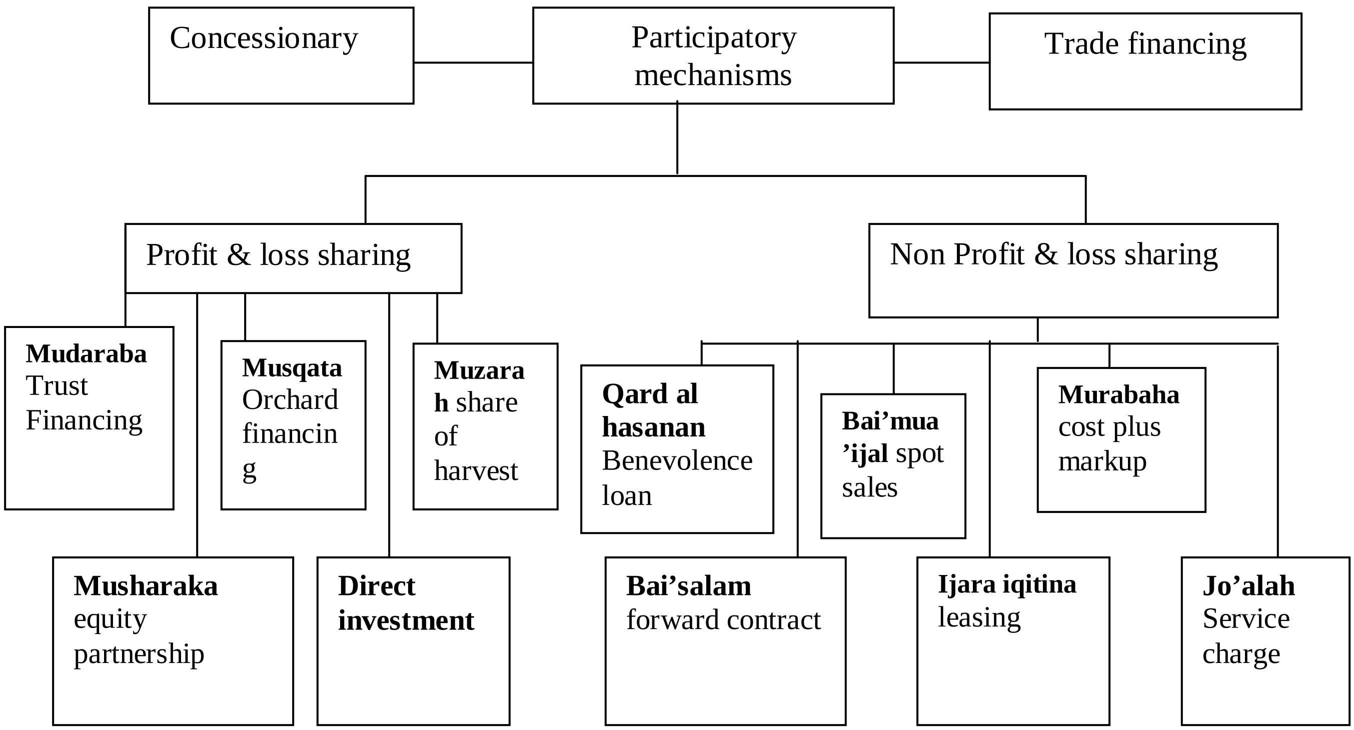
The first modern experiment with Islamic banking was under the pioneering effort, led by Ahmed. El Najjara, and took the form of savings bank based on profit sharing in the Egyptian small delta town of Mit Ghamr in 1963. Mit Ghamr saving bank is a small rural institution in Egypt (Abdularahman, 2007). Following the first experiment, there was a call for the establishment of an Islamic Bank at the International level. Since several Islamic Banks have come in to existence. The Dubai Islamic Bank (1975), Faisal Islamic Bank of Sudan (1977), the Faisal Islamic Bank of Egypt (1977) and the Bahrain Islamic Banks (1979) are some of the Banks operating in many countries (Ridza, 2008).

According to Karim et al. (2008) the emergence of (or the expansion) of the Islamic bank is due to three factors. The first being the agreement by the finance ministers of the organization of Islamic conference in 1973 to establish the Islamic Development Bank (IDB). In this regard, explained IDB is primarily a development assistance agency rather than a commercial bank. The second factor facilitating the development of modern Islamic banking was the oil price rises of 1973-74 that vastly increased the financial resources available to the gulf countries. The third factor promoting Islamic finance, indeed arguably the most crucial but insufficiently recognized, was the effort and vision of a number of Islamic scholars. The prohibition of Riba (interest) is of course explicit in the Koran, as is the call for the lenient treatment of debtors, but how this should be applied to contemporary finance was much more a matter of debate (Dhumale & Sapcanin, 1999). There was in particular the question of whether Riba, an addition to a loan constituted usury, excessive and exploitative interest, or any kind of interest. The consensus amongst Islamic economists from the 1960s was that it should be applied to all interest, which meant alternative to interest based banking had to be found (Wilson, 2007).

Today, Islamic banking has been grown rapidly in terms of size and the number of players. There are about 270 Islamic banks in more than 50 countries worldwide (Chong & Liu, 2005; Abdulrahman, 2007). In Iran, Pakistan, and Sudan, only Islamic banking is allowed. In other countries, such as Bangladesh, Egypt, Indonesia, Jordan and Malaysia, Islamic banking co-exists with conventional banking (Wilson, 2007). Islamic banking (interest free), moreover, is not limited to Islamic countries. It is also established in non Muslim countries. For example in August 2004, the Islamic Bank of Britain became the first bank licensed by a non Muslim country to engage in Islamic banking. Devon bank in Chicago offer Islamic banking products in the United States (Chong & Liu, 2005).

Despite the wide acceptance of Islamic banking worldwide, the concept of financing for the poor or micro finance by Islamic banks was not well developed. Most Islamic banks, as in the case of conventional commercial banks, did not provide easy access to finance the poor. The literature of the 1960s and 1970s was clear that Islamic banking and finance should be based on profit lose sharing (PLS) or Mudarabah (Dhumale and Sapcanin, 1999).

Figure1 Types of Islamic Banking Contracts



Source: (Dhumale and Sapcanin, 1999)

2.5 Major Islamic Microfinance Models and Practices

Islamic scholars recognize that the provision of needed financial services to the working poor can be accomplish in a manner that is completely with the precepts of Islamic law (Asyraf, 2008) Then Islamic finance (Islamic bank) instruments and microfinance instrument can be considered as compatible with each other. The mutual goals of poverty alleviation and economic advancement for distressed communities form the basis of the harmonious relationship that exists between microfinance programs and Islamic religious law (Obaidullah, 2008). Dhumale and Sapcanin (1999) drafted a technical note in which they tried to analyze how to combine Islamic banking with microfinance. The alternative micro credit strategies are in use to finance business under Islamic laws and with the aim of reaching the most disadvantaged people. The instruments or models are: Mudaraba (trustee financing), Musharaka (equity partnership), and Murabaha (cost plus markup).

a) Mudaraba (trustee or profit share agreement) has the potential to adapt as Islamic microfinance scheme. Mudarabah is where the capital provider or micro finance institution (Rabbulmal) and the small entrepreneur (Muddarib) become partners. The profits from the project are shared between capital provider and entrepreneur, but the financial loss will be borne entirely by the capital provider. This is due to the premise that entrepreneurs contribute the Mudarabah capital on trustee basis; hence it is not liable for losses except in the cases of misconduct, negligence and breach of the terms of Mudarabah contract (Dhumale and Sapcanin, 1999). Hence, the Mudarib (entrepreneur becomes liable for capital). The profit sharing ratio on Mudarabah is predetermined only as a percentage of the business, profit and not a lump sum payment. The profit allocation ratio must be clearly stated and must be on the basis of an agreed percentage (Dhumale and Sapcanin, 1999; Abdulrahman, 2007).

b. Musharaka (Equity participation or joint venture)

The word Musharakah is Arabic literally meaning "sharing" (Dhumale and Sapcanin, 1999). In a business context, it refers to arrangement in which all partners share the profit or losses, according to their contribution to capital (Asyraf, 2008; Sidiqi, 2004; Dhumale and Sapcanin, 1999). The guarantee can be obtained and structured for the loss of capital of some or all partners through the active role of the so called Credit Guarantee Corporation (CGC) as practiced in the case of small micro enterprise financing in Malaysia. There are also Qardual Hasen based micro finance scheme offered by Yasan Tekun in Malaysia (Dhumale and Sapcanin, 1999; Obiadullah, 2008).

c. Murabaha trade with mark-up or cost plus sale

One of the most widely used instruments for short-term financing is based on the conventional concept of purchase finance or cost plus mark-up sales. Repayments of selling printing price will be paid on installment basis (Dhumale and Sapcanin, 1999). This model of financing has already been introduced in Yemen in1997. There were more than 1000 active borrowers in 1999, by forming a group of 5 micro entrepreneurs as guarantee for defaulters (Abdulrahman, 2007). The benefit of this mode of financing is continuous monitoring, and entrepreneurs with a good reputation of repayment will be offered extra loan (Obiadullah, 2008). There are also the UNDP *murabahah* based micro finance initiatives at Jabal al-Haen in Syria. Islamic micro finance named *Al-Fallah* is located in Dinajapur district and it started its operation in 1989. *Al-Fallah* is one of the largest Islamic Micro finance in Bangladesh. The Islamic Co-operative Development Bank (ICDB) in Sudan is experienced in using Muraba financing (Wilson, 2007).

d. *Ijara* (micro- leasing)

Ijara in simple terms implies "leasing or hiring of a physical asset" (Segrado, 2005). It is a popular debt- based product in which the Islamic microfinance institution (ISMFI) assumes, that the role of a leaser and allows its client to use a particular material that it owns (ibid). The client is in need of the asset. Through '*Ijara'*, it receives the benefits associated with ownership of the asset against payment of predetermined rentals and for a known time period (Abdularahman, 2007; Dhumale and Sapcanin, 1999).

e. *Qard al-hasanah (*Benevolent loan)

The Quran clearly encourages Muslims to provide *Qardal- hasan* or benevolent loans to “those who need them” (Galimberti, 2008). In such loans the borrower should only repay the principal, although certain scholars allow the lender to cover the administrative costs incurred in disbursing the loan as well (Asyraf, 2008). The service charges are not profit; they are actual costs in respect of such items as office rent, salaries, stationary, etc (ibid). Islamic law allows a lender to recover from the borrower the costs of the operation over and above the principal. However, an important condition attached to such charges to prevent them becoming equivalent to interest is that the commission or charge cannot be made proportional to the amount or to the term of the loan (Asyraf, 2008; Dhumale & Sapcanin, 1999). In practice, such service fees are frequently in the range of 2-4% of the loan amount. For example, the Islamic Development Bank of Jeddah in Saudi Arabia charges 2-3% (Khan, 2008). Importantly, this figure is arrived at after due calculation of administrative costs actually incurred rather than an assumed percentage. Banks in Pakistan are authorized to provide loans on the basis of service charges that are considered permissible under *shariah* provided they are not related to the amount of the loan and are related to actual administrative expenses (Asyraf, 2008; Wilson, 2007).

"Who should receive *qardal- hasan* loans" (Dhumale and Sapcanin, 1999)? The practices of various Islamic lenders differ in this respect. Some Islamic banks only provide *qardal- hasan* loans to those who are existing clients of the bank, while others restrict such loans to weak or needy sections of society (.Galimberti, 2008). However, other lending institutions extend this service to include small producers, farmers or entrepreneurs who are unable to receive finance from other commercial banks or other lending institutions (Khan, 2008).

f. *Bai Muajjal Murabaha*

Bai muajjal is a sale where "payment of price is deferred to a future date" (Dhumale and Sapcanin, 1999). Often it includes features of a '*Murabaha'*, which implies a sale on a cost-plus basis. This mode follows the same conditions as *Murabaha* mode of investment except the following: the bank transfers the possession of goods to the client before payment; additionally, in order to cover the sale price of the goods the bank obtains collateral securities from the client and in case the client fails to repay the sale price the bank realize the amount by selling the mortgage property. As a micro credit product, it is very popular and perhaps the most popular product among MFIs (Alam, 2003).

'*Bai Muajjal'* based micro finance is known in Bangladesh (Obaidullah, 2008). Several other interesting modes of extending credit have been developed and are in use in mainstream Islamic finance. One Example is '*Bal'Salam'* differenced delivery contract. It is essentially a forward agreement where delivery occurs at a future date in exchange for spot payment of price. Unlike earlier mechanisms of '*Murabaha'* and *Ija*ra, Salam was originally designed as a financing mechanism for small farmers and traders (Dhumale and Sapcanin, 1999; Iqbal, 1997).

Table 2.1 Summary of the possible differences in characteristics and objectives between the conventional microfinance and Islamic microfinance

Item	Conventional MFI	Islamic MFI
Liabilities (source of fund)	External funds, saving of client	External funds, saving of clients, Islamic charitable sources
Asset (mode of financing)	Interest-based	Islamic financial instrument
Financing the poorest	Poorest are left out	Poorest can be included by integrating with microfinance
Funds Transfer	Cash given	Goods transferred
Deduction at inception contract	Part of the funds deducted a inception	No deduction at inception
Target group	Women	Family
Objective of Targeting women	Empowerment of women	Ease of availability
Liability of the loan (which given to women)	Recipient	Recipient and spouse
Work incentive of employees	Monetary	Monetary and religious
Dealing with default	Group/center pressure and threat	Group /center/spouse Guarantee, and Islamic ethic
Social development program	Secular (non Islamic) behavioral, ethical, and social development	Religious (includes behavior, ethics and social)

Source: Abdurahman, (2007).

2.6. Empirical Studies on Islamic Microfinance

Poverty is multifaceted phenomenon with different dimensions and can therefore be tackled with different instruments. If we considered financial exclusion as an obstacle to development, the introduction of microfinance service to the poor is the strategy to design specifically to meet their particular needs and circumstances (Khan, 2008). Microfinance is not the panacea to poverty reduction, but nonetheless it is a powerful tool for poverty alleviation (Obaidullah, 2008). While “classic" microfinance has been widely applied and thoroughly studied little research has been conducted on both theory and the practice of Islamic microfinance (). The application of the basic principle of Islam to the financial system has generated, on the one side, a new ethnical perspective and, on the other alternative financial instruments (ibid). The combination between the socially oriented micro finance sector and ethical values of Islamic finance results in a radically new and potentially powerful tool for development (Obaidullah, 2008).

Concerning Ethiopia in general, and Amhara region in particular, no such studies have been done with regard to Muslim rural households’ access to formal credit. One of the primary and the most frequent articulated rationale by Muslim scholars is that charging interest is a form of social and economic exploitation, which violate the core Islamic teaching of social justice (Gaimberti, 2008; Asyraf, 2008; Ahmed, 2000). Thus elimination of this is intended to promote economic justice, socially fairness, and ethically and morally corrected economic behavior (Asyraf, 2008; Khan, 2008).

According to Ismail Nizam (2008) interest is prohibited in Islam because it exploits poor people and widens the gap between the rich and the poor. As James Robertson’s (2006), observations on the role of interest, the pervasive role of interest in economic system results in the systematic transfer of money from those who have less to those who have more again, this transfer of resources from poor to the rich has been made shockingly clear. In a study conducted by Sideq (2004) in Bangladesh on conventional MFIs and Islamic micro finance, he found that it was due to negative effect of social as well as economic nature of microfinance that attracted the critics to provide alternatives, which would be free from the negative effect. In Yemen, Banking products have been available for many years. However, many people and the poor in specific, reserved from banking credit, mainly due to religious beliefs (Galimberti, 2008). In reaction to this, or to solve the problems Hodeimah Microfinance Program (HMFP) by means of Murabaha model was established in 1997. Hodeliba is a port city characterized by an active economy based on trading, fishing food production, small industries handcrafts and transportation (Segrado, 2005).

Seibel & Agung (2005) have studied the establishment of microfinance in Indonesia particularly on rural bank and cooperatives. They conclude that expanding Islamic banking (total 270 banks) to the rural poor could foster development under right application. Furthermore, emphasize on risk sharing and for certain products collateral free loan is compatible with the needs of some micro entrepreneurs. Islamic law allows room for financial innovations, and several Islamic contractual arrangements (profit and lose sharing). They further suggest, in certain circumstances the Mudaraba (profit sharing) and Murabaha (buy-resell) methodologies may be appropriate for microfinance to reach the Muslim who are reluctant to the conventional type of loan.

In sub-Saharan Africa, the only Islamic microfinance program that has been documented well is the one that operates in northern Mali (Obaidullah, 2008). It was born out of a development project by the GTZ (German Technical Cooperation) and KFW (German Financial Cooperation) in the former civil war areas of Timbuktu, Mali. The aim of the project, inter alia, was to provide financial services to all the 'tribes' of the area, the Moors, the Tuareg and various black African groups. It was felt that a bank that would be accepted to all previously civil war opponents had to be an Islamic one and this led to the establishment of Azavuad Finance PLC. The bank operates primary on profit and loss sharing basis (Obaidullah, 2008).

2.7. Empirical Studies on Determinant of Access to Credit in Muslim Communities

Access and formal credit are often confused with participation in formal credit programs. Indeed, the two concepts are often used interchangeably in many credit studies. The crucial difference between the two concept lies in the fact that participation in credit program is something that households do freely (more of demand side), while access to credit program details constraints placed on household availability and eligibility criteria to credit programs, which is more of supply side issue (Diagne, 1999; Zeller, 2000). In this study we deal with the demand and supply sides of microfinance.

A household survey reveals that some households have been granted loans while the others have not. If we consider only households with loans as those who have a demand for credit, it may lead to sample selection bias as it its very likely that households without loans have demand for credit but have for some reasons been rationed. Furthermore, the amount of credit supplied to a household, it is the interaction between demand and supply (Diagne, 1999). The difficulty is that the factors, which are likely to affect household demand for credit, also are likely to affect supply of credit. For example, ownership of farming land may positively affect household demand for credit while it may also positively affect supply of credit as lenders see it as collateral in rural market. This implies that credit supply and demand curves cannot be easily identified (Diagne et al. 2000; Nguyen, 2007)

Studies indicated that there are many factors constraining the rural households' access to credit. The appropriateness of credit initiatives can be described in terms of accessibility, simplicity of delivery process and procedures, collateral requirement, loan terms, delivery time, accessibility of the intermediaries, loan size, interest rate, repayment terms and flexibility, and legal regulations. Geography, ethnicity, culture and social class between borrowers and lenders are other determinant factors (Nguyen, 2007).

Distance is one of the most important determinants of transaction costs**.** Distance and access to credit have inverse relationship (Getaneh, 2005). Further more, Dhumale and Sapcannin (1999) noted that lack of tangible assets to serve as collateral is another constraint affecting access to credit by the poor.

Access to formal credit can also be affected by household characteristic. As stated by Bendig et al. (2009) and Hussien (2007), the probability of choosing the formal credit sector was positively affected by gender, educational level, household labor, and farm size. They further explained that education, credit information and extension visit are more likely to increase the information base and decision making abilities of the farm households including the ability to compare pros and cons of choosing appropriate credit and production technology.

Livestock ownership is one of the determinant factors that affect rural households' access to credit. Because livestock are not only a source of liquidity from which a loan could be repaid, but also a very significant measure of wealth and status in a community (Gonzalez-Vega et al. 2007).

Furthermore, Personal and household income is strongly associated with access to finance, though they have roughly comparable levels of interest in financial matters. Microfinance is used four times as much by the richest quintile than the poorest quintile. The lowest income group faces on average four times longer delay in reaching a bank than the highest income quintile. The lowest income quintile faces higher absolute costs than the highest (Zaman, 2004)

Culture and religion: The survey carried out in Bangladesh by the World Bank from 1991 - 1992, indicated that Islamic religion negatively affects micro credit participation. This result may have several explanations. One example could be the compliance with Islamic religious customs, which do not allow pre-arranged interest rates, but rely instead on profit and loss sharing principles. Indeed, this is also reflected in the negative sign of bank participation (Seibel 2005). The needs of the poor in Islamic communities are not different from the poor in other societies. They need financial services. As explained above different factors constrained rural households' access to formal credit. Khan (2008) in survey, conducted in Jordan, Algeria and Syria which revealed that 20-40 percent of the respondents cited religious reasons for not accessing conventional micro loans and more than 60 percent of the low income survey respondents in the West Bank and Gaza claim a preference for Islamic products over conventional products that involve interest.

Formal financial credit may not usually be appropriate for the chronically poor and destitute. Loans to the destitute may in fact make the poor poorer if they lack opportunities to earn the cash flow necessary to repay the loans. Indeed the other word for credit is debt. A destitute may be reluctant to incur debt and start a micro enterprise because of risk and uncertainty. In an Islamic microfinance system far greater priority is given to the need of the chronically poor than those of the poor or the moderately poor or the not- so- poor. To solve the problems of the destitute, safety net program through charity (Note that the third pillar of Islam Zakah) (Obaidullah, 2008) can be used. A study conducted in Indonesia found that, Muslims are reluctant to apply for credit because of interest (Okten & Osil, 2004).

In relation to gender, in many rural areas, where small-scale agriculture is practiced, gender differences have been found to have a significant impact on resource allocation and productivity in agriculture (Alderman *et al.*, 2003). And as many study indicated that women remain significantly less likely than men to have access to the financial sector overall, after accounting for the effect of income and other socio-economic differences (Zaman, 2004). Even when a woman heads the household and is in charge of household resources, gender differences emerge across female-headed households and their male-headed counterparts (Alderman *et al.*, 2003). Thus gender is the determinant factor for access to credit.

. In sum, the main factors affecting access can be categorized into four groups

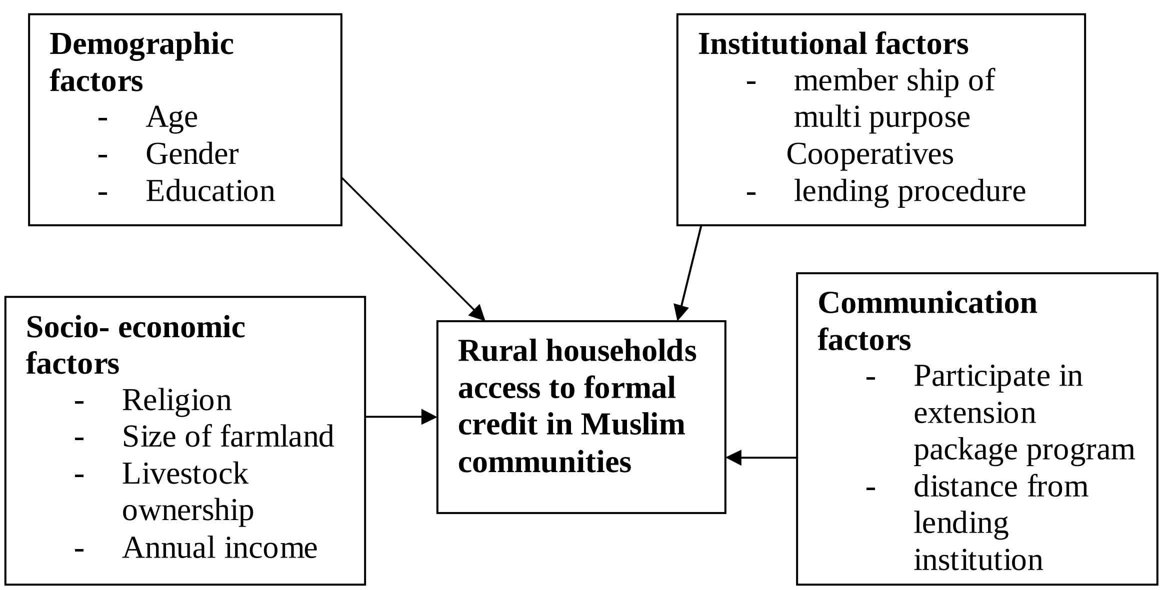
i) demographic factors (age, gender, education)

ii) socio-economic factor (religion, size of farm land, live stock ownership);

iii) Institutional factors (membership of farmers' cooperative, lending procedure of group lending);

iv) Communication factor (extension contact, physical distance from lending institutions).

Figure 2, Conceptual frame



Source: researcher's design from literature review

CHAPTER 3: RESEARCH METHODOLOGY

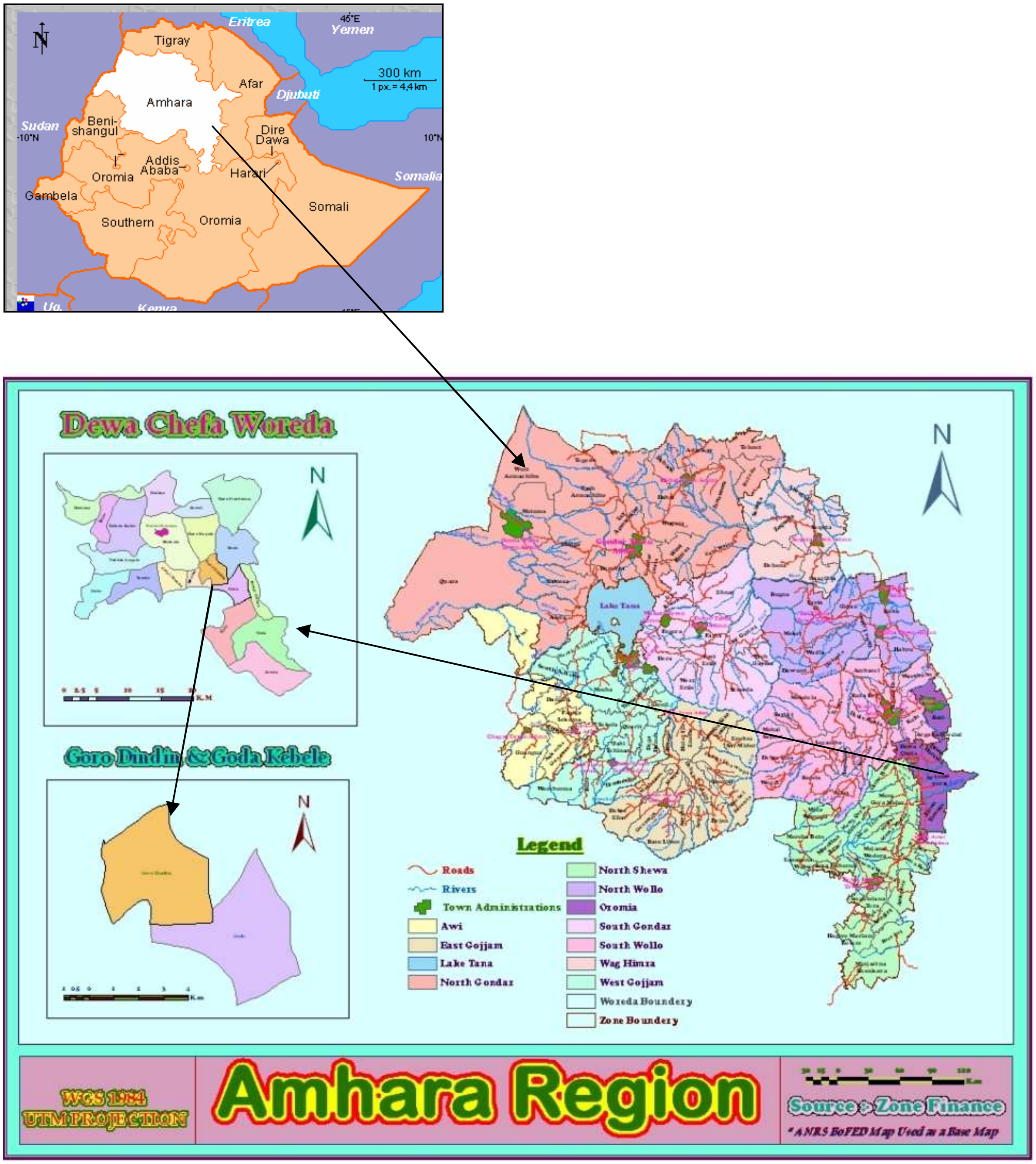
3.1. Description of the Study Area

Dewa-Chefa Woreda is found in Oromia special Administrative Zone of Amhara Regional State. Kemisie is the capital; it is located 325 km far away from Addis Ababa to the North. The Addis Ababa -Desie to Mekelle main road passes through it. The Woreda comprises 19-Peasant Association (Kebeles), out of these 18 Kebeles are rural. The total area of the Woreda is estimated at 56,892 square kilometer. And the average land holding size is below one hectare. (Dewa Chefa Woreda FEDO, 2008). Nearly all of the land in the Woreda is in the low lands, except some mountain tops.

The latitude of the area ranges from 1400-2500 meter above sea level, while the annual temperature ranges from25^{0}c to 35^{0}c. The mean annual rainfall of the area is not more than 900mm (Dewa –Chefa Woreda ARDO, 2008).

According to the Population and Housing Census of 2007, the Woreda's total Population was estimated to be 133,359 out of this 66,629 (49.96) percent are females the remaining 66,730 are males. From the total Population (urban and rural) about 98 percent are Muslims; the remaining (2 percent) are Orthodox, Protestant and other religious groups. About 97.8 percent (130, 483) live in rural areas and out of these 99 % are Muslims. The major source of livelihood of the population in the Woreda is mixed farming (i.e. crop and livestock). The Amhara Credit and Saving Institution (ACSI) and Cooperatives are the major providers of formal credit service for the rural population. Other NGOs exist to some extent (Dewa Chefa ARDO, 2008).

Figure 3 Maps of Amhara Region and the Study Area



Source: Department of Oromiya Zone Finance and Economic Development, 2010

3.2. Data and Methodology

Both qualitative and quantitative data were collected from primary and secondary sources. Qualitative data were used to assess the preferences of users and non users in different formal credit institutions in the study area, and collected from personal observation, focus group discussions and key informant interviews (women, religious leaders, community leaders, development agents, representative formal credit institutions) by using semi structured and open-ended questions.

The focused group discussion participants were 10 Women household (5 credit users and 5 non users) randomly selected by Kebele representative of Women affairs office. 12 men households (youth and from communities) were selected by Kebele Chair person (Appendix I Table1). Community leaders and development agents were one focused group participant. Based on these, discussions were made according to their homogeneity at Kebele level. Religious leaders, ACSI and Cooperatives Office representatives as well as Woreda administration were Key informant participants. The discussions were made at Kebele and Wereda level differently.

Structured questionnaire was prepared to collect quantitative data and gathered from rural households in the study area. Primary data were collected from various source including, informal discussion with key informants. And through face-to-face interview with head of the household using interview schedule by going to each interviewee’s homestead and each respondent was informed about the purpose of the survey before starting the interview. Seven enumerators were recruited from first degree graduate students and others experienced in data collection. The enumerators were selected from those who were familiar with the area. Appropriate training was provided to the enumerators. The interview schedule was pre-tested on 8 randomly selected rural household heads before conducting the formal survey. Secondary data source were collected from different bulletins, publishers, annual reports from different government and non-governmental sectors.

3.3. Sampling Procedure and Data Analysis

3.3.1. Sampling procedure

The study employed a two stage sampling procedure. From Amhara Region Oromiya Zone was selected by purposive sampling, because 98 percent of the communities are Muslims. By the same reasoning, Dewa-Chefa Woreda (district) was selected from 5 rural Woredas because ACSI closed its branch in Dewe Harewa Woreda, before it was splited in to two Woredas. ACSI is not functioning in Dewe -Harewa Woreda, but it gives service in Dewa-Chefa Woreda.

From a total of 18 rural Kebeles of Dewa Chefa two Kebeles were selected randomly by using lottery system. After selecting two Kebeles, the Muslim rural households were categorized in to two: credit user and non user from ACSI and Cooperative. By using random sampling technique 40-credit user, 35 non-users were selected from each Kebele based on the coded household number. There fore, 150 Muslim rural households' heads were the sample size of the case study.

3.3.2. Method of data analysis

Quantitative data were, coded and analyzed using the SPSS Version 16 software package and interpreted interims of descriptive statistics such as mean, percentage, standard deviation, tabulation, ratio and frequency distribution. In addition the t-test and Chi-square statistics were employed to measure the mean and percentage differences between credit users and non users. Binary logistic regression model which best fits for dummy variables (credit user and non user) is also employed. Then Binary logistic regression analysis is used to measure the determinants of rural households' access to formal credit in Muslim communities. This model is similar to a linear regression model but it is suited to models where the dependent variable is dichotomous. The logistic regression coefficient can be used to estimate adjusted odds ratios for each of the independent variables in the model.

In this analysis, the outcome variable is participant or non-participant. The major interest is the likelihood or probability of the outcome. The binary response in this study is whether the respondent has accessed credit from ACSI and/or Cooperative ("Yes") or has not accessed credit during his/her life time ("No"). According to Gujarati (2004) and Maddala (1992) the logistic regression model is expressed as follows.

If Yi is the random variable (dichotomous), it can be assumed that and if X1,......, Xp are characteristics to be related to occurrence of the outcome, then the logistic model specifies that the conditional probability of event (i.e., that Y = 1) given the values of $X_1,\ldots\ldots\ldots,X_p$ is as follows:

$$P_i = \mathrm{E}(Y = 1|X_i) = \alpha + \beta_i X_i \qquad (1)$$

$$P_i = \mathrm{E}(Y = 1|X_i) = \frac{1}{1 + e^{-}\left(\alpha + \sum \beta_i X_i\right)} \qquad (2)$$

$$P_i = F(Z_i) = F\left(\alpha + \sum \beta_i X_i\right) = \frac{1}{1 + e^{-Z}{}_i} \qquad (3)$$

Where, P_i is the probability that an individual 'uses' formal credit or 'does not use', given X_i; e denotes the base of natural logarithms, which is approximately equal to 2.718; X_i represents the i^{th} explanatory variables; and α and β_i are parameters to be estimated and the logistic model could be written in terms of the odds and log of odds, which enables one to understand the interpretation of the coefficients. The odds ratio implies the ratio of the probability (P_i) that an individual would choose an alternative and the probability (1-P_i) that he/she would not choose it.

$$\left(\frac{P_i}{1 - P_i}\right) = \left(\frac{1 + z_i}{1 + e^{-Z}{}_i}\right) = e^{Z}{}_i \qquad (4)$$

In order to linearize the right hand side a logit transformation was applied by taking logarithm of both sides, therefore we have:

$$Z = Ln\left(\frac{P_i}{1 - P_i}\right) = \alpha + \beta_1 X_1 + \beta_2 X_2 + - - - + \beta_m X_m \qquad (5)$$

If the disturbance term (ui) is taken into account, the logit model becomes

$$Z_i = \alpha + \sum_{i=1}^{m} \beta_i X_i + u_i \qquad (6)$$

Where Z, household uses credit from formal sources which is the dummy dependent variable. It takes the value of "1" for uses and "o" otherwise.

α = the constant term

βi= are the coefficient of the independent variable was estimated and it shows the direction.

Xi= is a vector of independent variable, that represent household characteristics (age, educational level, household size, and sex), household asset (household annual income, Livestock ownership, own land, Cultivated land size), and communication (household distance from lending institution and participate in extension package program, membership of cooperatives and group formation for collateral).

Z_i = Cumulative logistic regression

u_i = error term

Definition of Variables

- **Dependent Variables**

The dependent Variable for logistic analysis is of dichotomous nature representing rural households' access to formal credit. This is to distinguish between formal credit (MFIs) users and non users in the study area. **Y-household** uses credit from formal sources, which is the dependent variable. It takes the value of **"1**"for users and "**0"** otherwise (non user).

- **Independent Variables of the Study**

From review of literature, we saw that different factors influencing rural households' access to formal credit. The factors are categorized in to demographic (age, sex, educational levels of the household head, total family size of the household), institutional (farmers perception of group lending, membership of multipurpose cooperatives---), socio-economic (own land, size of farm land, annual income of the household, livestock ownership) and communication (distance from the lending institutions, participation in extension package program ---) factors.

Age:-refers to the age of household head measured in complete years.

Sex of respondents (SEX):-this is the Dummy variable that assumes a value of "1" if the head of household male and "0" otherwise.

Education level (EDULEV):-It is categorized in to literate and illiterate. And it is measured in Dummy variable literate the value "1" otherwise "0". Literate includes all formal and informal educational levels

Total family size (TOTALFAMLY):-it is the average family size measure in number

Household perception of group lending (COLTGL):-rural households will expect to form a group as collateral to get the credit from MFIs. But rural households' will perceive that group lending is difficult to access from these sources. It is a Dummy variable which takes the value "1" for those who perceives group formation is constraint and "0" otherwise.

Membership of multi-purpose cooperative (MMPCO):-this is **t**he dummy variable which takes the value "1" for membership and "0" otherwise.

Participation of rural household in extension package program (PARTIEXT):-this is the dummy variable which takes the value "1" for participants and "0" otherwise.

Own land (OWNLAND):-this is the dummy variable which takes the value "1" for land ownership and "0" otherwise.

Total cultivated land size in hectare (TOCALSI):-it is the total cultivated land size cultivated by rural households in 2008/09 (it is the sum of Owned, rented in, and by share cropping arrangements). It is measured in hectares.

Total livestock ownership (**TLU):-** This refers to the total numbers of animals' rural households' possessed and measured in tropical livestock unit (TLU).

Physical distance of rural households' from lending institutions (DIST):-households near the lending institutions might have location advantage and more information will disseminate, then access to credit increase. It is measured in kilometers.

Annual income of the households (GROANUAINC) measured by Ethiopian Birr.

CHAPTER 4: RESULTS AND DISCUSSIONS

This chapter presents and discusses the result of data that has been conducted to address specific objectives of the research. The chapter is divided in to five major sections. The first section presents characteristics of sample household. Formal and informal credit sources explained in the second section. In the third section, households' demand to micro credit and the mode of acceptable credit by the communities. In the fourth section social and cultural factors that affect access to formal credit is analyzed. In line with this, the econometrics analysis that identifies the most important factors that affect rural households' access to formal credit in Muslim Communities in the study area.

4.1. Characteristics of Sample Households and its Effect on Households' Access to Credit

4.1.1. Demographic characteristics of the sample households

Age and Sex of the Respondents:

With regard to sex, as the study indicated from 150 sample household heads, 76 percent are males and 24 percent female household headed, respectively (Table 4.1). Of credit user respondents 62(77.5 percent) are males whereas 18 (22.5 percent) are females. As table 4.9 shows in the case of package loan at 1% significant level, there is different between male and female access to formal credit in the study area. The chi-squire value of (10.28) indicates that there is a relationship between the sex of the household heads and use of package loan

Table 4.1 Sex of the respondents

Variable	Respondents	Formal credit		Total
		user	Non user	
SEX	Female	18(22.5)	18(25.7)	36(24.0)
	Male	62(77.5)	52(74.3)	114(76.0)
Total		80 (100.0)	70 (100.0)	150 (100.0)

Source: Own survey data, 2009.

Numbers in parentheses indicate percentage

The result of study is also indicated that the mean and standard deviation of sample household head age is 42.79 and 12.27, respectively. It ranges 20 to 80 years of age (Table 4.2).

Table 4.2 age and total family members of respondents in educational status

Descriptions	Minimum	Maximum	Sum	Mean	Std. Deviation
Age	20	80		42.79	12.27
Number of household members who are illiterate	1	10.00	568.00	3.78	2.01200
Literate household family	0	12	332	2.2	1.937
Total family members	1.00	16.00	896.00	5.9	2.46845

Source: Own survey data, 2009.

Age: - As Table 4.3 shows, the average age of sample rural household credit users is 42.08 while non- users is 43.60. Thus, there is no statistical significant mean age difference between credit users and non users at 5% significant level. The econometric analysis also shows age of the respondents have less determinant effect on households' access to credit in the study area.

Table 4.3 Age of the respondents

Variables	Formal credit user mean	Non credit -user Mean	Total mean	t-Value	Significant level
Age of household head	42.08(10.91)	43.60 (13.69)	42.79(12.27)	0.758	0.450

Source: Own survey data, 2009.

Numbers in parentheses indicate standard deviation.

Educational status: As table 4.4 shows, educational status of sample household headed in terms of illiterate and literate it is 78.7 and 21.3 percents respectively. Out of the total literate sample household headed 25.0 percent are formal credit users, while 17.1 percents are non-user. In line to this, there is no significant probability difference between credit users and non users of the household headed at 5 % significant level. This implication shows that educational level of the household headed has no relationship to use formal credit or not, in the study area.

Table 4.4 Educational status of the respondents

Variable	Response	Formal credit		Total	Chi-Square	P-Value
		user	Non user	(N=150)	Value	
Educational level of households head	Illiterate	60(75.0)	58(82.9)	118(78.7)	1.373	.241
	Literate	20(25.0)	12(17.1)	32(21.3)		

Source: Own survey data, 2009

. N: represents Number of total sample size

Note: Literate includes both formal and informal educational level.

Family size of respondents

In the study area the respondents have maximum family size of sixteen and a minimum of one person (Table 4.2). And their average household family size is found to be 5.9 (Table 4.4). According to MoFED, (2006), the average household size for the country was 4.8 (4.9 in rural areas and 4.3 in urban). Thus, the average household family size of the study area is greater than average household size of the country.

Table 4.5 Average household families in educational status

Variables	Formal credit user mean	Non credit - user Mean	Total mean	t-Value	Significant level
Average literate household family size	2.6 (2.06)	1.6 (1.63)	2.2 (1.93)	3.310***	0.001
Average illiterate household family size	3.7 (1.96)	3.8 (2.08)	3.7 (2.08)	-.157	0.876
Average family size	6.3 (2.18)	5.57 (2.71)	5.9 (2.46)	1.881*	0.062

Source: Own survey data, 2009.

***, * represent level of significant at 1% and 10% level respectively

Numbers in parentheses indicate standard deviation.

Note: - Literate includes both formal and informal educational status of the household family.

The result of the study also indicated that, 41.3 percent of sample households who have one to five family size, and 51.4 percent none credit user household family size is also found in this range (Table 4.6). But, 40 percent of credit users' family size found between six to seven (Table 4.6). In this regard, the mean family number of credit users and non -users are 6.3 and 5.57, respectively (Table 4.5). Thus, at 10% significant level there is the mean family number difference between credit users and non-users groups. This implies that family size of the household has relationship with access to credit in the study area. Thus, the family size is the determinant factors for access to credit.

Moreover, from respondents on average those who have 2.69 literate families are formal credit users. On the other side, sample household who has 1.69 literate household families are non users (Table 4.5). There is significant statically mean difference access to formal credit at 1% probability level. Further more, level of education positively affects opportunities for improving the livelihood of a given household. Hence, the presence of literate people in the household means better access to information and resources, and better social networking. This implies educational status of the household family determines access to formal credit. The probable reason could be explained in two ways: one, literate persons are more access to information and adoption of technologies, and then they demand more credit. Two, households take loans from microfinance and invest it for productive purposes then their income is increased. In line to this, they teach more children and the expenses increase. It is clear that school expenses include educational materials, school uniforms, living expenses to those attending school away from home and contributions to school expansion and up-grading. Therefore in order to fill the gap of financial deficit of their business access to formal credit is more demanded.

This study result is consistent with Getaneh (2007b), preliminary research as explained, "In rural areas the ACSI mature clients manage to forgo the opportunity of having their children's labor at home for income generating purposes, as well as incurring school expenses". Some households use loans from ACSI as well as income from their businesses to cope with the increasing cost of sending children to school.

Table 4.6 Family size of the respondents by credit users and non-user

Family size	Credit user		Non -user		Total	
	F	%	F	%	F	%
1-5	26	32.5	36	51.4	62	41.3
6-7	32	40,0	20	28.6	52	34.7
8 and above	22	27.5	14	20.0	36	24.0
Total	80	100.0	70	100.0	150	100.0

Source: Computed from own data 2009

F: Frequency of sample household

4.1.2 Socio Economic Characteristics of the Sample Household

Landholding size and tenure status

.

Land is a vital resource to rural households. In 2008/2009 the sample household respondents cultivated on average 0.69 hectares of land; and it ranges between zero and 2.5 hectare (Table 4.7). Moreover, the average land cultivated in 2008/2009 by credit users and non-users was 0.73 and 0.64 hectare respectively. There is no significant mean difference on total cultivated land size between two. This implies that total cultivated land size has less determinant effect on households' access to formal credit in the study area.

But with regard to land ownership, from total sample households, 26 respondents have no own cultivated land. Of these, only 10 percent has access to credit. The chi-square test is conducted to measure whether there is significant difference between to those who have own land or not access to formal credit; hence, the result shows that there is significant difference in access to credit among the groups at 5% probability level. As econometric analysis indicated land use ownership has determinant effect on households' access to formal credit in the study area. The implication is that, sample households who have no own land less access to credit. In Ethiopia case, it is obvious that land is not private property. "But the people have the right to use, bequeath and where the right of use expires, to remove his property, transfer his title, or claim compensation for it (The Constitution of FDRE, 1995 page 98-99"). From youth Key informant group discussion participants explanation, "we want the credit from government, but did not; because of the selectors not selected; and the person who has no any fixed asset including land; if the loan is given him it is difficult for loan repayment". On behalf of this most of the youth households have no land are marginalized from access to formal credit. Therefore, land use ownership is the determinant factor for rural households' access to credit in the study area.

Table 4.7 Mean difference of variables of the sample household

Variables	Formal credit user mean	Non credit - user Mean	Total mean	t-Value	Significant level
Cultivated land in hectare	0.73(0.53)	0.64(0.52)	0.69(0.53)	1.092	.278
Tropical Livestock Unit	1.72 (1.68)	1.97(1.88)	1.84(1.78)	-.838	.403
Annual income of household in Birr	11020.5	6238.6	8789	1.269	.234
Frequency of extension contact per three months	2.37 (3.81)	.8857 (1.97)	1.68 (3.17)	2.940***	0.004
Sample HH distance to reach the MFIs (Kms)	12.16(2.45)	12.34(2.49)	12.24(2.46)	-.445	.657

Source: Own survey data, 2009.
***, represent level of significant at 1% and 10% level respectively
Numbers in parentheses indicate standard deviation

Note: '*timad'* is converted in to hectare (1 hectare of land approximately four '*timad'*).

Livestock Ownership:-Livestock is the most important asset for rural households. Farmers in the study area under take both crop and livestock production activities. Based on Strock et al. 1991, (cited by Sisay 2008) the livestock population number was converted into Tropical livestock unit (TLU) to facilitate comparison between two groups. The mean livestock holding of total sample household is 1.84 TLU. Of this, mean livestock ownership of formal credit users and non- users are 1.72 and 1.97 TLU, respectively. This implies there is no significant mean difference between credit users and non users in livestock ownership in the study area. This implies as econometric analysis shows livestock ownership has less determinant effect on households' access to credit in the study area. This result is contrary to Sisay (2008)

Annual Income of the sample household: From the factors that determine rural household access to credit is his/her income from different sources. The results in table 4.7 indicated annual average income (from crop and vegetable & fruit production, sale of animals and animal product, wood and its product, petty trade, daily labor, wages, safety-net, food for work, remittance aid and other income sources in year 2008/2009) of respondent is birr 8789. Of this the credit borrowers and non borrowers sample household average annual income was Birr11020.5 and, 6238.6 respectively. As T-test shows there is no annual income mean difference between them. In addition to this, the econometric analysis indicated that annual income of the respondents have less determinant effect on households access to formal credit in the study area.

Access to Extension Service

Institutions are the rule of the game for development endeavor. In rural area one can finds a number of locally available rural institutions with varying objectives and degree of comprehensiveness. In the study area, we observed that the rural communities are supported each other interims of Debo, Zeka, and Kire and the most common rural institutions. Now days, the number of modern rural institutions is increasing over time. These modern rural institutions play an important role in the day-to-day activities of the rural community. Among the modern rural institutions credit and extension play a leading role in the development arena of the study community. In the discussion that follows we shall examine the association between access to credit and access to agricultural extension services.

The availability of credit for resource poor farmers is quite important to finance the agricultural and allied activities. The major sources of credit in the study area have been government and a local NGO called Amhara Credit and Saving Institution. The result of the survey indicated that from the total sample household respondents 44.7 percent of them participated in the extension package program for a minimum of one and a maximum of five years since 2005/6 to 2008/9 (Table 4.8). Whereas, 64.3 percent of the respondents are neither participate in extension package programs, nor to borrow credit from MFIs. Even though, the opportunity to participate in extension package programs are for all households, there is significant difference access to formal credit those participated in extension package and non participant at 5% probability level (Table 4.8).

The difference is perhaps government is giving more attention for food insecure households in order to leverage out from food insecure and push to prosperity. To achieve the objectives different inputs are delivered to households on credit and the development agents create more awareness for those households embraced in food security package. There fore rural households who have frequent contact with development agents are more demanded to formal credit.

As table 4.7 depicted development agents contact credit user and non user sample households on average 2.375 and 0.885 days per three months or 9.5 and 3.5 days per annum, respectively. Thus, at 1% significant level there is mean difference between formal credit users and non users' access to extension service in the study area. Thus, rural households that have frequent contact with development agent and have got relatively better extension services. Therefore, credit and extension serves are interrelated. With this regard, development agents frequent contact the households that determine access to credit in the study area. This finding is consistent with Sisay (2008) research.

Table 4.8 Discrete variable of the ample household

Variable	Response	Formal credit		Total	Chi-Square	P-Value
		user	Non user	(N=150)	Value	
PARTIEXT	No	38 (47.5)	45 (64.3)	83(55.3)	4.256**	0.039
	Yes	42 (52.5)	25 (35.7)	67(44.7)		
OWNLAND	No	8(10.0)	18(25.7)	26(17.3)	6.434**	0.011
	Yes	72(90.0)	52(74.3)	124(82.7)		
MMPCO	No	62 (77.5)	64 (91.4)	126(84.0)	5.389**	0.020
	Yes	18 (22.5)	6 (8.6)	24(16.0)		

Source: Own survey data, 2009

** represent level of significant at 5% Probability.

N represents Number of total sample size

Numbers in parentheses indicate percentages.

The survey result revealed that of total household 16.0 percent and 84 percent are members and non members of farmers' multipurpose cooperatives, respectively. Of farmers' multipurpose cooperative members 22.5 percent are credit users while 8.6 percent are not credit users from the formal sources (Table 4.8). This has significant percentage difference at 5% probability level between formal credit user and non user group. This implies membership of cooperatives determine access to credit if other things remain constant.

Distance is the sample rural households travel to reach the nearest formal credit institutions in order to access credit The survey result indicated that average distance between the nearest MFIs and sample households villages are 12.24 kms. In line with this, the distance between those sample households who have access to credit and no access are12.16 and 12.34 kms, respectively (Table 4.7). Hence, the research result indicated that, there is no mean physical distance difference between credit borrowers and none borrowers groups. Thus in the study area physical distance does not significantly affect rural households' access to formal credit in Muslim communities.

4.2. Sources of Credit in the Study Area

In the study area (Dewa-Chefa) there are formal and informal financial institutions (such as, Commercial Bank of Ethiopia, ACSI, Multipurpose Service Cooperative and Wisdom micro finance). It is known that Commercial Bank of Ethiopia did not give credit for rural households. On the one hand the credit is given for rural households by ACSI and Cooperatives micro finance institutions. On the other hand, informal credit sources are parents, friends, relatives or neighbors, money lenders, and others. In Muslim Communities the known form of gift (Zekah) is too.

4.2.1 Formal Source of Credit and Its Operational Modalities in the Study Area

Among the formal financial institutions ACSI and Multipurpose Farmers' Cooperative micro finance institutions provide credit for rural households. From the total of formal credit users 31.25 percent have got credit from ACSI, 68.75 percent from cooperatives in group guarantor or/ and individual credit lending procedures or modalities (Table 4.9). ACSI follows both group or/and individual credit lending modalities, while Cooperatives follow individual lending procedures.

Table 4.9 Access to formal credit by Sources

Characteristics	Credit user (N=80)		Male HH N=62(77.5%)		Female HH N=18(22.5%)		Chi-Square
	N	%	N	%	N	%	
Source of formal credit							
ACSI	25	31.25	16	25.8	9	50.0	
Cooperative	55	68.75	46	74.2	9	50.0	
Access to group loan	7	8.8	3	3.8	4	5.0	
Access to Package loan	73	91.2	59	80.8	14	19.2	10.28*** P=0.006

Source: Own survey data, 2009

***represent level of significant at 1% level

A. Group lending/ guarantor in MFIs

In the study area, ACSI is the only microfinance organization that follows solidarity group lending modalities. Group formation by potential borrowers serves as a precondition to access productive loans. Three to seven persons form a group by a process of self selection. In group lending, group members are well known to each other. Potential borrowers are recruited by PA credit and saving Committee. On this type of lending procedure, from 80 household credit user respondents only 8.8 percents borrowed the group guarantor loans. Of these, the women households' shares are 5.0 percent (Table 4.9). Those group guarantor borrowers applied their loans for different purposes; agricultural purpose (Specially purchased agricultural inputs, oxen, dairy cow and others) (42.8%), petty trade (28.6%), and Consumption (28.6%), respectively.

Even though, the rural households' used the group guarantor loans for different purpose, 57.1 percent of them dislike group guarantee loans. All of the group guarantor credit borrowers they prefer to take the credit individually (package loans). Focused group discussion participants are also supported this idea. And they forward the reason for their preferences of package loans. First group guarantor loans interest rate is higher than package/Individual loans. As Dewa -Chefa Woreda ACSI Branch office expertise explained in terms of interest rate, the saving rate is 3 percent; interest rate charged the credit client is 18.0 percent and 12.5 percent for food security package program users. Second, in group guarantor credit group members are jointly accountable for repayment in the event of default. Therefore the whole group provides monitoring and enforcement mechanism as a group member put pressure on creditor members to repay their loan. For repayment of the loan, increase social solidarity, to reduce asymmetry information and moral hazard this group lending system is thought as having positive contribution. But in the event of a group member being incapable of repaying the loan on time, the group pays the loan on behalf of a defaulting member. Third the researcher's observation, and focused group discussion participants explanations to take credit from ACSI, group formation is a pre-condition and some relatively 'wealthy' households do not prefer to form a group with the poorest of the poor. As key informants' explanation, the cooperative loan is given individually; interest rate is low (7.25 percent per annum), its financial controlling, and monitoring is less secured.

Depend upon these conditions some households' preference is individual loan (especially cooperative loan).

B. package/ individual/loan

Individual lending model has been widely used with some MFIs using it exclusively and others along with the group methodology. In the case of ACSI, individual lending started especially for food security package program. ACSI and Multipurpose Cooperative give the credit in kind or/and on cash individually in the interest rate of 7.25 and 12.5 per annum according to the types of credit and its time span (Dewa-Chefa ARDO, 2008). But the normal lending rate of ACSI is 18% per annum. As respondents explained the credit amount ranges between Br.95.00 to 5000.00 and its time duration is between 9 months to three years.

Table 4.10 Respondents borrowed package loan in kind and their preferences

sex	Taken package loan in kind			Households preferences			
	Yes %	No %	Total %	Cash loan	Loan in kind	Chas loan & in kind are use full	Do not want credit
Male	28.75	52.5	81.25	20(25.0)	17(21.2)	20(25.0)	5(6.25)
Female	3.75	15.0	18.75	9(11.5)	3(3.75)	1(1.25)	5(6.25)
Total	32.5	67.5	100.0	29(36.25)	20(25.0)	21(26.25)	10(12.5)

Source: Own survey data, 2009.

Numbers in parentheses indicate percentages.

The survey result of sample households indicated that out of total credit users 91.2 percent have borrowed individually from the two MFIs and out of these, 68.75 percent have borrowed from cooperatives the remaining borrowed from ACSI (Table 4.9). This figure indicates the proportion of cooperative credit borrowers are higher than ACSI' borrower, because in Goro-Dindin Kebele only cooperative supply the credit while ACSI was stopped to supply the credit in this Kebele before three years ago. The reason is as focused group participants and key informant explanation interest rate giving and receiving is not permissible by Muslim communities, social sanction on credit borrowers are higher in this Kebele. This does not mean that interest rate on loans not problem in other Kebeles). Besides, as the researcher's observation and focused group discussion participants explanation ACSI financial system is more supervised, regulated and rigged repayment time and period while cooperative loan is flexible and, less secured then it is less risk for borrowers.

With regard to sex, out of the total respondents credit users 91.2 percent borrowed package loans. Of these the share of male is 80.8 percent and female 19.2 percent respectively (Table 4.9). There are differences between male and female access to package loans. Male have got higher probability access to package loans at 1% significance level. As many studies indicated the difference may arise from the existing gender inequality that has contributed to lower access for women households. Moreover, the package loan is focused on household head. At national level out of the estimated 13.4 million households, about 75% are male headed and 25% female-headed (MoFED, 2006). Additionally the loan (on cash or in kind) was mostly given for household heads that are participated in food security package programs.

Although, 42.3 percent of the household respondents requested package loans for the purpose of purchasing animal fattening, 19.2 percent of them diverted the loans for consumption purposes especially, for food. Hence, loan diversion brings about problems for sustainability and loan repayment. To minimize this problem rural development and agricultural office in cooperation with ACSI have given the loan in kind. Credit in kind is mostly Beehives and accessories. However, from total credit users 32.5 percent of them borrowed credit in kind, 36.25 percent of them prefer to borrow in cash and 12.5 percent did not want any kinds of loan (Table 4.10)

Loan repayment

Loan repayment is an important factor for sustainability of financial institution. MFIs give credit not only for profit purpose, but also social concerns. As Table 4.11, depicted 62.2 percent of the respondents did not repay their loans on time. The respondents are mentioned many reasons, some of them; failure of crops, death of livestock, because of drought and other natural calamity. The group discussion participants are also explained that cooperative loans are less secure and the risk of default is relatively higher. Nevertheless, delay in loan repayment is common, when a farmer borrows from different sources (ACSI & Cooperative), ACSI's loan is more likely to be repaid first (or priority repayment is given for ACSI's loan). The reason is that interest rate of ACSI's loan is higher (18% per annum) than Cooperative loan. If the loan does not repay on time interest rate increases from time to time, then borrowers are more in risk. Second, follow-up, controlling and monitoring of ACSI's loan is better than Cooperatives loan.

Table 4.11, Sample households' response on repayment of package loan

sex	Respondents response		
	Repay on time	No repay on time	Total
Male	24 (32.4)	36 (48.7)	60 (81.0)
Female	4 (5.4)	10 (13..5)	14 (19)
Total	28 (37.8)	46 (62.2)	74 (100.)

Source: Own survey data, 2009.

Numbers in parentheses indicate percentages.

The Worked Key informants are also confirmed that, on one side some individuals are raising about the charging of interest rate that is contradict with religion principles; on the contrary, since 1992 E.C there are many individuals who fail to pay the interest and principal of the loan. It is an obstacle to access credit services for poor rural households. Further more, they explained that from religion principles point of view "repay what they borrowed" is mandatory. But some individual defaulters did not apply this religious principle. In line to this, they said in order to return the disbursed credit "we are trying as much as possible". From this point we observed that rural households to borrow credit on interest rate basis on one side, loan repayments on the other side are the problem in the study area.

Saving has its own impact on access to credit. Broadly two kinds of saving systems were observed in the study area. Those are traditional saving and saving in MFI.

Traditional saving is: - rural households save in their home, and some of them are purchased livestock for wealth accumulation and security against emergency. This is the most widely used way of saving.

Saving in ACSI: There are two kinds of saving in ACSI; Voluntary and compulsory or forcing savings. In the former type of saving clients receive record book where their deposits and withdraw entered. No obligation to save like compulsory saving. They can save the amount they have, and withdraw at any time of request. In compulsory saving which is prior saving required from borrowers in which loan clients have obligatory to save. From sample rural households 2.7 percent is voluntary, whereas, 12.5 percent is compulsory saving in ACSI. There is no saving and credit cooperative microfinance institution in the study area.

4.2.2 Informal credit sources and its contributions

Table 4.12, Access to informal financial institution 2008/2009

Access	Response		Total
	yes	No	
Access to Formal credit	80 (53.3)	70(46.7)	150(100.0)
Access to informal sources	39(26.0)	111(74.0)	150 (100.0)
Access to Formal +Informal	92 (61.3)	58 (38.7)	150(100.0)

Source: Own survey data, 2009.

Numbers in parenthesis represent percentage

In the study area, the most predominant source within the informal sector is friends, relatives or neighbor. From total respondents 26 percent borrowed from these informal lenders with out interest rate for consumption smoothing purposes in short period of time (Table4.7). As reviewed interest rate receiving and giving is prohibited in Muslim religion principles; then money lenders give the credit on interest rate (usury) basis is very minimal.

Friends Relatives or Neighbors:-In the study area 26.0 percent of the respondents accessed or borrowed loans from informal credit institutions mostly from friends, relatives or neighbors. It is a custom of the people to help each other to smooth seasonal cash flow. While from total household respondents, 38.7 percent did not borrow any credit in 2008/09 from formal and informal financial institutions (Table 4.12).

'Ekub and Idi'r

Idir is a type of traditional organization in which a small fraction of money is collected from members whose aim is to provide mutual aid and financial support under emergency support (Dejene, 2003). Though, it is not common in rural households of the study area.

***'Ekub'* is** a form of social organization in which members come together for the purpose of saving in cash or kind. The normal practice is that members contribute money or materials on a monthly or weekly basis and lots are drawn every month so that one who wins the chance gets the total sum. There is no interest charged from this source (Dejene, 2003). This type of informal credit institution is popular in urban areas but does no exist in sample taken Kebele.

Zekah Focused group and key informants discussion revealed that, in the study area there are a variety of social institutions that are diverse in purpose, composition of members, and importance in communities supporting each other. *Zeka* is one part of it found in Muslim communities.

Table 4.13 Sample household respondents gave *Zekah* to some one in 2008/2009

Sex	Respondents	*Zekah*		Total
		Gave	Did not	
	Male	54(36.0)	60 (40.0)	114(76.0)
	Female	8 (5.3)	28 (18.7)	36 (24.0)
Total		62 (41.3)	88 (58.7)	150 (100.0)

Source: Own survey data, 2009.

Numbers in parenthesis indicate percentage

Zeka is a religious based practice among the Muslims. In this case, any one who wants to have *zeka* can prepare food and drinks and donate especially to the poor and destitute. From total sample household respondents 41.3 percent gave Zekah for the poorest of poor and destitute in 2008/2009. From total '*Zekah*' giver respondents, 36 percents are male and 5.3 percent female household heads respectively (Table 4.13). As reviewed (Ahmed, 2007) in Muslim communities *Zekah* is one of the five pillars of Islamic obligations to support the poor. This idea also confirmed by key informant religious leaders. We observed from this point, there is local resource potential to establish self help funds.

4.3. Households' Demand to Micro Credit and the Mode of Acceptable Credit by the Communities in the study area

4.3. 1. Rural households Demand for Credit in Muslim Communities

Table 4.14, Reasons of respondent not taken loans from formal financial institutions

So/ Num	Reasons	Sex		Total
		Male	Female	
1	It contradict with the religion principle	20(28.6)	8(11.4)	28(40.0)
	fear of taking loans /Risk	18(25.7)	8(11.4)	26(37.1)
2	hate taking loans	1(1.4)	0(0.0)	1(1.4)
3	Want to take, but not selected by selectors	1(1.4)	1(1.4)	2(2.9)
4	Do not need loans (have enough of my own)	12(17.1)	1(1.4)	13(18.6)
	Total	52(74.3)	18(25.7)	70(100.0)

Source: Own survey data, 2009

Numbers in parenthesis are percentages

Rural households demand for credit refers to the number of household who are willing and able to borrow money at given conditions (such as duration, interest rate and lending methodology of credit providers). As explained earlier, of the 70 (46.6%) households are not borrowing from formal credit institutions. Accordingly, out of the total non credit user sample households 65.7 percent confirmed that they need credit. 70(46.6%) households have given their own justifications why they did not take credit from MFIs so far. Five main factors are mentioned as reasons, such as religion case (40 percent), fear of risk (37.14 percent), they have enough of their own resources (18.56 percent), not selected by selectors (2.86 percent), and dislike of loans (1.43 percent).

Table 4.15 respondents demand to credit

Initiation to borrow		Sex		Total
		Male	Female	
1	Yes	35(50.0)	11(15.71)	46(65.7)
2	No	17(24.3)	7(10.0)	24(34.3)
	Total	52(74.3)	18(25.7)	70(100.0)

Source: Own survey data, 2009

Numbers in parenthesis are percentages

As figures in Table 4.14 indicated, 40 percent of the respondents are distinguished that the presence of interest rate which is not accepted by Islamic religion is an obstacle to borrow credit from MFIs. This is the main reason for Muslim communities not to take credit from formal credit institution. Moreover, the other factor which negatively influenced rural households' access to credit is their attitude towards fear of risk. 37.14 percent of respondents explained even if credit is available, they did not like to borrow credit and enter in to risky ventures. This is due to fear of risk to repay the loans that come from loss of crops due to drought, pests, insects, and other natural calamities explicitly. Moreover, they want to avoid social and cultural exclusion imposes by the community because of interest that is forbidden by their Religion. Furthermore, the survey result also indicated that 22.8 percent of the female households excluded themselves only 1.4 percent respondents did not take credit since they feel that they have enough possessions of their own.

This idea is similar to the findings by Befekadu (2008) where he explained that the disadvantaged from economic empowerments point of view are women. His study found that credit access to women is still limited. He further explained that the industry level women credit access share is only 38.4 percent. On individual MFIs level the share of women participation to credit access is different but below 50 percent. Even though 80 households borrowed the credit from MFIs, 23.75 percent of them returned it before due date of loan repayment time; due fear of cultural imposition (Table 4.16). It is consistent with other studies. According to the majority of Islamic Jurists, the prohibition of 'Riba' is absolute and includes both institutional and non-institutional rate of interest, payment and acceptance of interest rate, high or low is considered as 'Riba'. (Obaiddulah , 2008). So, Islamic law or 'Shariah' law disallows 'Riba'.

Table 4.16 credit clients stop to borrow credit from MFIs fear of cultural imposition

Credit user (N=80)		
Sex	Frequency	%
Male	16	20
Female	3	3.75
Total	19	23.75

Source: Own survey data, 2009.

According to several studies, access to financial services in Muslim societies is either grossly in adequate or exclusive (Obaidulah, 2008, Asyaf, Seibel, 2006) .In recent study for 2007 World Bank Conference on access to financial services, Patrick Honan (2004), estimated the fraction of adult population using formal financial intermediation as a measure of financial access for over 160 countries. The study reveals that out of 44 OIC member countries for which the estimate is available in 17 countries only one-fifth or less of the adult population has access in 21 countries, one- fourth or less access to formal financial services.

In a wide range of countries religious reasons are known to determine the decision of Muslims in obtaining micro credit services. Survey on Jordan**,** Algeria**,** and Syria revealed that 20 to 40 percent of respondents cited religious reasons for not accessing conventional micro loans (Karim et al. 2008). Besides, more than 60 percent of low-income survey respondents in the West Bank and Gaza claim a preference for Islamic product over conventional product. Moreover, the IFC study showed that 18.6 percent of interviewees ranked religious reasons as a single most important factor in their decision on obtaining a loan. In Yemen, 40 percent of the poor is demanded Islamic finance regardless of price (Karim et al. 2008). In Syria a survey revealed that 43 percent of respondents consider religious reasons to be the largest obstacle to obtain micro credit. According to the report of IFC commissioned studies of Bank Indonesia (2000), 49 percent of the rural population of East Java taking loans with interest rate is a contradiction with Sheria (Islamic law). Therefore, they would prefer to take loans from Banks that could not contradict with religion principles. Our research is consistent with this.

As the survey indicated in the study area in particular and in Ethiopia in general, taking and giving money with interest rate is prohibited in Muslim communities. This idea is confirmed by focused group discussion participants, personal observation and religious leaders. They explained that ACSI tried to expand its financial services to Goro dindin Keble and discussed with the community for about three, four times, but did not reach the agreement. The issue of interest rate that contradicts with religion principles is always raise in different meetings and conferences still the problem doesn't minimize. As a result, the main obstacle to take credit from MFI in the study area is connected with religion factors (receiving and giving money with interest is riba.) Then the households willingness /demand / is to take credit, with out interest rate or any types of loans (in kind or on cash) that could not contradict with the religion. On the contrary, there are no formal financial institutions that cater credit with out interest rate in Ethiopia. There fore, as any other courtiers of the World an alternative MFIs will be necessary for Ethiopia that matches with the Muslims community.

4.3.2. Mode of credit proposed by the sample households in the study area

Some sort of credit and its modality which is appropriate for Muslim communities are depicted in table 4.17. About 58.6 percent of sample household respondents proposed interest free loans modalities, 18.5 percent credit with profit and share, 22.9 percent credit in kind (mark- up or cost- plus sale). These lending modalities proposed also confirmed by focused group discussion participants and religious informants. They explained that if the loan is given in kind based on their agreement, they would repay what the cost incurs (cost-plus sale or mark- up price). In any type of credit one coin is added on it in terms of interest rate it becomes '*Riba'* and contradicts with '*Sheria'*. In this regard, they suggest alternative lending procedures that could not contradict with religion principles. That is interest free credit. In their interpretation interest free credit is any type of credit (credit in kind /on cash) the principals and other administrative costs must be separated. The type of contract also clearly identified. It is known that during money transaction different costs incur, principal loan and service charge must be separated and treated differently.

Table 4.17 Forms of credit suggested as convenient for Muslim communities

Form of credit	Frequency	Percent
Credit in kind	16	22.9
Credit with out interest	41	58.6
Credit with profit & Share	13	18.5
Total	70	100.0

Source: Own survey data, 2009.

1. **Credit in kind**

Of 70 respondents 22.9 percent of them are proposed credit in kind modalities, focused group discussion participants and key informants religious leaders are also supported it. According to respondents any body interested to give credit services to the Muslim dominant households, first assess households demand and to register the specification of the commodities requires by each households. Depends on that, the credit providers would purchase the required commodities based on specification from where they are available. Then it would deliver to the registered beneficiaries, with principal cost plus some additional costs. This type of mode of credit in Muslim community is acceptable and what is called *Murabaha* mode of credit. This type of credit modality is reliable with what reviewed by Abdulrahman, 2007; obiadullah, 2008.

Murabaha (capital plus mark-up sales) is the most popular and widely used Islamic financing technique for short-term financing based on the concept of finance or cost plus mark-up sales. In other words this instrument involves the resale of a commodity, after adding a specific profit margin by the lender to the borrower who agrees to buy that commodity for the new offered price (khan, 2008; Abdulrahman, 2007; Sedaro, 2005; Ahmed, 2000). This idea also supported by religious leaders.

2. **Interest free loan**

The study area is food insecure and drought prone. As the survey result indicated 37.1 percent of the respondents did not borrow because of fear of risk, and 40 percent in connection with religion. If interest free loans are available, there is high demand for it. They perceived that interest free credit is acceptable. This type of credit is *'Qard-al hassan'* are benevolent loans that the '*Qura'an'* encourages Muslim to make to those who need them (Obaidulah, 2008, Ahmed, 2007).

As explained earlier 58.6 percent of the sample households suggested interest free loan. Focused group discussion participants and key informants have agreed that interest free loan is important credit modalities for Muslim communities and not contradict with '*Sheriha*. In line to this, what key informant religious leaders are elaborated, interest free credit is not only permissible, but also the poorest of poor and destitute benefit from it. On continuation of this, they explained poverty is seen as religious and social problems. Economic activity and prosperity are viewed as religious virtue or even obligation in Islam. Therefore, every body who are "healthy must work hard". In addition what they explained that repaying the loan what they borrowed is religious obligation. Even some one does not able to repay his credit '*Zekahat is* given to repay his credit. Then religion principles is to solve the problems and increase the solidarity and trustful between the people. '*Zekah'* and *'Waqif' i*s part of social capital to help the poorest of poor and destitute.

This research is consistent with different studies made by different authors. According to Asyraf, (2008*) Zekah* makes consumption smoothing and facilitate productivity, when it will integrate with Islamic micro finance. Then Interest free credit will integrate with *Zeka*, it is convenient for establishment of Islamic microfinance in Muslim dominant area and it reduces risk and default rates. In connection to this some religious leaders in the study area explained and literature reviewed during transaction process it is obvious that costs are incurred. All the expense costs will be calculated separately (it is administrative cost or service fee). Not included in to the principal loan. If it will add to the principal loan, it is interest rate and '*Riba'*. The charge is actual service charge.

This research is consistent with Khan, (2008) explained Qard al-hasanah is an interest free loan, which is to help borrowers rather than benefit from his/her difficulties. However, the financier is allowed to charge the borrower a service fee to cover the administrative expenses on handling the loan and the fee is not correlated to the loan maturity or amount.

3. **Profit and loss sharing**

Sample rural households in the study area have shown a need to involve in profit and loss sharing (18.5 percent) type of credit. This type of credit is an alternative means of financing to the Muslim community. It is lawful in *'Sharia'*. In profit and loss sharing (*Mudaraba*, sometimes *Musharikah*) contract, the financier provides the capital and the entrepreneur invests the money. If a profit is realized, it is shared between parts according to a predetermined ratio based on a percentage of the profit and not as lump sum payment, which would otherwise be a form of interest. In the case of loss the financer loss his money and the entrepreneur loss his/her labor or knowledge. This type of financial instrument may be costly and not always easy to implement, but when managed with expertise, it proves very profitable for the lending institution (Dhumale and Sacanin, 1999).

4.4. Social and Cultural Factors that Affect Access to Formal Credit in Muslim Communities

Culture plays significant role fore development. According to United Nations Educational, Scientific and Cultural Organization (UNESCO, 2002) cited by Baktiar, (2008), Culture is describes as *''the set distinctive spiritual, material intellectual and emotional features of society or a social group, and that it encompasses, in addition to art and literature, lifestyles, way of living together, value system, tradition and beliefs''.*

As mentioned above culture is the wide concept and related to religion. As explained repeatedly charging interest on credit is forbidden in Islamic religion. The discussion is simply on this issue.

In many studies credit improves the living conditions of the households' life (Ahmed, 2007; Alemayehu et al. 2006). In our research findings, it is too. Of formal credit borrower respondents 67.5 percent agree that access to credit improved the living conditions of household life (Table 4.18). And they expressed as, by taking the loan they bought plough oxen, production inputs (seeds, pesticides, Beehives with accessories, etc.), dairy cow, petty trade (animal fattening and sale), for construction of houses, and others. On the contrary, 13.7 percent of sample households explained that credit has negative influence on the living condition of the household life. Because of drought and other natural calamites the crop production failed, livestock died, and the credit borrowers are indebted; in order to repay their loans they are forced to sale other properties or they rented out lands if they have. If the loan borrower did not have any property for loan repayment, they repaid their loan from safety-net or food fore work income.

Table 4.18, perceptions of respondents' access to MFIs and its situation on household life

Situation	Access to MFIs		
	Male	Female	Total
Positive improvement	42(67.8)	12(66.7)	54(67.5)
No change	11(17.7)	4(22.2)	15(18.8)
Negative impact	9(14.5)	2(11.1)	11(13.7)
Total	62(100.0)	18(100.0)	80(100.0)

Source: Own survey data, 2009

Numbers in parentheses indicate percentages.

In Muslim Communities in general and in the study area in particular taking and lending loans with interest rate are the factors that affect rural households' access to formal credit. The Muslim populations living in the poorest countries have been so far reluctant to accept interest-based micro credit schemes (Gaimbarti, 2008). On one side due to the charge of interest rate on loans rural poor is not participate to use the formal credit, on other hand, even if they have borrowed and improve their living condition their acceptance by the Communities decrease (It is Paradox). Of the sample households' respondents' perception 53.3 percent agreed that Muslims who take credit on interest rate basis their social values and acceptance by the communities decrease (Table 4.19).

The focused Group discussion participants, Key informants and personal observations are also confirmed this idea. And they explained that even though, some credit borrowers' income is decreased, because of drought and other natural calamities and can not afforded to repay their loans, but most of the credit borrowers benefited from credit. The main problem is charging of interest rate is contradict with *shreia (Islamic law)*.

Because of this, the credit borrowers have been subjected to exclusion from the Islamic societies, since they become known by Islamic Religion leaders. Since the time of exclusion on wards, using and sharing of formal credit borrower's property (money, food, asset, etc,) is not allowed. That is eating or/ and drinking of the food prepared by the creditor households are '*haram*'. Since, the property of loan takers are considered as part of the loan or the income generated from interest rate bearing loans. Even do not participate on members of formal credit user household during burial and later religious ceremonies (*Sedeqa*). However, after the households completely repay their loans they have the chance to return back the normal situations. As indicated in table 23.8 percent from formal credit borrowers repay their loans before to reach the due date of loan repayment because fear of social and cultural imposes. Additionally, 40 percent of the respondents did not to access formal credit, because of the interest rate charged on loan is not compliant with their religion principles.

Table 4.19, perceptions of respondents' access to MFIs and its effect on households' acceptance, status and power with the community

Situation	Access to MFIs		
	Male	Female	Total
Increase	6 (5.3)	2 (5.6)	8 (5.3)
No change	46 (40.4)	16 (40.4)	62 (41.3)
Decrease	62 (54.4)	18 (50)	80 (53.3)
Total	114 (100.0)	36 (100.0)	150 (100.0)

Source: Own survey data, 2009
The numbers in parenthesis indicated percentage.

Nevertheless, it is not connected with interest rates some studies indicated that due to participate in credit the acceptability of women decreased. According to Balakrishnan (2005)

> *The incremental benefits of micro credit on women's livelihood and social solidarity as well as the potential for changing social relations. On the other hand, negative effects are increased social conflict in the community, the*

tendency of men to control women's access to economic assets and women being used as the front person for control over the loans or financial decisions.

The study result is also consistent with Getaneh, (2007b) explained that, microfinance may not be the only way to bring 'empowerment'. The women clients confirmed that they are really benefiting from the microfinance services in-terms of being able to ensure food security to their children, to themselves and to the family, among other things. These women are also better in terms of their relation-ship with their husband, now getting better respect than before. But in, Muslim Dominant areas getting involved in microfinance or banking services is still considered '*Haram*' (forbidden activity), and the local religious leaders advise that those who are going to such services should be isolated from the rest of 'true believers', as they are 'violating rules'. Meaning that these women cannot join the traditional social ceremonies in the local areas, and no one comes to their home to participate in their ceremonies ('*Sedeka'*), including burial ceremonies. So, the empowerment at 'household' or 'enterprise' and 'individual' levels cannot easily translate into empowerment at 'community' level. Indeed their 'Social Capital' seems to be now lower than it was before the microfinance program.

4.5. Impact of Demographic and Institutional Characteristics on Households' Access to Formal Credit

4.5.1. Econometric Analysis

The purpose of this subsection is to estimate the effect of demographic and institutional characteristics on households' access to formal credit. Then logistic regression analysis was conducted to ascertain factors that contribute significantly to credit accessibility some borrowed the credit others not. Prior to running the logistic regression models both continuous and discrete independent variables were checked for the existence of multi-co linearity problems. The problems arise when at least one of the independent variables is a linear combination of others. The existence of multi-co linearity might cause the estimated regression coefficient to have wrong signs and wrong decision or conclusion.

There are two measures that are often suggested to test the presence of multicolinearity. The variance Inflation Factor (VIF) employed to detect the problems of multi-co linearity among continuous variables and contingency coefficient for dummy variables (Gujarati, 2004).As rule of thumb, if the VIF of a variable greater than 10, there is a multi -co linearity problem. The measure of tolerance can also be used, alternatively, to detect multicollinearity. It is defined as:- $TOL = (1 - R^2) = \frac{1}{VIF}$, clearly, TOL =1 if X is not correlated with the other regresssors, where it is zero if it is perfectly related to the other regressors (Gujarati, 2004).

Table 4.20 Variance inflation factors (VIF) of the continuous explanatory variable

Variable	Tolerance	$VIF(1-R^2)^{-1}$
Average household family size	.821	1.218
Age	.888	1.126
Total cultivated land size	.498	2.009
Tropical livestock unit	.587	1.705
Distance from nearest MFIs	.872	1.146
Annual income of household	.508	1.969

Source: Model out put 2009

The decision rule for contingency coefficient is that when its value approaches 1, there is a problem of association between the discrete variables. Based on the VIF and contingency coefficient results the data are found to have no serious problems of multi-co linearity (Table 4.20 and 4.21). Therefore, the continuous and discrete independent variables are retained in the model.

Table 4.21 Contingency coefficient values of dummy and discrete explanatory variables

Variable	SEX	EDULEV	OWNLAND	PARTIEXT	MMPCO	COLTGL
SEX	1	0.103	-0.266	0.007	-0.012	-0.057
EDULEV		1	-0.119	0.071	0.043	-0.120
OWNLAND			1	0-.223	-0.051	-0.037
PARTIEXT				1	-0.158	-0.200

MMPCO	1	-0.011
COLTGL		1

Source: Model out put 2009

The problem of heteroscedasticity which is mostly inherent in cross-sectional data was checked before estimation of the model, and correction was made with respect to heteroscedastically consistent standard errors. Thus, the reported overall significance of the model as seen from the pseudo R2 and chi square is significant.

Model out put

The reported overall significance of the model as seen from the pseudo R squire and chi square is significant.

Table 4.22 Maximum likelihood estimates of logit model and the effects of independent variables on the probability of Access to formal credit.

Independent variable	B	S.E.	Wald	Sig.	Exp(B)
Age	.013	.017	.555	.456	1.013
Sex	-.124	.499	.062	.804	.883
Educational level	-.563	.518	1.182	.277	.569
average household family size	-.050	.090	.309	.578	.951
Land owner ship	1.455	.673	4.675	.031**	4.284
Total cultivated land	.010	.134	.005	.943	1.010
Participate in extension package	.762	.418	3.317	.069*	2.142
Membership of cooperative	.878	.591	2.205	.138	2.406
Group lending	-2.268	.602	14.169	.000***	.104
Distance from nearest MFIs	-.141	.097	2.137	.144	.868
Tropical livestock unit	.129	.146	.779	.377	1.137
Annual income of household	.090	.138	.427	.514	1.094
Constant	-3.056	2.324	1.730	.188	.047
Chi-square			40.408		
Significant			.000		

-2 Log likelihood	166.869
Pseudo R Square	.315

Source: Own survey data, 2009

***, **, * represent at 1%, 5% and 10% significant level respectively

Twelve independent variables were simultaneously regressed to see their effect on Muslim households' decision to use formal credit or not. Depend on the binary logistic regression analysis we are described that, participation in extension package, land ownership and collateral group lending were important factors influencing rural households' access to formal credit in the study area.

The demographic variables (Age, Sex, total households family), Educational level, distance from the nearest lending MFIs in Kms, annual income of the household, member ship of cooperative, number of livestock, and total cultivated land size independent variables are insignificant at 1%, 5% and 10% significant levels. Thus these variables had less impact (power full) in explaining rural households' access to formal credit and indicating that the two groups were homogeneous with regard to these variables

Elaboration of significant independent variables

Participation in extension package program is found to be an important variable influencing access to formal credit use. The Wald statistics corresponding to the variable participation in extension package program show that it is significant at 10% level. The odds ratio favoring access to formal credit use, increased by a factor of 2.142 for rural households' who participate in extension package programs (Table 4.22).The explanation is that the study area is one of the food insecure Woreda. The government has the policy to provide credit for the purchase of farm technologies to smallholder farmers. From the total population of Woreda, 15 percents (21155) are beneficiary of food security package program (ARDO, 2008). Thus, the priority of extension package credit services is given for those food insecure households. In addition, the development agent are mobilizing food insecure households to take credit and contacts frequently it has positive impact to use the formal credit. Therefore, if rural households participate in extension package program, there is the possibility to be provide the farm inputs on credit basis, even though the interest rate on loans is an obstacle for Muslim communities to take the credit. This study is consistent with Sisay, (2008) who empirically tested a set of socio-economic and other important factors influencing agricultural credit use among small farmers aimed at differentiating borrowers from non borrowers. He found that adoption of improved technology is a significant variable in distinguishing borrowers from non- borrowers.

Land ownership:-In this study land ownership has Positive impact on access to credit. The logistic regression analysis indicated that land ownership has positive (5% significant level) effect on access to credit. This finding is consistent with Gonzalez-Vega, et al. (2007). In Ethiopia land is not privately owned but the people have the right to use and inherit. Land certification is introduced to promote land security. Odds ratio favoring access to credit increase by a factor of 4.284 for rural households' access to MFI credit. Focused group discussion interviewers were also confirmed this result. They explained that rural households who have own land, properly cultivated and will repay their loans on time will be selected in order to benefit from MFI. The youth who have no own land and physical assets has been marginalized from MFI opportunities.

Group formation: The results of logistic model shows that this variable affects access to formal credit negatively at 1% significant level. This is due to the fact that some of the rural households do not want to form a group because of fear of risk in the case of default. If one member does not repay his/her loan, the other group members are required to cover the loan from their own resource, and if they do not, they lose access to future loans. Then group formation requirements by lending institutions as a precondition to provide credit has negative influence to access credit from microfinance institutions (ACSI). The odd favoring access to formal credit decreases by a factor of 0.104 for rural households who are deprived of group members (Table 4.22).

CHAPTER 5: CONCLUSIONS AND RECOMMENDATIONS

5.1. Conclusions

Basically, the needs of the poor in Muslim communities are no different from the poor in other societies. However, as one can imagine, their actions are influenced by their religion and culture in a significant way. Thus understanding the socioeconomic factors influencing rural households' access to formal credit in Muslim communities can help in the design of alternative credit modalities that are acceptable by the communities.

According to the study findings 65.7 percent of rural households have demand to micro credit. However, the existing MFIs may not exactly fit into the type of services such households may prefer. It was found out in this study that some 40% of the households indicated that they refrain from taking loans because of religious factors while 37.1 because of fear of the risk of failure which will ultimately result in their inability to repay their loan obligations.

Islamic law (Sheria) teaches that paying and receiving credit on interest is *'haram*' or *'Riba';* i.e., it is forbidden. This appears to be the likely reason why some 40 percent of the sample household in the study area refrained from participating in the credit scheme. Moreover, lack of complementary services such as technical support from development agents and experts, lack of availability of inputs and technologies provide the other reasons why those who are not currently taking credit have not yet decided to take loans. The econometric analysis conducted in association with this study indicates that rural households that are participating in extension package programs have more access to credit and contact with extension agent and expertise as compared to non credit user. This and other factors are happen to have become the main reasons why ACSI stopped providing its financial services at Goro Dinding Kebele of the study area. However, cooperative societies continue to provide food security package services in the particular Kebele.

ACSI may have stopped providing financial services in the Kebele, which is expected to be temporary, but ACSI as well as cooperative societies provide financial services to other Kebeles. In those communities where access to credit is available, it is found to have positive impact on the welfare of households. Many studies show that availability of group lending provides appropriate solution to the lack of collateral of the poor communities which will negatively affect their access to formal loans. Moreover, group lending is believed to minimize misuse of funds through its risk sharing mechanism implicit in the system and, as a result, the risk of default gets minimized. In relation to this particular study, problems of dissatisfaction with group formation were observed and there were many instances of repayment related problems. However, it was found in this study that land ownership has had positive impact on househhold’s access to credit in the study area.

5.2. Recommendations

The government of Ethiopia has established different polices and strategies to alleviate poverty. In line with the policies and strategies, attempts have been made to ensure the availability of rural credit through government and non governmental organization for rural development. However, in the study area, it appears that many households refrain from taking loans because of interest related issues which is not acceptable by the Sharial Law. Thus, poverty alleviation in general and achieving food security in particular could not be easy without addressing the financial constraints of this social category. One can conclude that availability of microfinance services that do not contradict with the forbidden interest, i.e., Islamic Microfinance, may provide a good alternative to address the financial requirements of those who have so far refrained from taking loans. One can make the required adjustments to the existing financial services in a manner that microfinance principles are upheld on the one hand and that it addresses the religious considerations of the communities, on the other.

The following practices are recommended to improve the financial access to Muslim communities in the study area.

1. Interest free credit (benevolent loan) *or* 'Qard al-hasanah' *loan* is permissible by Muslim community. In this type of credit principle lenders will charge service fee to cover the administrative expenses on handling the loan and fee is not correlated to the loan maturity or amount. The service charge and principal costs will be calculated separately. From other countries experience this type of loan is provided for destitute, small producers, farmers or entrepreneurs who are unable to receive from other lending institutions. As the research findings indicated rural households who have no own land and can not be able to form group lending, have less access to credit. Thus they will be treated in this type of credit modality.

2. Credit in kind (cost plus mark up):- This is also interest free credit based on credit in kind. As a mode of microfinance industry the credit providers assess or identify the type of commodities will be preferred by rural households. Then purchase assets (example, dairy cow, goat/sheep, ox, beehives with accessories water pump and etc.) or business equipment according to specification and resell credit in kind to the borrower by adding some mark up on principal price. Repayments will be as per the agreed repayment installation. For the establishment of alternative MFIs that will be appropriate for Muslim communities; the government and non-governmental organization and the communities by themselves have their own role.

From MFI perspective they can assess Islamic Microfinance that is practiced in other countries and design a model that can safely be implemented in Ethiopia. On the part of the community, they can mobilize the local resources such as Zeka and other funds and establish self help group in a manner that ensures coordination with MFIs. Non-governmental organizations can nurture the development of self-help groups to generate funds from the community and use them to provide loans to others. More appropriately, one can study the experiences available in other parts of the world and adapt them for local circumstances by taking into consideration local realities and societal needs.

REFERENCES

Abdulrahman, A. (2007). Islamic microfinance: A missing component in Islamic banking: Kyoto of Islamic area study, International Islamic University Malaysia (IIUM).

Ahmed, A. (2000). Islamic finance and Banking: The challenge and prospective Review of Islamic economic number.

Ahmed S. (2007). ‘Micro credit and poverty: new realities and strategic issues’ in ‘attacking poverty with micro credit’ UPL, Dhaka

Akram. M. Khan, (1994). "Rural Development through Islamic Banks," The Islamic Foundation, Markfield, Dawa Center, UK.

Alam M. (2003). Micro Credit through ‘Bai-Muajjal’ Mode of Islamic Banking Financing Paper to present at the First Annual Conference of SANABEL, Islamic Microfinance in the Arab World: Shapint the Industries Future” , to be held in Amman, Jordan.

Alderman,H., J. Hoddinott, L., Haddad and C. Udry. (2003). Gender differentials in farm productivity: implications for household deficiency and agricultural policy. FCND Discussion paper No.6. Washington D.C.: International Food Policy Research Institute.

Alemayehu Geda, Abebe Shimels, & Dagne Zerfu, (2006). Finance and Poverty in Ethiopia: A Household Level Analysis. Helsinki, Finland, *www.wider.unu.edu*

Alemnew Mekonnen, (2007). Access to and Demand for Credit in Rural Ethiopia; A case study of Amhara Region MA.Dissertation, Institution of Development Policy and Management, University of Antwerp.

Asyraf,W. D., (2008). Banking for the Poor; The Role of Islamic Banking in micro finance Institution, Department of Economics Malaysia. Email: asyraf.w@iiu.edu.my

Atieno, R. (2001). Formal and Informal Institutions' lending polices and access to credit by small scale Enterprise in Kenya: An Empirical Assessment. African Economic Research Consortium, Nairobi.

Baktiar, M. R., (2008). Culture Oriented Management Control System of Microfinance Institution in Bangladesh.

Balakrishinan, R. (2005). Rural Women and Food Security in Asia and Pacific Prospect and Paradox: Food and Agricultural Organization on the UN Regional Office and the Pacific Bankok, Thailand.

Befkadu B. Kereta, (2007). Outreach and Finance Performance Analysis of Micro finance Institution in Ethiopia: African Economic Conference United Nation Conference Center (UNCC) Addis Ababa, Ethiopia.

Bendig,M. Giesbert. L. Susan., S. (2009). Savings, Credit and Insurance: House Holds demand for financial services in Rural Ghana. GiGa research program: Transformation in the process of Globalization Germany.

Chang,B. S. and Liu, H., (2005). Islamic Banking: Interest- free of Interest-based? New Zealand.

CSA (Central Statistics Agency), (2008). Federal Democratic Republic of Ethiopia Population and Housing Census Summery and Statistical Report Addis Ababa,

David & Moore K. (2006). Why has Microfinance Been a Policy success in Bangladesh (And Beyond)? Institute of Development Policy & Management University of Manchester

Degene Aredo, (2003). Informal Financial Institution: The Economic Importance of Iddir, Iqqub, and loans, Proceedings of the National worship on the Technological progress In Ethiopia, Agriculture, Nov, 20-30, 2001. AAU, Addis Ababa.

Dewa-Chefa Wereda, Agricultural and Rural development Office (2008) Annual Report, Kemis

Dewa-cefa Wereda, Finance and Economic Development Office, 2008, Amharic Brusher

Dhumale, Rahuland, Amela Sapcanin, (1999). An application of Islamic Banking principles, to microfinance, Technical Note A study by the regional Bureau of Arab states, UNDP, in cooperation with the Middle East and North Africa Region, World Bank

Diagne, A. Zeller. M. M. Sharma, (2000). Empirical Measurement of Households access to credit and credit constraints in developing countries: Methodological issue and Evidence Food Consumption and Nutritional Division Discussion paper Number 90. International Food Policy Research Institute Washington DC.

Diagne A. (1999). Determinants of Households Access to and Participation in Formal and Informal Credit Markets in Malawi: International food policy research institute, Washington

Enugu forum, (2007) “Policy challenges for microfinance design and practice in Nigeria” Debating policy option for National development accessed www.microfinancegateway.com

FDRE (Federal Democratic Republic Ethiopia) 1996, Federal Negarit Gazeta Proclamation No. 40/1996, Proclamation to provide for the licensing and supervision of the business micro financing institutions, Addis Ababa, Ethiopia.

Ghatak. M. (1999). "Group lending, Local Information and Peer Solution," *Journal of Development Economics 60, 229-248.*

Gaimberti L.F (2007-2008). Development according to Shari'ah: The case of Islamic Microfinance Milan. Www. galimbertifaussone@gmail.com

Gamal Ibrahim, (2007). Household-level Credit Constraints in Urban Ethiopia: Nottingham Business School, Nottingham Trent University, UK

Gebrehiwot Ageba, (2002), Microfinance Institution in Ethiopia: Issues of portfolio Risk, and institutional arrangement and governance the paper presented Mekelle University.

Getachew Teka and Yishak Mengesha. (2006). Integration of Financial Services in to the poverty Reduction Strategy: The case of Ethiopia: paper presented in the East Africa Sub-Regional work shop, Dare Salaam, Tanzania.

Getaneh Gobezie, (2007). Successes in Expanding Microfinance Opportunities in Rural Ethiopia; Where There is Little Entrepreneurship? [A paper submitted for the International Finance Corporation & Financial Times Ethiopia, "Essay Competition" www.ifc.org/competition]

Getaneh Gobezie, (2007b). "Impact Assessment of Microfinance in Amhara Region of Northern Ethiopia" Amhara Credit & Saving Institution (ACSI) Head, Planning & Monitoring, CEO, Institute E-Mail: cgarber@ideasnet.org Web: www.ideasnet.org

Getaneh Gobezie, (2005). Livelihood through micro enterprise/ Assessing supply and demand constraints for microfinance in Ethiopia (With particular reference to Amhara Region) paper presented at the third International conference Ethiopian Economy, Addis Ababa, Ethiopia.

Gonzalez-Vega Nguyen, Korotoumou, Ouattara , and Thi-Dieu-Phuong (2007). Using Village Mechanisms to Expand the Frontier of Microfinance: The Case of the Caisses Villageoises in Mali Ohio State University

Greanwal D, and Associate, (1983), the concise McGraw-Hill Dictionary of Modern Economics, New York, U.S.A

Gujarati D, N. (2004). Basic Econometrics, Fourth Edition, the McGraw-Hill Companies, New York.

HGI (Harar Global Institute (ud)], University of Microfinance Products. [On line] Available from http:// www.mh/hararglobal.com.accessed on 8/4/2009

Honohan, (2007), Access to finance: A conference co-sponsored by the finance and private sector development Team of the world bank's Development Research group and the world Bank economic Review in Washington.

Honohan, P. (2004). Measuring Microfinance Access: Building on existing cross-Country Data. Prepared for the UNDP, World Bank and IMF Workshop Data on the Access of Poor and Low Income People to Financial Services Washington, DC,

Hussein Hamda, (2007), Farm Household Economic Behavior in Imperfect Financial Markets, Doctoral Thesis, Swedish University of Agricultural Science, Uppsala.

Iqabal, Z. 1997, Islamic Financial system: Finance and development National of Pakistan.

Itana Ayana, (1994). Credit Policy, Financial Institution and Private investment in Ethiopia, Addis Ababa.

IFSP (Integrated Food Security Program) (1997) Rural Credit Provision., The regional government of Tigray integrated food security program in drought areas of Tigray.

Ismail Nizam, (2008). Why Interest is Prohibited Riba? An economic perspective

James C. Brau, Gary M. and Woller (2006). Microfinance: A Comprehensive Review of the Existing Literature Brigham Young University.

Karim, A. Tranzi, M., and Reille X. (2008). Islamic Microfinance an Emerging Market Niche

Karlan, D., S. (2001). Microfinance impact Assessments: The Perils of Using New Members as a Control Group

Kempson, Elaine, Claire Whyley, John Caskey and Sharon Collard., (2000). "In or out? Financial Exclusion: A Literature and Research Review." London: Financial Services Authority. http://www.fsa.gov.uk/pubs/consumer-research/crpr03.pdf

Khan, A. (2008). Islamic Microfinance Theory, Policy and practice www.islamic-relief.com

Khan, A. (2008). Livelihood strategy and Employment structure in Northern Pakistan.

Mohammed, A. Dairo and Hasan, Zubair. (2008). Microfinance in Nigeria and the prospects of the introducing its Islamic version there in the light of selected Muslim countries' experience international Islamic University Malaysia.

Mohieldin, S. and Write W. (2000). Formal and Informal Credit Market in Egypt Center for Economic Policy Research and University of Nottingham

Maddala, G. S., (1992). Introduction to Econometrics: Macmillan Publishing New York.
MoFED (Ministry of Finance and Economic Development, 2006). A Plan for Accelerated and Sustained Development to End Poverty (PASDEP) (2005/06-2009/10), Volume I: Main Text, Addis Ababa.
Morduch Jonathan, (1999). The Microfinance Promise: Journal of Economic Literature Vol. XXXVII (December 1999), pp. 1569–1614
NBE (National Bank of Ethiopia 2007/2008), Annual Report, Addis Ababa, Ethiopia
NBE (National Bank of Ethiopia 2002/2003), Annual Report, Addis Ababa, Ethiopia.
Nguyen, H.C., (2007). Access to Credit and Borrowing Behavior of Rural Households in the Transformation of Economy: Center for Economic Reform and Transformation, Heriot-watt University, Edinburgh, UK
Obaidullah, M. (2008). Introduction to Islamic Microfinance: IBF Net, the Islamic business and finance network Web: http://www.islamic-rfelief.com
Obaidullah, M. (2008). Role of Microfinance in Poverty Alleviation, Lessons from Experience in Selected IDB Member Countries. Islamic research & Training institute, members of Islamic development Bank Group, Jeddah.
Obaidulah, M. Hajji, S., (2008). Islamic Finance for Micro and Medium enterprise: Islamic Research and Training Institute Islamic Development Bank, Darussalam.
Okten, C., Urla, O. (2004). Social Net works and Credit Access in Indonesia: Bilkent University, Ankara, Turkey.
Oromiya Zone Finance and Economic Development Department, (2010) Kemisie
Padmanabhan, K. H., (1996). Rural Credit, Lessons for Rural Bankers and Policy Makers, London,
Ridza, M. (2008). Islamic Finance: The way forward in Malaysia. www.ridza@radzalaw.com.my
Schmid, R.H and Erhard Krapp, (1987). Rural Finance: Guiding Principles Bonn, German foundation.
Schmith, S. (2005). Islamic Banking Experience Rapid Growth: Islamic Foundation, UK.
Segrado, C. (2005). "Islamic Microfinance and Social Responsible Investment," MEDA project microfinance at the University of Torino.
Seibel, H. and Agung, W., (2005). Islamic Microfinance: in Indonesia.

Sideqi. Muhammed, N., (2004). Banking Without Interest: Islamic Foundation, UK.

Sisay Yeuala, (2008). Determinants of Smallholders Farmers Access to formal Credit: The case of Metema Woreda, North Gonder Ethiopia. M.Sc. Thesis Haramaya University, Ethiopia

The Constitution of the Federal Democratic Republic of Ethiopia, 1995 Addis Ababa.

Wilson R., (2007). The Evolution of Islamic Financial System, University of Durham.

Wolday Amha, (2002). Product Development in The Ethiopia Microfinance Industry: challenge and Prospect: Producing of International workshop on 'the Dimension of Microfinance in Sub-Saharan Africa:' Faculty of Business and economics Mekelle University, Ethiopia.

Udry, C., (1991). Credit markets in Northern Nigeria: Credit as Insurance in a Rural Economy. World Bank Economic Review 4(3): 251-269.

Zaid Negash, (2008). Microfinance Loan Delivery Utilization and Impact: with specific reference to Tigray, Northern Ethiopia, PhD Dissertation.

Zaman Hassan, (2004).The Scaling-Up of Microfinance in Bangladesh: Determinants, Impact, and Lessons, World Bank Policy Research Working Paper 3398, September 2004.

Zeller, M. Diagne, A., and Mataya, C., (1998). Market Access by Smallholder Farmer in Malawi

Appendices

Appendix I Table.1 Profile of Focused Group Discussion and Key Informant Participants

	Participant	Total participants in person		The discussions were made
		Goda-Kebele	Dindin Kebele	
Focused group discussion participants	Women households	10	10	At each Kebele
	men households (youth and from communities)	12	12	At each kebele
	Community leaders and DAs	12	11	At each Kebele
Key informants	Religious leaders	3	4	At each Kebele
	Religious leaders	3		At Woreda level
	Representatives of ACSI, Cooperatives Office and Woreda Administration	5		At Woreda level

Appendix II Table 2: Conversion factors to estimate Tropical Livestock Unit equivalent

Animal category	TLU	Animal category	TLU
Cow/Ox	1	Donkey	0.70
Heifer	0.75	Mule	1.10
Bull	0.34	Horse	1.10
Calf	0.25	Camel	1.25
Sheep/Goat	0.35	Chicken	0.013

Source: Sisay 2008

Appendix III Interview schedule

Instruction: Introduce yourself before starting the interview. Inform the respondent politely to whom you are working for and explain the purpose of the interview. Fill the responses in the space provided where appropriate.

Identification number__________ Date of interview _____________________

Name of enumerator____________________________ Signature___________

Peasant Association/Kebele__________Village ____________________________

Respondent's name____

1. Household Characteristics

1.1. Age in years_____________ 1.2. Sex; 1.Male ☐ 2.Female ☐

1.3. Marital Status 1. Mariad ☐ 2. Divorced/ Separated☐ 3.Widowed.☐

4. Single/ Never married ☐

1.4. Educational level_________________

1.5. Religion of respondent; 1. Muslim ☐ 2. Orthodox ☐ 3.Others ☐

1.6. Household head; 1. Yes ☐ 2. No ☐

1.7. Details of members of the household including head of the household.

S.No	Age group	Sex		
		Male	Female	Total
1	No of family members below the age of 7			
2	No of family members from 7 to 14 years age			
3	No of family members from15 to 64 years age			
5	No of family members above 64 years age			
	Total			

1.8. Households & members educational level

No	Educational level	Sex		
		Male	Female	Total
1	No of family members who are illiterate (can't read & write)			
2	No of family members who are literate (but not formal education)			
3	No of family members that are primary & secondary school (1-8)			
4	No of family members that are secondary & above (9th grade			
	Total			

2. Total land holding size of the household head

2.1 Do you own land? 1. Yes ☐ 2. No ☐

2.2. Total land holding __________Timad

2.3 .Tenure statuses can be: 1) Own ___2) Inherited___3) Rented in ______

4) Share cropping ________ timad

2.4. If own land operated by others __________ Timad

2. 4.1. Rented out _____ Timad 2.4.2. Sharecropped out _________ Timad

3. Household Income and Productive Asset

Livestock	**Quantity**	**Value (Br.)**	**Total Price**
Ox			
Cow			
Heifer			
Bull			
Calf			
Sheep			
Goat			
Donkey			
Mule			
Horse			
Camel			
Chicken			

3.1. HOUSEHOLD INCOME

Please indicate the income of your household in each of the following divisions

3.1.1. Crop Output (from Meskerm 2001 E.C until Nehase 2001 E.C) From Rain and Irrigation

Type of Crop Produced	Estimated Amount (in Quintals)	Estimated Market Value (in Birr)
Cereals (teff, wheat, barley, maize, sorghum, etc.)		
Pulses (Beans, Peas, Lentils, flux, etc.)		
Vegetables (Tomato, Potato, Onions, Carrot, Lettuce, etc.)		
Fruits (Orange, Lemon, Zeithun, Mango, Papaya, etc.)		
Others _______		

3.1.2. Average Monthly Income from the sale of the following items from Meskerem 2001 E.C until Nehase 2001 E.C

Items Sold	Average Monthly Income (Birr)
Wood and Wood Products (Trees, firewood, Charcoal, etc.)	
Animals	
Animals Products (Milk, butter, Honey, eggs, etc.)	

3.1.3. Average Monthly Income from Other Sources

Type of Activity	Average Monthly income (Br.)
Daily Labour (Not Safety Net)	
Petty Trade (not included in H.2.)	

Others (Specify) __________________	

3.1.4. Safety Net

Average annual (yearly) income from Safety net Br.__________________________

3.1.5. Other Sources

1. Rent income:

Can you give us the **average monthly rent** you receive from renting your property (land, Ox, others) or your house: Br. _______________

2. Remittances/Gift

Can you give us the amount of remittances/Gift that you received from Meskerem 2001 E.C until Nehase 2001 E.C.: Br. ___________?

3. Food Aid

Can you give us the amount of food aid you received from Meskerem 2001 E.C until Nehase 2001 E.C. in Br. __________?

4. Income from Social Occasions

Can you give us the amount of income you received from social occasions (wedding, eddir, you organized from Meskerem 2000 E.C until Nehase 2001 E.C.: Br. ______________

5. Other Income (not stated above) (**monthly average**): Br. _____________ per month

4. Access to Extension Services

4.1 Did you participate in agricultural extension package program in the last years (2005 till now)? 1. Yes ☐ 2. No ☐

4.2. Do you get extension service? 1) Yes ☐ 2) No ☐

4.3. If yes, for how long have you been getting the service? _________Years

4.4. Who provides the extension service? 1) Development agents ☐ 2) NGOs ☐

3) Others specify________

4.5. How frequently were you visited by development agents in the last 12 months?

Days /3 months____

e. Are you member of farmer's multipurpose cooperatives in the area? 1. Yes ☐ 2. No ☐

5. Credit and Savings

5.1. Have you ever taken any loan from formal credit institutions?

1. Yes ☐ 2. No ☐

5.2. If your answer for 5.1 is “Yes”, from which sources?

1. ACSI ☐ 2. Cooperatives ☐ 3. Banks ☐ 4. Others ☐

5.3. How far is your home from the nearest lending formal financial institution office? In kilometers.__________

(If answer is “No”, in Q.5.1 **go to 5.D,**)

5.4. If your answer for Q5.1 is “Yes”, have you taken Group Loan/s?

1. Yes ☐ 2. No ☐ (If answer is “No” **going to 5.B**)

A. 1. GROUP LOAN

5.5. If your answer for 5.4 is “Yes”, how many times have you so far taken group loan/s?

________________ times

5.6. What promoted you to take the first loan? (Choose three most important reasons in order of priority) 1. To expand or promote the business that I was doing at that time ☐

2. I felt that I can do something useful, but I did not have money at that time ☐
3. To repay the debt I had taken from other sources ☐
4. To solve serious problem of lack of money I faced at that time ☐
5. To buy some useful things to my family or pay for my children education or pay for medicine ☐
6 .Others (specify) ____________________

5.7. What was the first loan **mainly** used for? _____________ (Choose A, B, C, D, E, F or G from the **code a** below)

5.8. Indicate the specific activity for which you used the loan within your answer for question number 5.7. ____________________ (Choose A.1, A.2, … B.1, B.2, etc from **code a** below)

Code a:

<table>
<tr><th>A. Agriculture</th><th>B. Trade</th><th>C. Handicraft</th><th>D. Manufacturing</th><th>E. Services</th><th>F. Consumption</th></tr>
<tr><td>A. 1 Farming Ox</td><td>B.1 Cereals/Pulses</td><td>C.1 Embroidery (‘sift’)</td><td>D.1 Wood Work</td><td>E.1 Pharmacy</td><td>F.1 Food</td></tr>
<tr><td>A.2 Dairy Cow</td><td>B.2 Animal Trade (or fattening)</td><td>C.2 Weaving, Spinning</td><td>D.2 Metal Work</td><td>E.2 Beauty Salon (men, women)</td><td>F.2 Household Goods (utensils, cloths, soaps)</td></tr>
<tr><td>A.3 Sheep/Goats</td><td>B.3 Honey, Butter</td><td>C.3 Pottery</td><td></td><td></td><td>F.3 Educational</td></tr>
<tr><td>A.4 Donkey; Mule; horse; camel</td><td>B.4 Shop</td><td></td><td></td><td></td><td>F.4 Medical</td></tr>
<tr><td>A.5 Beehive</td><td>B.5 Local Drinks (bukuri---)</td><td></td><td></td><td></td><td>F.5 Jewelry (gold, silver, earnings, bracelets,)</td></tr>
<tr><td>A.6 Farm Implements</td><td>B.6 Food (Enjera, bread, biscuits…)</td><td></td><td></td><td></td><td>F.6 Social Festivities (Wedding, …)</td></tr>
<tr><td>A.7 Seeds</td><td>B.7 Fruits/Vegetables</td><td colspan="3" rowspan="4">G. Others
G.1 Repayment of Loans (Taken from others or from ACSI)
G.2 House Construction
G.3. Do not remember
G. 4. Other purposes __________________</td><td>F.7 TV, Radio, Tape</td></tr>
<tr><td>A.8 Fertilizer</td><td>B.8 Fire wood/charcoal</td><td>F.8. Other consumption ____________</td></tr>
<tr><td>A.9. Poultry</td><td>B.9 Other petty trade ___________</td><td></td></tr>
<tr><td>A.10 Others ____________</td><td></td><td></td></tr>
</table>

5.9. How many members did your group have ____________?

5.10. Did you take second loan immediately after paying the first loan? (Mark one)

1. Yes, 2. No,

5.11. The following question is about the last two group loans (including an outstanding loan, if any) you took

Please fill in the following table as related to the amount of loan taken, and utilization.

Last two loans	Year	Loan Amount (Br.)	Loan Requested for (code a)	Loan Term (in months)	Did you use all or part of the loan for other uses (1 = Yes; 2 = No)	If you use part of the loan for other purposes, mainly for what (code a)	
Latest							
Previous							

Code a:

<table>
<tr><th>A. Agriculture</th><th>B. Trade</th><th>C. Handicraft</th><th>D. Manufacturing</th><th>E. Services</th><th>F. Consumption</th></tr>
<tr><td>A.1 Farming Ox</td><td>B.1 Cereals/Pulses</td><td>C.1 Embroidery (‘sifet’)</td><td>D.1 Wood Work</td><td>E.1 Pharmacy</td><td>F.1 Food</td></tr>
<tr><td>A.2 Dairy Cow</td><td>B.2 Animal Trade (or fattening)</td><td>C.2 Weaving, Spinning</td><td>D.2 Metal Work</td><td>E.2 Beauty Salon (men, women)</td><td>F.2 Household Goods (utensils, cloths, soaps)</td></tr>
<tr><td>A.3 Sheep/Goats</td><td>B.3 Honey, Butter</td><td>C.3 Pottery</td><td></td><td></td><td>F.3 Educational</td></tr>
<tr><td>A.4 Donkey; Mule; horse; camel</td><td>B.4 Shop</td><td></td><td></td><td></td><td>F.4 Medical</td></tr>
<tr><td>A.5 Beehive</td><td>B.5 Local Drinks</td><td></td><td></td><td></td><td>F.5 Jewelry (gold, silver, earnings, bracelets,)</td></tr>
<tr><td>A.6 Farm Implements</td><td>B.6 Food (Enjera, bread, biscuits…)</td><td></td><td></td><td></td><td>F.6 Social Festivals (wedding…)</td></tr>
<tr><td>A.7 Seeds</td><td>B.7 Fruits/Vegetables</td><td colspan="3" rowspan="4">G. Others
G.1 Repayment of Loans (Taken from others or from ACSI)
G.2 House Construction
G.3. Do not remember
G.4. Other purposes ______________</td><td>F.7 TV, Radio, Tape</td></tr>
<tr><td>A.8 Fertilizer</td><td>B.8 Fire wood/charcoal</td><td>F.8. Other consumption</td></tr>
<tr><td>A.9. Poultry</td><td>B.9 Other petty trade _____</td><td></td></tr>
<tr><td>A.10 Others ___________</td><td></td><td></td></tr>
</table>

5.12. What do you feel about the interest on loans charged by ACSI? (Mark one)

1. Very Low ☐ 2. Low ☐ 3.Good (moderate) ☐

4 High ☐ 5. Very High ☐

5.13. Did you repay your loan on time? 1. Yes, ☐ 2. NO ☐

5.14. What do you feel about the Group Loan? (Mark one)

1. I hate it ☐ 2. I do not like it ☐ 3. It is alright ☐ 4. I like it very much ☐

5.15. What is your preference, Group Loan or Package Loan? (Mark one)

1. Group Loan ☐ 2. Package Loan ☐

5.16. If your answer for number 5.15 is 'Package Loan', what is your main reason? (Give one reasons)

1.Because of lower interest rate for the package loan ☐
2. It is contradict with the religion ☐
3. Because it is easier to get package loan than group loan.☐
4. Because the repayment period for package loan is longer than that of group loan.☐
5. Because I prefer individual loan to group loan.☐
6. Because package loan has no collateral and if I cannot repay, I will be excused ☐
7. Because the loan amount in the package loan is bigger than the loan amount in group loan ☐
8. I can use package loan for whatever I want, but I cannot use group loan for whatever I want ☐
9. Others (specify) ______________________________________

5. B. PACKAGE LOAN

5.17. Have you taken package loan (individual credit) from formal microfinance institutions?

Yes ☐ ***[If "Yes", see 5.21.]*** 2. No ☐ ***[If "No", go to 5.C.}***

5.18. Which was the source?

1. ACSI. ☐ 2. Multipurpose cooperatives ☐ 3. NGOs ☐ 4. Bank ☐

5. Others specify________

5.19 Why do you prefer cooperatives loans?--

____

5. 20. Did you give-up to take loans from formal lending organizations due to fear of religious with related to interest rates? 1. Yes ☐ 2. No ☐

5.21. Concerning the Package Loan you took **in cash**, please fill in the following table:

Package Loan	Year	Loan Amount (Br.)	Loan Requested for **(code 1)**	Loan Term (Years)	Did you use all or part of the loan for other uses (1 = Yes; 2 = No)	If you use part of the loan for other purposes, . Mainly for what (**code 2**)
First Package Loan						

code1

P1. Animal Fattening	P4. Dairy Cow/s	P7. BBM	P10. Donkey	P13. Fertilizer, Improved Seed, Chemicals	P16. Handicraft
P2. Modern Beehive	P5. Irrigation	P8. Poultry	P11. Mule	P14. Petty Trade	P17. Construction
P3. Sheep/Goat	P6. Triddle Pump	P9. Camel	P12. Horse or camel	P15. Grain and Animal Trade	P18. Wheel B. or Cart

code2

O1. Food
O2. Wedding, Tsebel,etc.
O3. Housing
O4. Education, Health
O5. Loan Repayment
O6. Others ___________

5.22. Have you taken Package Loan in kind for inputs (i.e., in the form of Coupon)?

1. Yes ☐ 2. No ☐

5.23. If your answer for 5.22 is "Yes", what type of coupon loan did you take? ____ (***Code 3***)

Code 3:

C1. Triddle Pump
C2. Improved Seed
C3. Dairy Cow/Goat
C4. Modern Beehive including accessories
C5. BBM
C6. Water Pump
C7. Others _______________

5.24. Do you prefer cash loan or Loan in Kind (i.e., coupon loan)?

1. Cash Loan ☐ 2.Loan in Kind (coupon Loan) ☐

3. No specific preference (both are useful in their own way) ☐

5. 25. If your answer for 5.24. Is "Yes", what for? ______________________________

5.26. How do you explain the way you have been repaying your package loans?

1. I am a new borrower (Not yet started repaying) ☐
2. Paying on time up to now (no delay at all) ☐
3. Largely paying on time (occasional delays) ☐
4. 4. Many delay ☐
5. Other _________________

5.27. Do you prefer group loans or package loans? 1. Group Loans ☐ 2.Package Loans ☐

3. No Preference (both are useful) ☐

5. C. Savings in ACSI

5.28. Do you have Center (maekel) or Group savings in ACSI?

1. Yes, and I know the amount ☐
2. Yes, but I do not know how much ☐
3. No, I do not have ☐

5.29. Do you have personal (voluntary) savings with ACSI? 1. Yes ☐ 2. No ☐

5. D. Credit from Sources Other Than Formal Financial Institutions

5. D .1. Ekub and Credit

5. D.1.2. Are you (or any member of your family) currently a member of Ekub? (Mark one)

1. Yes ☐ 2. No ☐

5.D.1.5. Did you give Zeka't to someone in the current 2001 E.C? 1. Yes ☐ 2. NO ☐

5.30. Have you or your spouse borrowed money of more than Br. 50.00 (in cash or in kind) from sources other than formal micro finances institutions in 2001 E.C. for over a month? (Mark one). 1. Yes ☐ 2. Not at all ☐

5.31. If your answer for 5.30 is "Yes", who were your main lenders? (You can give up to three answers)

1.Parents ☐ 2. Friends, Relatives, or Neighbors ☐ 3. Edir, Ekub ☐

4. Money Lenders ☐ 5. Women's Association, Youth Association ☐

6. NGOs ☐ 7. Others (specify) ________________

5.32. If you borrowed from money lender/s, how much was the interest charged?

________________ Percent per year

6. For Those How Have Never Taken loans From Formal Credit Institutions

6.1. Do you have personal (voluntary) savings? 1 .Yes ☐ 2. No☐

6.2 If your answer for 6.1 is "Yes", Where to save. _________

6.3. With interest or with out_________

6.4 Why was it that you have not taken loans from formal financial institutions so far (give one reasons in order of importance)?

1. It is contradict with the religion ☐
2. I am afraid of taking loans ☐
3. I hate taking loans ☐
4. I have heard or seen many people who took loans from ACSI not happy with it ☐
5. I want to take package loans, but I was not selected by the selectors☐
6. I want to take group loans, but I was not allowed by ACSI ☐
7. I prefer taking loans from other sources ☐
8. I do not need loans (I have enough of my own) ☐

9. Distance from lending institutions ☐

10 Others, (specify) ____________________________

6.5. Do you have an intention to take loans from formal financial institutions if it will not contradict with your religion?

1. Yes ☐ 2. No ☐

6.6. If your answer for question 6.5 is “Yes”, which type of loan do you prefer to take?

1. Group Loan ☐ 2. Package Loan (individual loan) ☐ 3. Any one ☐

4. Others specify________________________

6.7. If the answer for “6.4” is 1, list and describe the forms of credit you think not contradict with your religion?

1____

2 ____

6.8. If you got chance of accessing to credit initiative not contradicts with your religion principles, what are the main purposes/activities of your choice? List in order of priority

1 ____

2 ____

6.9. How to cover the transaction costs? _________________________

7. Overall Assessment of MFIs Borrowers

7.1. What can you say about the impact of MfIs credit and savings services on your household’s life?

1. Very big positive impact (i.e., long term and permanent positive impact) ☐
2. Good impact (mainly temporary benefit, but some permanent impact ☐
3. Very small positive impact (small temporary benefit) ☐
4. Partly positive, partly negative (i.e., mixed with the overall impact being almost zero) ☐
5. Negative impact (I got into problem as a result) ☐

7.2. How do you describe the impact in line with your answer for number Q7.1 number 1?

____

7.3. Do you feel that taking loans from MFIs has increased your power and status **in your family**?

1. Yes, very much. ☐ 2. Yes, slightly ☐
3. No change in my power and status ☐
4. No, my power and status has rather decreased ☐
5. I just live alone ☐

7.4. What effect does taking loans from micro finance institutions have acceptance, status, and power within community?

1. Increased very much ☐ 2. Slight increase ☐
3. No change ☐ 4. Decreased ☐

5. If it is decreased explain______________________________________

____

8. for Borrowers and Non-Borrowers from Formal Microfinance Institutions

8.1. What happened to your household's living condition over the last three years?

1. Big Improvement ☐ 2. Small Improvement ☐
3. Remained the same (No change) ☐ 4. Worsening (going from bad to worse) ☐

9. What effect does taking loans from Formal financial institutions (ACSI, Cooperatives & others) have on acceptance, status, and power within the community?

1. Increase ☐ 2. No change ☐ 3. Decrease ☐

9.1 Is there social and cultural imposes those who have taken loans from formal credit institutions? 1. Yes ☐ 2. No ☐

9.2. If the change has been positive (in your family and community), how do you explain that?

____

9.3 If the change has negative, how do you explain that? _______________

10. Summery what is your perception about formal financial institutions?

Topic	Score		
	Agree	Neutral	Disagree
ACSI Control loans not to be used for quite different ends			
Cooperative Control loans not to be used for quite different ends			

11. What is your view on the constraints and difficulties to access credit from the formal financial sources?

Constraints & Difficulties	ACSI Yes/ No	Cooperatives Yes /No	NGOs Yes/No	If others
Group lending				
Time of credit availability				
Repayment time				
Repayment period				

Open ended questionnaire for group interview (Part two)

1. Are there credit and saving providing institutions in your area? Yes____ No____

If "yes" mention them____

2. is there saving habit? "Yes ___"No"_____

If "Yes "where to save-______________If No, why? ____________________________

3. What type's loan procedure is given in the area? Package loans or group loan? Which one is more preferable? Why? ____

4. Mentioned the formal microfinance institutions that provide package loans____________________

5. What is the main reason that rural households prefer one microfinance institutions from the other? ____

6. Have you ever thought credit as government gift as one of the production resource? Justify your perception____

7. Are you late to repay your loan? If "yes" why? _______________________________

7.1. For which source loan do you give priority to repay?

1. ACSI. 2. Cooperatives .3. NGOs. 4. Private lenders.5.others specify_____________

7.2. Why? Specify your reason____

7.3. If your debt totally not repaid, what are the major reason or factors, which force you not to repay your loan/debt? What measures the formal lending institutions take on you? What is your opinion on the action? ____

8. Who are the target groups for credit delivery of formal credit institutions in your area? (Rank in order of importance).

8.1 What are your comments on formal financial institutions in addressing the very poor and women?

8.2 Are there most of the rural households' benefited from formal microfinance institutions in your area? If "yes" what types of benefit? If "No" why?

8.3. Do you feel that credit institutions satisfy the credit demands of the household?

If you were not provided according to your demands what will be the alternatives

9. What are the most important factors that affect Muslim's communities to use or benefit from formal credit? ____

10. Would you suggest the means to improve to use formal credit? __________________