ADDIS ABABA UNIVERSITY
RESEARCH AND GRADUATE PROGRAMS OFFICE
REGIONAL AND LOCAL DEVELOPMENT STUDIES
(RLDS)

The Demand for Microcredit Service in the Afar National Regional State – the case of Gewane Woreda

By: Seifu Ali

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"... Every house, of course, is built by someone – and God is the one who has built all things..."

Hebrews, 3÷ 4

I have incurred numerous intellectual debts in writing this thesis. I believe it is a sine qua non to acknowledge those who dedicated their resources to my work

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List of acronyms

AEMFI - Association of Ethiopian Microfinance Institutions
BancoSol - Banco Solidario (Bolivia)
BoPED - Bureau of Planning and Economic Development
BRI - Bank Rakyat Indonesia
CBE - Commercial Bank of Ethiopia
CSA - Central Statistical Authority
DBE - Development Bank of Ethiopia
FA - Farmers Association
FDRE - Federal Democratic Republic of Ethiopia
HH - Households
IFAD - The International Fund for Agricultural Development
MFI - Microfinance Institutions
MOC - Mobile Outreach Camp
NBE - National Bank of Ethiopia
NGO - Non-Governmental Organizations
PRSP - Poverty Reduction Strategic Paper
PWR - Participatory Wealth Ranking
RLDS - Regional and Local Development Studies
ROSCA - Rotating Savings and Credit Association
RUFIP - Rural Financial Intermediation Program
SGS - School of Graduate Studies
UNICEF - United Nations International Children's Emergency Fund
VIP - Visual Indicators of Poverty test
WIBS - Woreda Integrated Basic Services

Abstract

Despite the presence of plenty of business opportunities that can be promoted by microfinance institutions (MFIs) and despite the presence of large unemployed and economically active population in Afar, the development of MFIs has long been conceived as costly and laborious at best and impractical at worst. Although some small credit schemes around Awash (zone three) by CARE Awash, Gewane (zone three) by Farm Africa and Afdera and Teru (zone two) by UNICEF – WIBS (United Nations International Children's Emergency Fund – Woreda Integrated Basic Service) program have been undertaken, full time functioning commercial microfinance institutions have not been introduced to the region yet. This has hampered the development of microenterprises. Economically active people in the region are kept idle and spend their life financially insecure.

The primary objective of the study is to show the extent of potential demand for microcredit in Gewane woreda, to indicate the most important household characteristics which dictate the household's decision for a given amount of loan, and to show the presence of plenty of business opportunities that can be a potential base for the development of sustainable financial institutions.

Primary data were collected through cross-sectional survey. Both purposive and systematic random sampling techniques were employed to select woreda, farmers associations (FAs) and households. Structured questionnaires and focused group discussions were used to collect primary data. Quantitative and qualitative techniques were used to analyze the data.

Major findings of the study shows that in Gewane woreda the livelihood of households is mainly dependent on livestock production. About 70 percent of the sample households are engaged in livestock production. On the average, there are about 6.1 dependents and 3.4 economically active people in a household. About 3/4th of the households earn monthly income which is below the woreda average (547.61 Birr). Livestock and crop production and urban and rural petty trades including Gulit, small shopping center, selling of food, local drinks, and chat and the production of handicrafts such as Sifet, Selen, and Gadeta are the major business opportunities in Gewane woreda. Shortage of capital and marketing are the major problems faced by microentrepreneurs. Cattle disease, marketing and instability (because of the conflict with Issa) are also the main causes to household food insecurity problem. These causes of food deficit may also be potential weaknesses of Gewane woreda to the development of microfinance institution.

More than 90 percent of Gewane woreda households need credit to operate gainful microbusiness activities. Out of these 68.3 percent require a loan amount of 2,000 Birr or less. The study revealed that rural households demand higher amount of loan than urban households. From the total sample survey population, more than 95 percent are willing to pay for the financial service they would receive. Out of these, 61.8 percent are willing to pay 12.5 percent or more interest for the loan delivered to them. About 3/4th of rural and half of urban households are willing to pay the indicated amount of lending interest rate. The analysis using logistic regression model indicated that age, ethnic group, level of education, number of dependents and number of economically active age people in the household and monthly income of the household head are the most important household characteristics which influence the decision of the household for a given amount of loan.

Chapter One – Introduction

1.1 Microfinance in Ethiopia

In Ethiopia, as in the rest of the world, since poor people were regarded as "not creditworthy", access to institutional credit is very limited to them (Wolday, 2002[1]: 2-3). The Formal banks (Commercial Bank of Ethiopia (CBE) and Development Bank of Ethiopia (DBE)) have not been interested in the delivery of financial services to this group. Because, economic policies were not in favor of small-scale microenterprise sector and hence microenterprise operators were usually considered as outlaws (Bekele, 1996). Due to high transaction cost, shortage of financial resources (fund)[1] and collateral requirements, existing institutions were not in a position to promote and finance the informal sector (Bekele, 1996 and Solomon, 1996). Small-scale micro enterprise operators have also limited familiarity with loan procedures and they are not well organized to qualify for credit in the formal banks.

The number of formal financial institutions in rural Ethiopia is also very limited. According to Mulat Demeke et al (in Wolday, 2002[1]: 3) only 21 percent of the woredas in Ethiopia have bank branches. Formal banks usually consider the demand for loan of the poor unattractive and unprofitable. Because of these lack of finance has remained to be the main obstacle facing households who run or wish to run small business on a part time or full time basis in Ethiopia (Gebrehiwot, 1998: 26 and Solomon, 1996: 308). According to the survey of urban informal activities in Ethiopia in 1997 (Wolday, 2002[2]: 3), 50 percent of the informal sector operators and 35 percent of small scale manufacturing industries reported that their main problem in operation was lack of sufficient initial capital.

[1] *Shortage of financial resources was not a problem at all Solomon (1996: 308-309). Rather CBE was faced with problem of excess liquidity. The development Bank of Ethiopia had also been directing the bulk of its loan to government owned agricultural and industrial projects, state farms, and state created cooperatives.*

Different studies show that the majority of urban and rural poor in Ethiopia get financial services from informal and semi-formal financial institutions. Quoting Dejene, Wolday (2000[2]: 4 and 6) reported that the semiformal and informal finance accounts for 78 percent of agricultural credit in Ethiopia. According to the study by Fasika and Daniel, 68 percent of micro and small enterprises reported that personal savings were the main sources of finance to start new business. Only 1.9 percent of the enterprises indicated that bank loan was the source of finance for their business. Another study by Dejene and Kibre on household asset also revealed that for 66 percent of the sample households the major sources of loan were friends and relatives. Only 1 percent of the households had bank account. Due to this nowadays measures are being taken to promote and develop ROSCAs in order that the low income section of the society would benefit most from them (FDRE, 1996, article 12, sub-article 3 (c) and Farm Africa, 2000)

The introduction of Grameen Bank model institutions in Ethiopia were reactions to the enormous potential demand for microcredit and the growth of potential market for financial services in the urban informal microenterprise operators (or for those who wish to have such enterprises) that do not get chance to take credit from the formal banks. According to the study made by Choa-Beroff et al the unmet demand for rural finance in Ethiopia is more than 90 percent (Wolday, 2002[2]: 4). In addition to this the issue of sustainable development than mere relief assistance initiated the development of microfinance in Ethiopia (Wolday[1], 2000).

Recently, the delivery of financial services for both urban and rural poor is being considered as one component of the policy instruments and development strategies in the process of poverty reduction (FDRE, 2001 and BoPED, 2002[2] and FDRE, 1996).

Although NGOs initiated credit and savings scheme in early 1990s (Gebrehiwot, 1998: 27), they had long been delivering relief and development services starting from the 1970s (Wolday, 2002[1]: 8). Concentrated in urban areas, in 1995 there were 30 NGOs offering microcredit in Ethiopia (Wolday, 2002[2]: 7). But the proper microfinance using the innovative approach of group collateral in Ethiopia can be traced back in 1993/94 under the Market Town Development Program in Debre-Birhan town. Targeting the bottom poor who are engaged or wish to pursue small-scale gainful business activities in urban areas, the program was launched in 16 selected urban centers with the help of the World Bank (Solomon, 1997).

Since the take of the new government (after the dergue regime) in 1991 considerable attempt has been made to liberalize the financial sector, Proclamation No. 84/94 is just the case in point. This proclamation was an indication of liberalization of the financial sector in the sense that it let private domestic investors to participate in banking and insurance activities.

However, the issuance of proclamation No. 84/94 did not solve the financial problem of the economically active poor in rural and urban areas. Thus, Proclamation No. 40/96 (FDRE, 1996) was issued to ameliorate, if not to eradicate, the problem of the delivery of financial services to farmers and poor microbusiness operators. Furthermore, regulation limits on loan size (Birr 5,000), repayment period (one year), and methodology (group collateral and peer pressure) (NBE, 1996) which had been negatively affecting the contribution of microfinance in filling the financing gap to micro and small borrowers (Gebrehiwot, 1998 and Wolday, 2002[1]) are improved by the recent directive (NBE, 2002) which was effective as of the 1st day of May 2002 (Annex 3).

Currently, in Ethiopia there are about twenty microfinance institutions (with a network of 500 sub-branches and branches) licensed by National Bank of Ethiopia (NBE) and mostly sponsored by Regional states, NGOs and government departments. However, in Ethiopia the industry is still non-competitive and provide uniform loan (agricultural and microbusiness loans) and savings products to all clients. The products are supply driven and they are simply replicated from other MFIs (Wolday, 2002[1]: 1 and 24). They were not produced based on market analysis to meet the taste of their clients. The twenty MFIs meet less than 9 percent of the demand for financial services of the poor (Wolday, 2002[2]: 8 and IFAD, 2001).

In the last five years, the microfinance industry in Ethiopia showed a remarkable growth in terms of outreach and performance. Up to the end of 2001, they have reached more than 500,000 clients; delivered about Br 526 million credit to these clients; have mobilized Br 273 million loan outstanding and mobilized about Br 129 million of savings (see annex – 1). The clients served by the MFIs in Ethiopia are mainly the rural poor. About 47 per cent of the clients are female. The relative low average loan size, which varies between Br 400 to 1,800, reveals that the microfinance industry focuses on the poor. The lending interest rates are again relatively lower compared with other sub-Saharan countries. It varies between 12.5 (declining rate) and 25 (flat rate) (Wolday, 2002[2]).

During the same period, the gross savings as percentage of the loan outstanding, which is about 47 percent, indicated that the experience of the MFIs in Ethiopia is encouraging. The repayment rate varies between 92.5 and 100 percent. There are encouraging client or loan size to field staff ratios, though differs from one MFI to another. However, still much has to be done in revising the policies on microfinance so as to provide financial services on sustainable basis (Gebrehiwot, 1998).

1.2 Problem statement

Microfinance institutions play a significant role in improving the livelihood of rural and urban poor households. They are meant to improve the financial security of the poor and to allow them to take advantage of business opportunities. They help to finance the informal sector enterprises (which are rather considered as outlaws by policy makers) and to facilitate their growth. Microfinance interventions may also increase incomes of poor households and change social relations for better (Johnson & Rogaly, 1997). By providing appropriate saving services, MFIs also give the poor secure and convenient deposit facilities, which can be used in times of crisis. Such secure and convenient deposit facilities can also serve as collateral when poor people need credit.

Despite the above facts, however, microfinance institutions have not yet been introduced to Afar people. The poor in Afar are denied of the benefit that could have been gained from microfinance institutions. The development of existing microenterprises is constrained by limited access to financial resources. The performance of microbusiness activities that could have been improved with little injection of finance has been decreasing from time to time. The exploitation of potential business opportunities is inhibited due to the absence of financial services. Healthy and economically active section of the population remains idle due to lack of financial services.

Lack of secure and convenient deposit facilities make Afar people to save in livestock and other forms of informal savings. However, savings in livestock have limitations of their own. The cost associated with caring for them is high and they are very much vulnerable to drought. They are

not liquid, hence not suitable for use in time of emergency immediately. They are often sold at cheaper prices during crisis.

The absence of study on MFI vis-à-vis pastoralist societies is another critical problem. To the best knowledge of the researcher, the only document available is a "study on a feasible and sustainable microfinance initiative in the Afar National Regional State", by Gebeyehu Tebeje. Thus, there is a significant gap in knowledge concerning microfinance and pastoralism.

Given the presence of immense business opportunity and economically active population in the Afar region, we can safely conclude that the introduction of commercial microfinance institutions would play paramount role in improving the socioeconomic status of the poor. In Afar, the delivery of microfinance services will help the poor to maintain and promote small businesses which will help the poor to cope up with the fluctuations and crises that dominates their nomadic way of living. The financial services also help the pastoral community to improve the productivity of their cattle.

1.3 Objective of the study

1.3.1 General objective

The general objective of this study is to show the extent of potential demand for microcredit in the Gewane woreda. The paper is geared towards answering the following specific research questions.

1.3.2 Specific research questions

- Is there local demand for microcredit?
- What are the basic household characteristics that dictate household decision for specific amount of loan?
- What kind of business opportunities (that can be supported by MFIs) and local markets for microenterprises exist in the region?
- Would people pay interest rate (service charge) for the microcredit they would receive? If yes, what would be the interest rate that the clients are willing to pay?
- What are the potential weaknesses of Gewane woreda to the development of MFIs?
- What is the extent of informal finance in Gewane woreda?
- What design features of microcredit are appropriate for the people?

1.4 Significance of the study

The commitment of resources (time and money) to this study is justifiable in many aspects. Firstly, this paper provokes government authorities (policy makers) and NGOs to critically consider the delivery of microfinance services to pastoralists in Afar. It will also help the current effort that is made by the regional council to initiate the establishment of a MFI in the region. The study will further play paramount role in filling the knowledge gap in the delivery of

financial services in pastoral areas. It will contribute towards the understanding of the nature of business opportunities and the significance of sustainable and feasible microfinance initiatives in pastoral areas. Finally, the paper will serve as a good reference material for the region as well as for those who are interested in doing further study on the same topic.

1.5 Scope and limitations of the study

This study is limited to those households who are settled and perform or wish to perform some activities around Gewane Woreda. Therefore, it may not have a scientific justification to assure the reader that the final conclusion out of this paper could be representative and applicable for mobile pastoralists in the region. However, one can logically say that due to the extended family and the firm sociocultural interconnection between the pastoralists who are settled and those who are not, it may be possible to apply some concluding remarks or implications of the study for the latter. To study the relevance of MFIs for those pastoralists who move from place to place for different purposes is beyond the scope of this study.

Absence of fresh listing of household heads for a sample frame was a problem faced by the researcher. The researcher used the Afar Aries (houses) that are built in certain arrangement as a sampling frame. The samples were selected by taking every K^{th} house so that representativeness of the household samples selected is ensured.

The effort made to collect household expenditure pattern was not successful for two major reasons. Firstly, households could not be able to estimate what they have spent in the specified

period. Secondly, most of the household consumables are provided to them in kind by their relatives in urban and semi-urban areas.

The expectation of the households that they will get credit soon after the survey is completed and the transfer of information between those who are already interviewed and those who are not would probably make households provide informed and calculated responses.

1.6 Research methodology

1.6.1 Methods of data collection

The type of survey design used in the study is cross sectional. With regard to the sampling design, zone, woreda and FAs were selected purposively in collaboration with regional authorities and NGOs who have worked with the grassroots community for long. On the other hand, random sampling was used to select individual households (see annex 5). The total number of sampled FAs and households are indicated in table 1

Table 1. Total number of sampled towns, FAs, and households

		Sampled town/FAs	Total number of households *	Number of Households Sampled
Gewane Woreda	Urban	Gewane town	1,500	104
2 urban towns		Ura-Feita	619	41
8 rural FAs	Rural	Babur-Fagie	495	33
Total			2,614	178

* Source – CSA, 1996

Structured questionnaire was basically used as instrument to gather the information from individual cases. Semi structured interviews using guidelines (checklist) was used to enable households talk freely about various issues on the topic. In-depth interviews were also conducted with key informants, such as clan leaders, elders, government officials (head of economic sector,

Gewane woreda social services and economic development office, and Gewane woreda cooperatives department), and NGOs (Farm Africa). In order to pick up problems not anticipated, pre-testing was undertaken around Ayisaita Woreda. This has helped in refining the questions and the variables in the questionnaire.

1.6.2 Methods of data analysis

Both quantitative and qualitative techniques were used to analyze the data. SPSS package was used to estimate the logit coefficients and to identify the important variables that govern households' decision for a specific amount of loan. The quantitative analysis is made based on the following considerations and hypotheses.

Total number of cases	:	178
Number of selected cases	:	178
Number of unselected cases	:	0
Number of rejected because of missing data	:	14
Number of cases included in the analysis	:	164

Dependent Variable	..	AMTLNRQD	Amount of loan required by the household head is 2,000 Birr or less. It is a dummy variable where 1 represents yes and 0 otherwise

For the Dependent variable, AMTLNRQD, Birr 2,000 is selected as a cutoff point because of two major reasons. Firstly, according to the survey result the average loan demand is about Birr 2,706 (annex 2), 4,604 and 1,362 (table 8) for the total, rural and urban, respectively. Secondly, the average amount of money required to start a microbusiness in Gewane woreda is also found

to be Birr 1,591 (annex 2), 1,804 and 1,340 (table 8) for the total, rural and urban areas, respectively. Considering the above two reasons, it will be reasonable if the average loan size for Gewane woreda households would be set at Birr 2,000.

Independent variables

- PLACE – It represents the location of the household – whether it is in rural or urban areas. It is a dummy variable where 1 represents urban area and 0 represents otherwise. The location of the household, whether it is rural or urban, affects the loan requirement of the household head. Households in rural areas require relatively larger amount of loan as compared to their counterparts in urban area. This is mainly because of the interest of the former to pursue farming activities in rural areas and the later to pursue small petty trades in urban areas.
- AGE – age affects the decision of households on the amount of loan they take. As the experience of the household head increases with the increase in his/her age, the amount of loan demanded will increase. It may also be the case that as age increases the family size also increases. This further make households to demand higher amount of loan (up to a certain age and decline then after) to meet the increased expenditure. In another explanation we can also say that as age increases the ability and willingness of household heads to be engaged in multiple income generating activities will also increases. But this may not be monotonous. After a certain age the willingness and the ability of the household head to be engaged in gainful income generating activities and the willingness to take higher loan might decline. To capture such trends both age and age squared variables are used as a regressor.

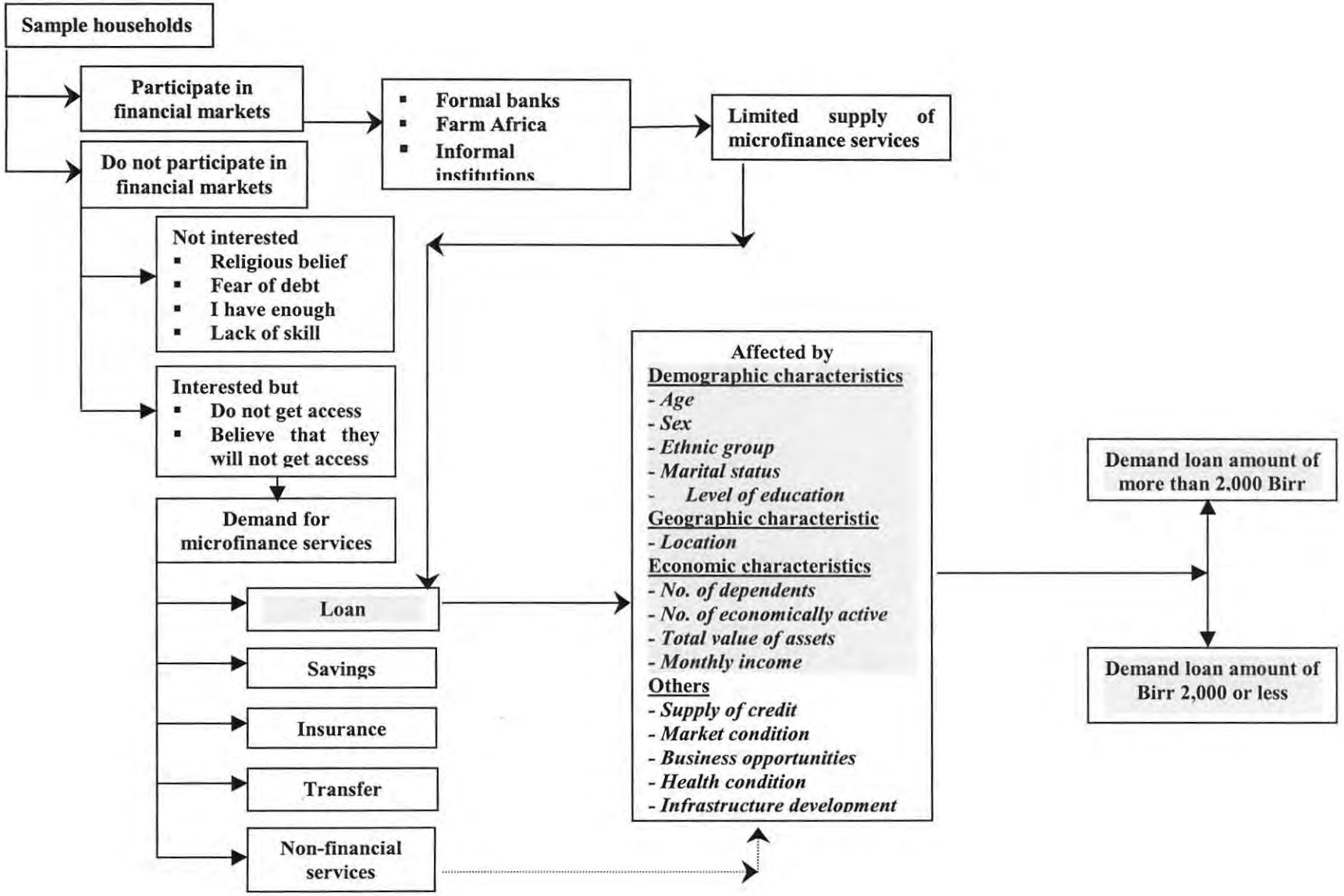
- SEX – it is a dummy variable where 1 represents male and 0 otherwise. The sex of the household head is believed to affect the decision of the household head on the amount of loan required. Most of the time female household heads prefer to take a small amount of loan at the outset. On the other hand, male household heads tend to take higher amount of loan at the beginning.
- ETHNCGRP – Ethnic group is a dummy variable where 1 represents Afar and 0 otherwise. Afar household heads usually want to take higher amount of loan to be engaged in farming activities while the other ethnic groups who are mostly in urban areas, prefer to take small loan to be engaged in petty urban trades.
- MARTLSTS – Marital status is one household characteristic that affects the amount of loan required by household heads. It is a dummy variable categorized as 1 for ever-married households (including the divorced and widowed) and 0 otherwise (single). In this study it is hypothesized that the ever-married households require relatively higher amount of loan as compared with single household heads. One argument is that married respondents would have relatively higher number of families (at present or in times to come) than unmarried respondents. Because of this the former are very likely to demand higher amount of loan than the latter.
- LVLEDCTN – Level of education is one household characteristic that affects the amount of loan required by the household head. It is categorized as 1 for literate and 0 otherwise. Most of the time literate household heads make an informed and calculated estimate of their demand and require relatively lower amount of loan as compared with illiterate households.
- NMDPNDHH – The number of dependents refers to those household members who are dependent on the income of the household head regardless of their age. Households with high

number of dependents would require a higher amount of loan for two reasons. The first reason is that as the number of household members increase the monthly income per individual will decline. Therefore, the household head may want dependent, but economically active, members of the family to start their own business. The second reason is that as the number of dependents increase the household head may face shortage of food for household consumption. To fill this consumption gap s/he may ask higher amount of loan by pretending s/he will invest in microbusiness activities.

- NECOAPHH – The number of economically active population refers to family members whose age is between 14 and 65. With increase in number of economically active population, the demand for higher loan will also increase.
- TTLVLAST – It is dummy variable where 1 represents total value of asset owned by the household head is 10,000 Birr or less and 0 otherwise. Total value of asset affects the household decision on amount of loan required by a household. The relationship is that households with high value of asset will require higher amount of loan. This is mainly because of household heads in the upper wealth status are more likely to be engaged in small scale business activities (like farming) which require relatively higher amount of finance as compared with rural and urban small petty trades. On the other hand household heads in the lower wealth status are more likely to demand relatively small amount of loan to be engaged in small rural and urban petty trades.

MNTHINCM – It is dummy variable where 1 represents the monthly income of the household head is 550 Birr or less and 0 otherwise. Monthly income is also another economic characteristic that affects the size of loan required by household head. The relation ship is direct. As the income of the household head gets higher and higher, s/he is more likely to demand a higher amount of loan. The explanation is similar with the one that is given above for the variable "total value of assets".

Figure 1. Conceptual framework



1.7 Chapter scheme

The whole study is organized in five chapters. In the second chapter related literatures will be reviewed. In this chapter, debates in the industry, products design, targeting, experiences of informal financial services & systems and major challenges for the industry will be dealt. In chapter three attempts will be made to describe the study area based on some socioeconomic and topographic characteristics. Major findings of the study will be discussed in chapter four by using both descriptive and quantitative data analysis techniques. And finally, in chapter five, conclusion and possible recommendations will be presented.

Chapter Two – Literature review

2.1 Introduction

2.1.1 Meaning of microfinance

The term microfinance refers to the provision of very small financial services by different governmental and non-governmental financial institutions to low income clients, including the self-employed and excluding the poorest of the poor (Ledgerwood, 1999). The programs are united in aiming to provide financial services to individuals traditionally excluded from the banking system, especially women (Park and Ren, 2001). A more wider definition of microfinance by Robinson (2001:9) describes it as;

> *"Small scale financial services – primarily credit and savings – provided to poor people who farm or fish or herd; who operate small enterprises or microenterprises where goods are produced, recycled, repaired, or sold; who provide services; who work for wages or commissions; who gain income from renting out small amounts of land, vehicles, draft animals, or machinery and tools; and to other individuals and groups at local levels of developing countries, both rural and urban."*

One component of microfinance, microcredit, is a Grameen Bank innovation which involves the extension of small amounts of collateral-free institutional loans to jointly liable poor group members [or individuals] for their self-employment and income generation (Rahman, 1999)

The financial services provided by MFIs are about enabling people to accumulate usefully large sums of cash. They can be divided into two main types (Johnson and Rogaly, 1997: 7). The first type includes those that build up cash reserves through forgoing income (e.g. savings, insurance, and loans). This type of microfinance service is the primary focus and interest of this paper. The second main type, on the other hand, allows assets to be converted into and out of lump sums of cash (e.g. mortgage and pawns). A further type of service which poor people may need, but

which is rarely discussed, is cash handling, especially to allow the transmission of cash from one place to another.

Though, by definition, MFIs provide financial services to the poor, they may also offer other services such as non-financial services as a means of improving the ability of its clients to utilize financial services. However, there is still much debate in the field as to where the focus of the institutions should be; offering only financial intermediation or both financial intermediation and other services (Ledgerwood, 1999).

2.1.2 Role of Microfinance services

During the 1970s, the provision of financial services have been increasingly acclaimed as effective means of poverty reduction (Johnson and Rogaly 1997, Evans, Adams, and Mohammed, 1999). Emerging evidences have identified the positive impact of microcredit on household well being, and gender relations (Evans, Adams, and Mohammed, 1999).

According to Robinson (2001:37-39) access to microfinance services benefits clients in the following ways: First it provides financial services that may need to expand and diversify the economic activities of the poor, to increase their incomes, and to improve their lives. Although, by raising average income level, MFIs help poor people to get out of poverty, microfinance specialists increasingly view improvements in economic security (income protection) rather than promotion as the first step in poverty reduction (Johnson and Rogaly 1997: 13-15). According to these specialists, the primary concern should be to help the poor reduce vulnerability to downward fluctuations and protect livelihoods.

Second, microfinance can assist to improve social relations. Microfinance programs are powerful methods of building the self-confidence of the poor by providing a demonstration of thrust in their clients. It helps to deal with the problem of powerlessness (which may result from economic inequalities) within households and community at large (Johnson and Rogaly, 1997). The self-confidence of the poor also grows simultaneously with the expansion of their economic activities and the increase of their incomes and assets.

By empowering women and changing gender relations in the household and in the community, credit schemes will lead to progressive social change (Kabeer, 2001:71). According to Schuler et al (in Rahman, 1999) microfinance programs may reduce domestic violence by channeling resources to families through women, and by organizing women into solidarity groups that meet regularly and make women's lives more visible. It increases women's position within the household domain and helps them raise their voices in the household decision making[2].

Microfinance institutions ensure secure and convenient deposit facilities, which the poor can use in time of crises (Johnson and Rogaly, 1997). Besides, savings accounts in regulated MFIs are legally recognized assets and can be used as collateral for loans and mortgages. Microfinance is also an important part of the solution to poor people's problems associated with dead capital[3] (Ledgerwood, 1999:234). It accepts some dead capital as loan collateral (or do not require collateral) to provide financial services and products.

[2] *However, recently arguments and debates are continuing on the empowerment potential of loans to women in rural Bangladesh (Kabeer, 2001).*
[3] *Properties without legal enforceable transactions and hence cannot be used as collateral for loans or mortgage.*

In addition to financial inter-mediation, many microfinance institutions provide social inter-mediation services such as group formation and training in financial literacy and management capabilities among members of a group (Ledgerwood,1999:1). Some also form relationships with other service organizations to coordinate the provision of financial, and non-financial services, taking advantage of the comparative strengths of each organizations (Ledgerwood, 1999:28).

Microfinance services can also strengthen existing formal financial institutions by expanding their market and "potentially" their profitability. When borrowers with good repayment records have reached the loan ceiling of a commercial microfinance institution, they are often eligible for standard loans from commercial banks (Robinson, 2001).

2.1.3 Rational for the development of MFIs

The exclusion of small holder poor farmers and micro operators from the use of formal sector financial products and services is the underlined reason for the development of microfinance institutions (Gebrehiwot, 1998: 26). This in turn is attributed to many factors: The first one is the nature of financial markets. Since the market takes place overtime, lending money carries with it the risk of non-repayment. In order to reduce this risk the lender screens potential borrowers according their creditworthiness. Under such conditions since poor people are regarded as "not credit worthy", they are usually excluded from the products and services rendered by formal financial institutions (Johnson and Rogaly, 1997).

The other factor behind the exclusion of the rural and urban poor from access to formal banks is the issue of collateral. To deal with the risk of default, formal financial institutions need meaningful collateral to provide credit services for the rural poor. But the majority of the poor do not have collateral to guaranty his/her credibility and, therefore, credit is virtually inaccessible to them.

The transaction cost (such as time cost to gather information, and other costs associated with administrative, contract enforcement, and supervision) of borrowing to the rural poor are considered to be very high. Therefore, financial institutions, by considering the provision of financial services to the poor as "not profitable," prefer to give their services only to clients around urban areas (Johnson and Rogaly, 1997).

The other factor relates to government policy (Ledgerwood, 1999). Although the self-employed poor in Africa account for more than 50 per cent of the GDP (Bass, 2000: 1), most policy frameworks favor large manufacturing sector and are biased against the informal sector and small enterprises. The informal sector entrepreneurs have limited knowledge and familiarity with bureaucratically long loan procedures and mostly they are not well organized to qualify for credit (Bekele, 1996).

Due to the above and other related problems, out of 500 million economically active poor in the world operating microenterprise and small businesses, most do not have access to adequate financial services (Ledgerwood, 1999). Formal banks are estimated to serve no more than 5 per cent of Africa's population compared to 95 per cent in the USA (Meagher and Wilkison,

2000:30). As a result of this, governments and other concerned local and international organizations and agencies gave an emphasis to the development of MFIs to the poor (Gebrehiwot, 1998).

2.1.4 The development of MFIs in the world – the shift in paradigm

The provision of cheap loans to households at grassroots level had long been the top prior agenda for the last many decades. The current emphasis on microfinance is an extension of those agendas of earlier days. What is new in the current history of MFIs is the shift in paradigm. The idea that lending capital to poor people can be done in ways which ensure the sustainability of the institutions delivering the service became prominent from time to time (Rogaly and Roche, 1998).

In 1970s (from 1950s Johnson and Rogaly, 1997: 11) state delivery of subsidized credit programs emerged to assist the agricultural production of small holder farmers who faced great difficulty in obtaining adequate volumes of credit and who were charged high rates of interest by monopolistic money lenders. During the same period, donor agencies also tried to initiate cooperative financial institutions so as to mobilize savings in rural areas (Ledgerwood, 1999 and Johnson and Rogaly, 1997).

But, later in mid 1980s (as of mid 1970s), most of subsidized state owned credit schemes had failed (Gebrehiwot, 1998: 27). They had accumulated large loan loses and required frequent recapitalization to continue operating. They even hindered the development of sustainable financial institutions and often fostered a non-repayment culture among enterprises and distort

the financial markets (Wolday, 2002[2]). Consequently, government policy makers and local and international donor agencies for the first time understood that over supply of subsidized credit without realistic assessment of people's ability to repay credit could also be described as debt and could result impoverishment of borrowers (Ledgerwood, 1999, Johnson and Rogaly, 1997 and Aryeetey, 1996).

By questioning the efficiency of intervening in credit markets and by underlining market based solutions to tackle financial problems in rural areas, they started urging governments to attack the conditions that made directed credit desirable (such as market failure) than pursuing directed credit schemes (Aryeetey, 1996). Meanwhile, local NGOs began to look for a more long-term approach to community development than the unsustainable income generation approach. They took the initiative by building sustainable local institutions which operate as an integral part of the over all financial system (Gebrehiwot, 1998:27 and Ledgerwood, 1999: 2).

To overcome some of the failures of the old paradigm, a number of innovative methodologies have evolved technologies for lending to poor people (Johnson and Rogaly, 1997: 8 &10). Using these technologies, some institutions proved high repayment rate on microcredit that were provided at commercial interest rate (Robinson, 2001: 52-53). As a result of this new innovations, according to Otero and Rhyne,

> *"The credit scheme ... starts to offer the prospect of becoming financially viable. This leads to a desire to increase outreach in order to reduce unit costs sufficiently to equate them with interest income* (Rogaly and Roche (1998: 8)."

Until the end of 1980s, however, supply of formal sector MFIs in many developing countries has not been satisfactory. This was mainly because of lack of appropriate and efficient financial

technology and lack of information about the dynamics and interactions of local markets (Robinson, 2001). The action of bankers, economists, and policy makers were based on government policies rooted in economic theories that were uninformed or [misinformed] by the realities of how local market operates. Lack of basic infrastructure, and sparsely settled populations also inhibit the further development of MFIs.

During the 1990s, however, the field of microfinance has expanded enormously (Buckley, 1997: 1081). Information about commercial microfinance expanded exponentially. The approach promoted was one of adaptation, not of replication. The process selects and uses indigenous practices, adapts experiences from other countries to the local context, and encourages local innovations (Robinson, 2001). The decade has also been marked by expanding international and regional communications about aspects of commercial microfinance; and the founding of microfinance training programs and practitioners network. Consequently, microfinance started to develop as an industry. The number of MFIs grew very fast emphasizing on reaching scale. Finally, in the late 1990s microfinance graduated to an "infant" but rapidly growing industry from a small group of scattered institutions. In the 21st century, the development of microfinance programs are going to be the significant component of development initiatives in both poor and industrialized countries (Rahman, 1999).

2.2 Debates in Microfinance Industry

2.2.1 Financial Systems Vs poverty lending approaches

Nowadays there is considerable debate as to where the main objective of microfinance institutions should be – outreach or sustainability (Gulli & Berger, 1999 and Wright & Dondo, 2001). Some scholars prefer exclusive focus on the poorest clients, with the objective of poverty alleviation and others suggest mixed program serving a range of clients, which is highly effective in reaching the poorest. In such a debate, intellectuals and practitioners are divided between the two approaches, namely (1) the financial systems and (2) the poverty lending (Wright and Dondo, 2001).

The ***financial system approach*** mainly focuses on commercial financial intermediation and emphasized institutional self-sufficiency to ensure sustainability in the long run (Robinson, 2001: 8). Their "win-win" proposition asserts that MFIs that follow good banking principles will also be those that alleviate the most poverty (Morduch, 2000: 617). Therefore, they insist the evaluation of MFIs should focus on financial indicators and efficiency.

Given enabling macroeconomic, political, legal, regulatory and demographic conditions, commercial institutions can be developed to provide financial intermediation for the economically active poor and can deliver services at the local level profitably, sustainably, without subsidy, and with wide coverage (Robinson, 2001). However, this sustainable system, according to Yunus, can be built only on the basis of users' undertaking responsibility (Rahman, 1999:78).

Providing financial services to the economically active poor is the core argument of financial system approach for different reasons. Firstly, the inclusion of economically active poor section of the society will induce more profitable business, which can cross subsidize outreach to the poor. Secondly, according to the study made by Hulme and Mosley (Johnson and Rogaly 1997: 14), economically active borrowers who already have assets and skills are able to make better use of credit and generate higher income from the loan. Thirdly, and above all, without access to any financial services, vulnerable non-poor people are likely to reduce to poverty when crisis arises (Wright and Dondo, 2001).

The extremely poor, according this approach, do not need debt, rather, they need food, shelter, medicines, skill training, and employment (Robinson, 2001: 8). The poorest, in particular, often face pressing need in terms of primary health care, education, and employment opportunities than credit (Johnson and Rogaly1997: 16). They are less able to take risks or use credit to increase their income. Indeed, some of the poorest borrowers became worse off as a result of microenterprise credit. The credit has exposed these vulnerable people to high risks (Johnson and Rogaly1997: 14-18).

MFIs need to ensure that the costs of providing the service should be kept low and should be covered by income earned through interest and fees on loans (Johnson and Rogaly, 1997: 11-12). Since the cost of the provision of microfinance services is much higher than the cost of providing standard banking services, the interest rate charged by commercial MFIs should be higher than that charged by the formal sector banks (Robinson, 2001).

Recent microfinance interventions by Grameen Bank and BRI have demonstrated the ability and willingness of the poor to pay higher interest of the loan they would take (Johnson and Rogaly, 1997 and Robinson, 2001). By charging commercial interest rates, institutions could be able to become self-sustaining. In addition to Grameen Bank and BRI, some institutions in China have not only reached operational sustainability (i.e. are covering operating costs inclusive of subsidies), but also are approaching or have achieved financial self sufficiency (where costs, especially capital, are measured at their market values) (Johnson and Rogaly, 1997 and Park and Ren, 2001).

Criticizing the poverty lending approach, advocates of financial systems approach argued that, in subsidized rural credit programs, repayment rates were low, the cost of running the schemes was high and default was frequent and widespread. (Rogaly and Roche, 1998 and Robinson, 2001). The history of agricultural credit tells us that subsidized programs that mix grants and loans lead to "groans" (Wright and Dondo, 2001). As loan portfolios are dependent on subsidy, the number of borrowers who can be served are limited. So does the extent of outreach in both lending and savings operations (Robinson, 2001: 46). Furthermore, the credibility and financial viability of subsidized credit schemes were weakened by the use of public money to waive outstanding and overdue loans at election time (Johnson and Rogaly, 1997). Therefore it is generally believed that subsidies to MFIs are simply underwriting inefficient and expensive systems (Wright and Dondo, 2001).

On the other hand *poverty lending approach* focuses on reducing poverty by the help of institutions that are funded by donor and government subsidies. The credit is often provided

together with complimentary services such as skills training and the teaching of literacy and numeracy, health, nutrition, family planning and the like (Robinson, 2001). Much emphasis has been put on outreach (to reach the poorest of the poor) so that economies of scale can be made, they argued, and the cost of servicing numerous small transactions start to fall.

The approach excludes the non-poor regardless of their vulnerability. As its name implies, the emphasis is on the provision of microcredit at low cost (below market interest rates). Saving is not a significant part in poverty lending approach (Robinson, 2001:7-8).

According to the advocators of the poverty lending approach, if emphasis has been put on self-sustainability, the institution may lose its focus on the poor and the poorest will automatically be marginalized in favor of population that are considered to be credit worthier (Johnson and Rogaly 1997).

Nowadays, whether or not financial sustainability is an achievable objective is still the cause of much debate and inquiry. Christen, Rhyne, and Vogel (in Johnson and Rogaly 1997: 52-53) on their study questioned the potential for full financial self-sustainability. According to the study they made it remains open question whether full self-sufficiency is consistently possible in a variety of settings. However, they give a room for the possibility of achieving operational efficiency[4] with in a reasonable time frame.

[4] *The non-financial costs of operation (salaries and other administrative costs) are covered out of program revenues (interest on loans and fees).*

Recent studies shows that there are always tradeoffs between sustainability and outreach (Park and Ren, 2001). Internationally, poverty focused programs with a commitment to achieving financial sustainability cover only about 70 per cent of full costs on average. Grameen bank, for example, charges 20 per cent interest rate on small loans while the financially sustainable interest rate for the bank is 32 percent. On the other hand, when institutions are trying to achieve financial self-sufficiency, they mostly fail to reach the poorest of the poor in rural areas. Banco Solidario (BancoSol) and Bank Rakyat Indonesia (BRI) provide loans that tend to be larger (and less focused on the poor) at commercially viable rates (48 per cent and 34 per cent) (Park and Ben, 2001). Therefore, simultaneously with achieving financial sustainability, the service providing institutions must also consider whether the attainment of such sustainability involves too large a cost in terms of borrowers socioeconomic impoverishment (Rahman, 1999).

Because the cost of reaching these people exceeds possible revenues, Webster and Fidler underlines the need for subsidies to reach very poor people in remote rural areas and to reach sparsely settled populations, specially in pastoral areas. (Johnson and Rogaly, 1997: 53). However, any subsidy provided should be to the operational cost of the scheme rather than in the form of low interest rates and lax repayment policy (Johnson and Rogaly 1997, Kabeer, 2001).

Table 2. Main arguments of financial systems and poverty lending approaches

The Financial Systems Approach	***The poverty Lending Approach***
The overall goal is to provide sustainable financial services to low income group, but not necessarily to the poorest among them	*The overall goal is poverty reduction and empowerment, and hence the target should be the poor*
Evaluation of MFIs should focus on financial indicators and efficiency	*Impact assessment studies should be conducted to prove the poverty reducing*

The Financial Systems Approach	*The poverty Lending Approach*
	effect of the services of MFIs
NGOs do not have an important role in microfinance development, and subsidized programs may undermine the development of a financial system for low income groups	*Due to social welfare benefits, microfinance programs implemented by NGOs may require subsidy*
Microfinance should not be integrated with other development services, because specialization is necessary to reach financial sustainability and large scale outreach	*Complimentary services, such as business development services may be needed in order to contribute to poverty reduction*[5]
Credit is not seen as the most important tool for poverty reduction	*Credit is seen as a powerful tool for poverty reduction*

Source – Summarized in table form from Gulli, Hege and Berger, Marguerite (1999:16-17)

Despite the arguments of the two approaches, the truth seems to lie somewhere in between the two approaches (Gulli and Berger, 1999). Both reaching the poor and sustainability objectives are complimentary in many instances (Wright and Dondo, 2001 and Gebrehiwot, 1998). According to Elizabeth Rhyne (Wright and Dondo, 2001: 59),

> *"Reaching the poor and sustainability are in large measure complimentary, and particularly that sustainability serves outreach. ... There is in fact only one objective – outreach. Sustainability is but the means to achieve it. Sustainability is in no way an end itself; it is only valued for what it brings to the clients of microfinance."*

To achieve both sustainability and outreach objectives emphasis should be given to the designing of appropriate products and cost effective and efficient systems of operation (Wright & Dondo, 2001). Side by side the extent to which higher interest rates will deter poor borrowers should also be considered[6] (Park and Ben, 2001).

[5] *see also David Hulme, 2000: 28*

[6] *However, the extent to which the interest rate is a barrier to participation by the poor remains controversial (IBID, 2001: 44).*

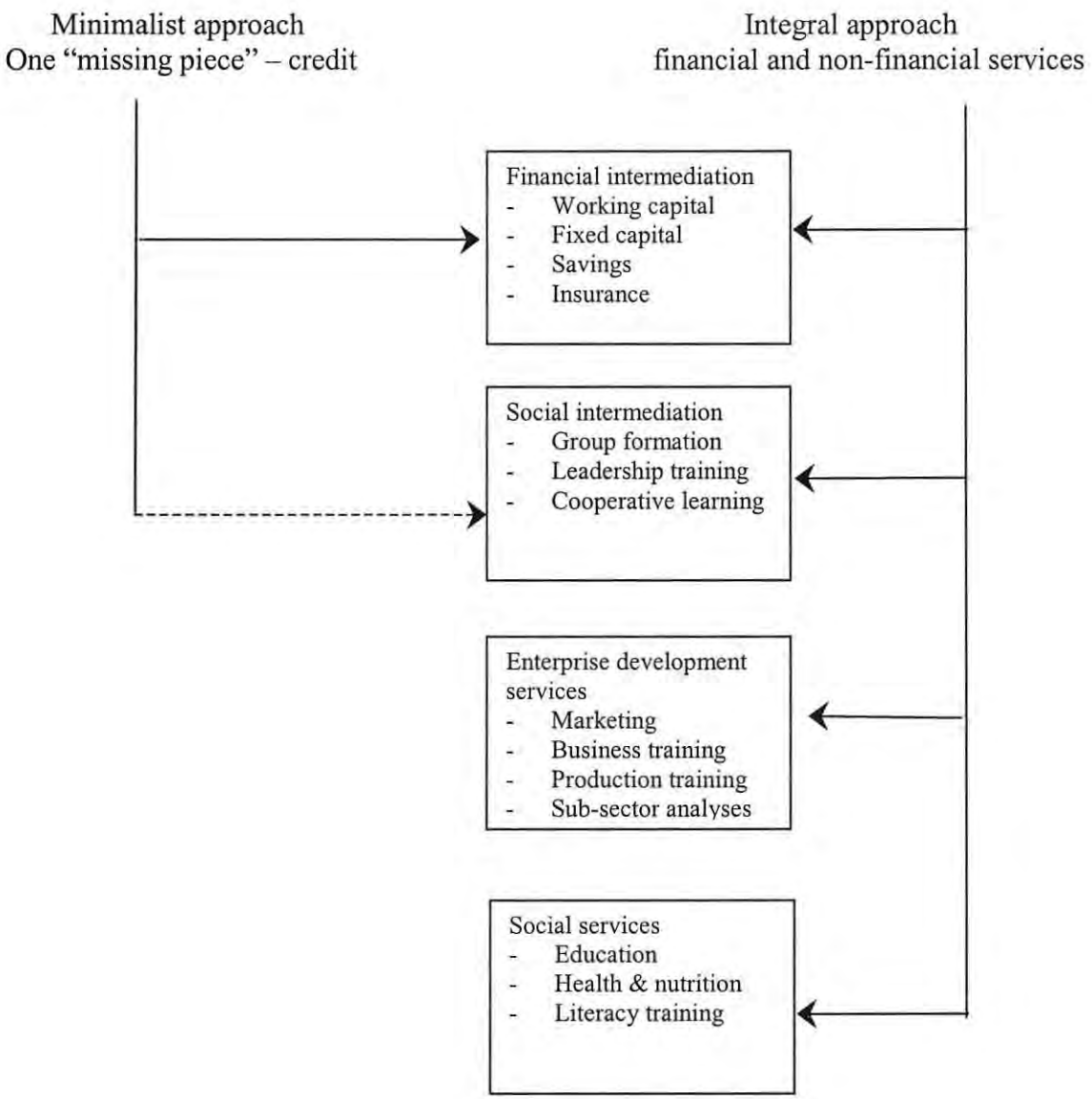
2.2.2 Minimalist Vs Integral Approach

The other area of debate in microfinance industry rests on the package of the services that should be provided by the institutions. By considering credit as one missing piece, minimalist approach emphasizes that MFIs should be concerned only in providing financial intermediation, though occasionally they involve in social intermediation (Ledgerwood, 1999). And all the project activities, including any training of staff or beneficiaries, are designed to facilitate lending (Aryeetey, 1996). This approach assumes the presence of other organizations to provide other services demanded by the target clients. Microfinance institutions, by involving in providing only one service, may get cost advantages (Ledgerwood, 1999).

The integral approach, on the other hand, takes a more holistic approach of the interventions. According to this approach, in addition to financial intermediation, MFIs can play significant role in providing non-financial services like social intermediation, enterprise development services and social services (Ledgerwood, 1999). Training and other forms of technical assistance are regarded as integral components of the whole scheme of assistance (Aryeetey, 1996).

The study made by Lipton (Johnson and Rogaly1997: 16) revealed that concentration on a single intervention mechanism, say credit, is much less effective in poverty reduction than simultaneous credit, primary health, and education work. Without the provision of non-financial services, the poorest section of the population may be excluded from microcredit service (Evans, Adams, Mohammed, & Norris, 1999). Because a range of other constraints (such as numeracy, health) are likely to exist, especially in making use of credit for production purposes (Johnson and Rogaly1997).

Figure 2. microfinance institutions – minimalist or integrated?



Source – Ledgerwood (1999:65)

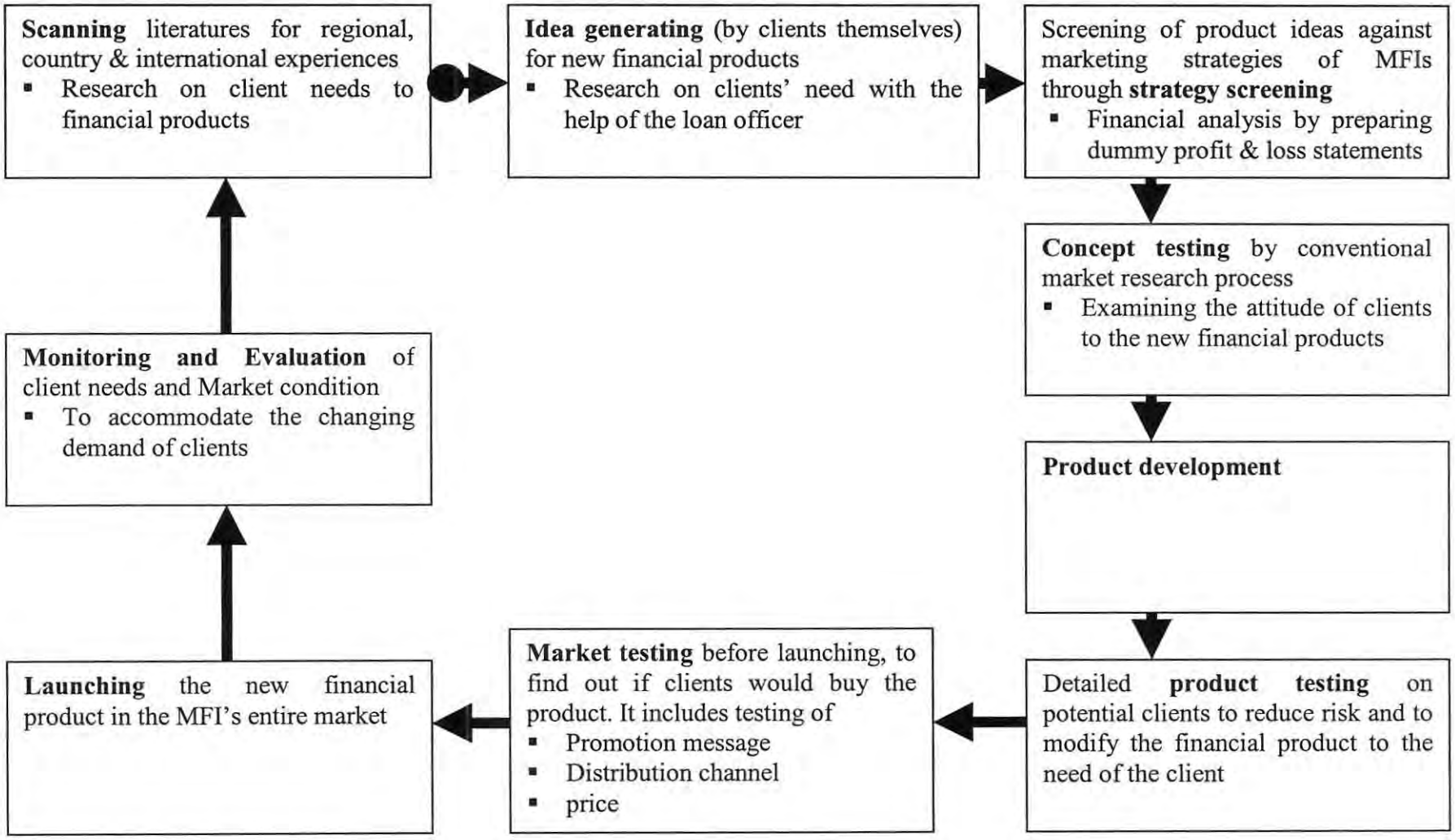
2.3 Designing of Microfinance Products

Decisions on whether and how to intervene in local financial markets should not be taken without prior knowledge of the working of those markets. It is only after assessing the degree to which poor people use existing services and on what terms that an intervening agency or bank make an informed decision on whether their work is likely to augment or displace existing 'pro-poor' financial services (Johnson and Rogaly, 1997).

The introduction of new design features from out side without assessing the workings of the existing traditional system fails to solve the problem of the community. It will not also be worth allocating budget for older traditional systems without critically reassessing their quality. Frequently more contribution can be made to the development of microfinance by improving the workings of the traditional system which are already underway than by starting new ones.

Traditionally, regardless of the needs and preferences of their clients, MFIs have offered a uniform loan product for all of their customers where loan terms and conditions are set to minimize the risk and cost of the provider institutions (Tran, 2000). However, most of the time what people want is not always what will best serve program goals (Park and Ren, 2001). Therefore, MFIs are usually advised to start their operation by defining a market, finding the right clients and the appropriate mix of products, and identifying the institutions' strategic position with in that market (Wolday, 2002[1]: 18-22). They need to identify and understand the possible threats to and opportunities for the development of microfinance institutions in the given market. After introducing the new product, MFIs should also closely monitor client needs and market conditions to accommodate the changing demand of clients. According to Wolday (2002[1]: 28-30) every MFI needs to pass eight distinct steps when developing new products to clients.

Figure 3. Steps in financial product development [7]



[7] *Source – Wolday, 2002[1]: 28-30*

Recently it is becoming evident that after a long process microfinance interventions have made use of a range of design feature that enables households to repay the loan without undue hardship (Johnson and Rogaly, 1997, Robinson, 2001, Park & Ren, 2001, and Rahman, 1999). The interventions have also exploited new contractual structures and organizational forms that reduce the riskiness and costs of making small, uncollateralized loans (Morduch, 2000). Such innovations in microfinance industry play paramount role in

> *"Solving the problem of lack of collateral by using group based and character based approaches (Grameen Bank); solving problems of repayment discipline through high frequency of repayment collection (BancoSol), [individual lending (BRI)], the use of social and peer pressure, and the promise of higher repeat loans; solving problems of transaction costs by moving some of these costs down to the group level and by increasing outreach; and designing staff incentives to achieve greater outreach and higher loan repayment " (Ledgerwood, 1999: 3-4).*

2.4 Targeting

2.4.1 Microfinance and the poor

Targeting can be a time consuming, and therefore costly, activity (Johnson and Rogaly 1997). Eligibility criteria that successfully identify the poor do not ensure quality of access to microcredit. There is considerable evidence that only some of the poor will benefit from greater access (Park and Ren, 2001: 59). Mustafa, et al (in Johnson and Rogaly1997: 34) in their study reported that some organizations have assessed the proportion of 'non-target' households in their membership. Others target a segment of the population that has no access to business opportunities because of lack of markets, inputs and demand (Ledgerwood, 1994).

Because of problems associated with targeting, MFIs that have long been regarded as poor friendly are found to have high proportion of non-poor clients. This challenged the effectiveness of MFIs in poverty alleviation, particularly with the poorest section of the population

(Simanowitz, 2000). Recently debates continue as to the actual effectiveness of microcredit programs in reducing poverty (Kabeer, 2001).

The levels of outreach MFIs have even in the more microfinance friendly and population dense environments such as Bangladesh is really becoming questionable (Wright and Dondo, 2001). A population survey of over 24,000 households in Bangladesh revealed that although three-quarters are eligible for microcredit, less than one-quarter participate. A study made by Hulme and Mosley (in Evans, Adams, Mohammed and Norris, 1999: 420) revealed that 20 percent of the population in Bangladesh are effectively excluded from microcredit program

.

Out side Bangladesh, it is argued that, the microfinance industry has not even scratched the surface of poverty (Hulme, 2000). In Africa, for example, the numbers of borrowers reached by microfinance programs are far lower than those successful institutions in Asia and Latin America. The largest MFIs in Africa reach only as many people as some of the smaller ones in Asia and Latin America (Aryeetey, 1996).

Hulme (2000: 27) surprisingly stated that in Nyeri, Kenya, he was amazed to find out that 13 out of 13 group members of a 'poverty focused' MFI he interviewed in 1999 owned cars. Similarly, Many MFIs in Latin America offer services to their non-poor clients (Gulli and Berger, 1999: 16).

2.4.2 Why poor people are excluded from microfinance services

Evidences from Montgomery (Johnson and Rogaly, 1997)suggest that the poorest section of the society are usually excluded from the microcredit services primarily because self selected groups for peer monitoring have not been inclusive of these groups. Considerations of social class, literacy, health status and other sociocultural norms and practices may influence group decisions about member selection and credit-readiness (Evans, Adams, Mohammed and Norris, 1999: 420). People usually select those with whom they want to form a group on the basis of their knowledge of the likelihood that these people will make timely payment of loan and savings installments (Johnson and Rogaly1997: 14).

Other factors that prevent the poorest from being beneficiaries of microcredit can be grouped into two broad categories; viz., program-related barriers and client related barriers (Evans, Adams, Mohammed and Norris, 1999: 420-421). Program related barriers include insufficient supply of microcredit, membership requirements (such as the payment of registration fees, attendance at weekly meetings, and the accumulation of minimal savings), peer group expectations (as described above) and institutional incentives (i.e. rejecting potential clients who are, or appear to represent, a credit liability).

Client related barriers, on the other hand, include insufficient resources (Gebrehiwot, 1998) (such as time to attend meetings, cash reserves for savings, and energy and motivation for education and planning activities), ill health or vulnerability to crisis, female head of household, lack of education and individual and household preferences.

2.4.3 Targeting techniques

Targeting the geographical area on the basis of a range of poverty indicators is the first step in targeting[8]. Within the given geographic area, some organizations target the poor by defining the criteria which users have to meet in order to be eligible for loans. The criteria can be defined based on asset or land holding ceiling. Direct exclusion is also possible through the use of wealth ranking exercise. But 'self-targeting', with members choosing to join the scheme as a result of the services on offer, is increasingly becoming a feature of the design of interventions (Johnson and Rogaly1997). This approach uses design features (such as small loan sizes and the holding of compulsory regular meetings to qualify for loans and to make repayments) which result in the better off excluding themselves. In practice, however, although schemes often combine several methods of targeting (Johnson and Rogaly1997: 34), considerations such as estimates of administrative costs, leakage and under coverage should be made to determine which targeting technique is the most appropriate (Abbi, 1996:265).

By taking experience on targeting the poor from Small Enterprise Foundation in South Africa, Simanowitz (2000: 30-33) discussed two kinds of targeting techniques; Viz. the Visual Indicator of Poverty test (VIP) and the Participatory Wealth Ranking process (PWR).

Visual Indicators of Poverty test (VIP) is based on the "outsider's" perspectives on external housing conditions. Quoting Gottschak, Simanowitz argued that VIP was designed to "allow a field worker to make an educated guess about the income of households" based on the appearance of their housing from the outside. Field workers score the external condition of the house according to a checklist.

[8] *see also Abbi (1996: 266-267)*

However, most of the time this criterion is inaccurate in its final results. It is static and extremely judge criteria. It does not take changes into consideration, which occur in household welfare overtime, for example the loss of job or the main earner dying or deserting the household. Because of these limitations, institutions shift towards using PWR.

Participatory Wealth Ranking process (PWR), on the other hand, takes an "insider's" perspective and is based on "villagers defining their own concepts of poverty and determining the relative wealth of their own community". The method aims to draw out local knowledge and criteria to judge poverty. The role of the field workers is limited to facilitating the process of scoring or ranking. In addition to visual indicators, the community uses sociopsychological factors that are not visible or accessed by outsiders for ranking.

In PWR process a group of 30 or more people from the village meet for two or three hours and draw a map of the village, showing all the houses. The commonly used name for each household is written onto individual cards by the group. After this, participants will be asked to assist with setting up three reference groups, with three to six people in each group (at least one is from those who participate in mapping). They will also be asked to invite additional people to the reference group meetings which takes place in the participants' homes. Finally, in the meeting each group will sort the households on cards by groups and individuals according to wealth.

The approach of the facilitator and the way in which the tool is used is central to PWR process. The participants should understand the purpose of the process and feel comfortable with and thrust the facilitator.

The triangulation of results during the process is found to be the main benefit of PWR. The detailed information gathered through the process is also of paramount importance in deciding where the cut-off points should lie for joining the program and for product design or impact measurement. In spite of these, PWR method has also been criticized for the subjective perceptions of participants and the problem that can be associated with poor facilitation. It has also been criticized for the high cost involved in PWR.

The subjective perception of participants may create anomalies when compared with accepted 'objective' measures of poverty. On the other hand, although triangulation of results means that problems are easily detected, poor facilitator can rapidly lead to inconsistent results, which must be abandoned, and resources are wasted. Therefore, training and assessment of field staff remained to be the major challenge in the operationalization of PWR.

2.5 Informal financial institutions

2.5.1 The experience of informal financial services and systems

For low-income borrowers, rural credit markets in developing countries tend not to be competitive. As a result, the informal system plays a paramount role in facilitating financial transactions in rural areas. The system remains to be primary source of finance to the rural poor and a regular feature of their lives (Johnson and Rogaly1997 and Robinson, 2001).

Informal financial services can be divided into two broad categories; viz., user-owned informal financial services and informal financial services for profit (Johnson and Rogaly1997: 18-22). User-owned informal financial services range from simple reciprocal arrangements between

neighbors, savings clubs and rotating savings and credit associations (ROSCAs), to forms of insurance, and systems of cooperative business finance. Although these kinds of financial services are more supportive and enabling as compared to informal financial services for profit, they may widen inequalities between users and non-users.

The second category of informal finance gives financial services for profit. This kind of service can be exploitative when there is a monopoly or collusion among providers. It has two main groups – deposit takers (often called money guards) and lenders. Lenders can also be sub divided into moneylenders (commercial or non-commercial); pawnbrokers, who take collateral in the form of physical assets; and forms of trade credit and hire purchase. Advance sale of the crop, usually to a grain buyer or his agent, when their main crop is on the ground is another type of informal financial services provided for profit.

2.5.2 Informal financial institutions Vs formal financial institutions – the comparison

In general, informal lenders in Africa have much lower transaction costs (such as the time, travel and paper work involved in obtaining credit, bribe) than do formal lenders (Aryeetey, 1996). They require very little form filling or travel. As a result, disbursement is normally quick in this sector (Buckley, 1997: 1084).

However, this advantage of lower transaction cost is more than counterbalanced by lack of power of rural households in setting the exploitative terms of loan. Moreover, the difference in interest rates is often so large that the total cost to the borrower is much lower at the formal

commercial MFIs (Robinson, 2001 and Johnson and Rogaly, 1997). Furthermore, the short maturity periods and high interest rates make this credit unattractive for those seeking working capital and fixed investment loans (Aryeetey: 1996).

In the informal financial sector, screening costs and default rates are low. Due to this, this sector is usually considered as an efficient source of credit for the poor (Wolday, 2002[2]: 6 and Johnson and Rogaly1997: 10). To respond to the requirements of poor people, they use local insiders' knowledge, and lower overheads (Johnson and Rogaly1997). Screening mainly relies extensively on personal knowledge of borrowers, (Aryeetey, 1996). The lenders typically have reliable information and some control over borrowers because of their close relationships with their clients – family attachments, neighborhood associations, religious affiliations, business networks, political alliances, etc... (Robinson, 2001: 161). A ROSCA member to fail to repay their installments risks social ostracism (Johnson and Rogaly1997: 24).

According to the study made by Yotopoulos and Floro, the other argument for the better repayment records in informal sectors is that informal lenders constantly monitor the use to which loan are put (Aryeetey, 1996). For Nissanke and Aryeetey, however, this is not the case. For them the more efficient procedures for retrieval of loans and the borrower' knowledge that the informal lenders are more likely to act on threats to foreclose on collateral are among the main factors which are behind high repayment rates of informal lenders (Aryeetey, 1996).

Unlike the formal systems, the variety of forms and functions of informal finance demonstrates the adaptability of these systems to different economic conditions and changing circumstances.

There is, thus, much to be learned from informal financial systems. Indeed aspects of these systems (such as group based and individual based schemes) have found their way into the design of NGO and semi-formal financial service programs (Johnson and Rogaly1997). In some countries such existing informal systems have evolved into formal systems. As pointed out by Aredo, iddir in Addis Ababa run by the Ethiopian Teachers' Association is the case in point (Johnson and Rogaly1997: 22). This iddir is of the scale of medium size insurance business in Addis Ababa.

2.6 Major Challenges for MFIs

Credit diversion as a result of poor match between services and client needs and lack of diversification

Nowadays, services are observed to have a poor match with client needs (Robinson, 2001: 250-251). In many cases most of the credit is given for working capital (like fertilizers) and fixed capital (like oxen and grain mill). But farmers who have nothing to eat do not get credit for consumption. As a result, they will be forced to divert the credit that they are given for productive purposes (Johnson and Rogaly 1997: 43).

If loans are specified as being for productive purpose only, the household may state such a purpose in loan application but may not use the money in this way in practice. They have to pretend that they want microenterprise loans (when they need to pay school fees, cope with a medical emergency, buy food, etc...). For example, in one rural village of Bangladesh, 78

percent of total loans approved by Grameen Bank are actually used for different purposes than sanctioned by the project (Johnson and Rogaly 1997: 43).

Lack of diversification of financial products

Most of the time financial products provided by the MFIs lack diversification (Johnson and Rogaly 1997). Many farmers in different parts of the world do not have access to the types of service that they desire.

Shock periods and threats to poor rural households

Because of circumstances beyond their control (sickness, flood, drought, theft and so on), lack of skills and knowledge or taking bad decisions, a proportion of poor borrowers encounter great difficulties in repaying loans (Hulme, 2000 and Johnson & Rogaly, 1997). During these periods poor farmers are unable to pay their credit. Consequently, many reported being threatened by group members and MFI staff or having their possessions (pots and pans, roofing iron) seized. Hulme (2000: 26) further stated that;

> *"In Bangladesh, Microfinance institution debtors have been arrested by police, are threatened with physical violence, and (especially females) commit suicide because of problems of repaying loans"*

Regular repayment schedule Vs irregular income flow

Microfinance institutions target the poorest of the rural poor that collect their yearly income only during one season. But they are usually asked to settle their debt every week/month (Gebrehiwot, 1998: 34). For households lacking diversified incomes, weekly repayments can cause difficulty, even hard ship, especially during certain times of the year (Park and Ren, 2001).

Policy constraints

The first policy constraint relates to the issue of participation (innovation). Although it is understood that Grameen Bank type of MFIs need huge subsidy either from the government or NGOs, policies in some countries (such as Proclamation No. 40/96) prohibit the direct involvement of NGOs in the microfinance arena. The second policy constraint is on interest rate ceiling. The very low interest rates charged do not cover operating costs, protect funds from inflation and maintain adequate margins, including the provision for bad debts and other institutions building costs. Many MFIs under such environments never reach either the minimal scale or the efficiency necessary to cover costs (Ledgerwood, 1999). Lastly, limited loan size that is determined by proclamations/directives affects the development of micro and small enterprises, delivery of low cost housing credit, delivery of water pump for irrigation and delivery of credit to cooperatives (Wolday, 2001).

Poor infrastructure

Well developed infrastructure including transportation facilities, market, education, health, electricity, water, etc may be essential prerequisite for the continuing and persistent growth of microenterprises and microfinance institutions. The poor infrastructure affects outreach and sustainability of MFIs. Many obstacles to the development of MFIs and microenterprises center on deficiencies of infrastructure.

Chapter Three – Study area description

The Afar national Regional State lies on the northeastern part of Ethiopia, at the western edge of the rift valley between the upper and lower Awash. It shares boarders with Tigray, Amhara, Oromia, and Somalia regions from Ethiopia Federal States and with Djibouti and Eritrea from abroad (annex – 6). The region covers an area of 97, 256 square kilometer and has five administrative zones, twenty-nine woredas, and twenty-eight towns. In urban and rural areas, there are 32 kebeles and 326 farmers associations, respectively (CSA, 1996).

About 8.4 percent of Afar's 1,272,000 people (projected population of 2002: CSA, 1999) dwell in urban areas (CSA, 1999). The rest 91.6 percent, engaged in nomadic way of life, reside in rural areas. The average household size in Afar region is estimated to be 5.7 persons per household. In urban and rural areas the figure is 3.7 and 6 persons per household, respectively.

According to the 1994 population and housing census of Afar (ibid), among the population aged 10 years and above, 80.6 percent are economically active and 19.3 economically inactive. The economic activity rate[9] is estimated to be 80.7 percent, 60.5 percent, and 82.6 percent for total, urban and rural areas, respectively. Among the economically active population, the employed and the unemployed were reported to be 98.6 percent and 1.4 percent, respectively. About 62.4 percent of the economically active population were unpaid family workers, and 29 percent were self-employed. In the urban areas of the region, the self-employed category comprised the highest proportion of employed population. On the other hand, in rural areas, the unpaid family workers comprised the highest proportion of employed population.

[9] *Economic activity rate = (economically active population/total of the active plus the inactive)*100*

The unemployment rate[10] of the region is found to be 1.4, 11.1 and 0.7 percent for the total, urban and rural areas, respectively. About 71.7 and 0.4 percent of the population are employed in livestock production and farming, respectively. The rest 27 percent are involved in both livestock production and farming.

Social and economic infrastructure developments are at their low ebb in the region (BoPED, 2002[1]). In 1992, gross enrolment rate was 10 percent and 2.7 percent in primary and secondary schools, respectively. The total health coverage is only 29 percent. Only 5.2 percent of the rural population have access to pipe water and protected well water. The outbreak of animal disease is very common. According to recent evaluations, the animal health service coverage is found to be only 9.06 percent. The condition of existing road in the region is very poor. Because of this, transportation service in the region is very low. There is only 605 kilometer asphalt, 592 kilometer all weather RR50 and 793 kilometer dry season RR30 roads. Until the end of 1992 (E.C.) postal service was limited to eight towns and telecommunication to ten towns (out of which the analog microwave system is available only in two towns) of the region. In Afar the electric power supply is also limited to only eight towns out of which five towns benefited from the hydroelectric and the rest three use generator for power supply. There are about five commercial bank branches only in two zones of the whole region.

The Afar regional state "by agro-climatological classification" is divided into two zones. The first zone is the middle Awash valley, which lies between Awash station and the Mile River. And the second zone is the lower Awash valley, which lies from Mile River to the western boarders of the region. The region possesses high rate of temperature. From June to August the

[10] *unemployment rate = (unemployed population/economically active population)*100*

temperature reaches its peak. The average temperature at high lands and low lands is estimated to be 25 and 40 degree centigrade, respectively.

Although the region is classified as desert and semi-desert, some part of it near the boarder of Amhara and Tigray regions is classified as temperate zone with a lower mean annual rainfall. According to previous studies the region has a good breeding ground for agricultural activities. Generally, due to its favorable environment, income and employment generating activities that can be supported with microcredit programs are diverse and numerous in the region (Gebeyehu, 2001: 24-29). Among these, dairy production, natural gum collection, hides and skin trade, private animal drug vendor and veterinary service, salt mining, and retail shop business (cooperative shops) are the most important business opportunities that could be supported with microfinance interventions.

As the people's livelihood is dependent on livestock production, there are more than 4,000,000 cattle, sheep, goats and camels (BoPED, 2002[1]). About 92 percent of the population earn their income exclusively from this livestock production. The remaining 8 percent are engaged in farming, microbusiness and farming & livestock (BoPED, 2002[1]). There are also women and men cooperatives who are engaged in the production of traditional handicrafts, milk and livestock/grain. According BoPED report, the monthly income of a household is 414 Birr while the monthly expenditure for the same period is 344 Birr. About 51.8 percent of population of Afar live below poverty line (IFAD, 2001:2).

The Addis Ababa – Bure high way and the Addis Ababa Djibouti rail way lines are the major market movement routes in Ethiopia which runs through the Afar region and provides access to the domestic market and export outlet to the port of Assab and Djibouti, respectively.

Gewane woreda is located on southeastern part of Afar (annex 6) with a total population of 28,144 (CSA, 1996). About 69.5 percent of the total population lives in rural area and the remaining 30.5 percent lives in urban areas. Out of a total population of the woreda 68.6 percent are economically active out of which about 70.1 percent are found in rural areas and the remaining 29.1 percent are in urban areas of Gewane woreda.

One of the sample study area Gewane town has a population of 7,504 and 1,500 households. The others rural sample study areas Babur-Fagie and Ura-Feita have a total population of 5,488 and 1,112 households (table 1). About 65.5 percent of Gewane town population are economically active.

Livestock production is the major livelihood for Gewane woreda population. They earn a significant proportion of their monthly income out of this activity. However, the productivity of livestock is still very low in the woreda for many reasons (BoPED, 2002 [2]).

The supply of health services in Gewane woreda is very limited. There is only one health center, two clinics and one health post. Although in the woreda there are five primary schools and one junior secondary school, the supply is still very low compared with the over all school age population. Due to this and other sociocultural reasons gross enrollment in primary schools is

low and in secondary schools it is very low. The development of other physical infrastructure (such as market place, feeder roads, bank, telecommunication, postal services, electric power and transportation) is also very limited. This situation further hampered the development initiatives of the woreda and weakened the living conditions of the community.

Gewane woreda is endowed with splendid natural resources that could have been used for agricultural production – both farming and livestock production. However, due to lack of awareness about agricultural activities, shortage of irrigation facilities, expansion of probosis (Derghi-Hara), diversion of Awash River from its natural course, the problem of siltation, and limited provision of extension package, the majority of Gewane woreda irrigable land is not exploited (BoPED, 2002[2]).

Chapter Four – Findings and discussions

4.1 Descriptive Analysis

4.1.1 Demographic Characteristics

Out of a total of 178 surveyed household heads 71.3 are Afars while the rest 28.7 percent comprise other ethnic groups (Argoba, Amhara, Oromo, Guraghe, Tigre and Wolaita). The sex distribution of the households revealed that 84.3 percent of them are male and the rest 15.7 percent are female. The average age is about 36.5, 40.5 and 33.7 years for the total, rural and urban areas, respectively (table 3 and annex 2). The minimum and the maximum ages recorded were 18 and 78 years, respectively. There is no significant difference in the age of he household heads between urban and rural areas. About 53.4 percent of the respondents are illiterate while 10.1 percent are capable of reading and writing and 36.5 percent have attended formal education. With respect to marital status, 74.7 percent of the surveyed population are married, 12.4 percent are single, and the remaining 12.9 percent have dissolved their marriage either divorce or widowhood.

4.1.2 Economic characteristics

According to the survey result, all of the respondents are employed at least in agriculture, microbusiness or government structures. In Gewane Woreda agriculture dominates the livelihood of most of the households. Out of the total, 70.2 percent are involved in agriculture, 34.3 in microbusiness and 49.4 in government structures. The average number of dependents is estimated to be 6.1 persons per household (annex – 2). The average number of dependents in urban (4.6 persons per household) and rural (8.2 persons per household) areas shows significant difference at 1% significance level (table 3). On the average, there are about 3.4 economically

active persons in each household. The comparison of this figure in urban and rural contexts revealed that the average number of economically active population in rural areas (3.9 persons per household) and urban areas (3 persons per household) showed significant difference at 5% significant level (table 3).

Table 3. Descriptive statistics for selected continuous variables

	Residence	Mean	Std. Deviation
Age	*Urban*	33.72	8.57
	Rural	40.50	9.03
No. dependents	*Urban*	4.61	3.35
	Rural	8.23	5.47
No. of economically active	*Urban*	2.99	1.59
	Rural	3.89	2.23
Total value of assets	*Urban*	5,682.84	5,690.63
	Rural	19,590.35	20,284.00
Monthly income	*Urban*	250.13	100.00
	Rural	965.70	1,052.41

The majority (76.4 percent) of Gewane woreda household heads earn a monthly income of 600.00 Birr and less. Their average monthly income is about 547.61, 965.70, and 250.13 for the total, rural and urban areas (table 3 and annex – 2). Unlike the national (IFAD, 2001: 2), in Gewane woreda per capita is distinctly higher in rural than in urban areas. The average monthly income of the whole survey population of Gewane Woreda is higher than the estimated monthly income of the total Afar region, which is estimated at 414 Birr. On the other hand, The total value of assets owned by the survey population is estimated at 11,464.61, 19, 590.35 and 5,682.84 Birr for the total, rural and urban areas (table 3 and annex – 2). The majority (57.9 percent) of household heads owned assets worth between 5,000.00 and 50,000.00 Birr.

4.1.3 Microbusiness opportunities

Because of the region's natural condition (convenient weather condition, livestock production possibilities and accessibilities) Gewane has diversified opportunities for microbusiness activities on which the role of microfinance intervention would be crucial. Most of these opportunities of microbusiness require an injection of only small amount of finance.

The major business opportunities in Gewane Woreda can be grouped into three main categories. The first group includes crop production that make use of a wide range of farmland which is suited for the production of cotton, oil crops, vegetables and fruits. The second group of business opportunity is livestock production, which exploits the biggest cattle resource of the region. The production of beef cattle and milk and the processing of hides and skins are basic business opportunities that can be supported by microfinance intervention. The third group comprises the rural and urban petty trade. This includes the production of handicrafts such as *Sifet, Selen, Gadeta,* on one side and others like *Gulit*, selling of food, local drinks and *chat* and establishment of small shopping centers on the other side.

4.1.4 Existing microbusiness activities

According to the survey data the average amount of money required to start microbusiness is about 1,590.98 Birr (annex – 2). About 55.7 percent of the microbusiness operators start their activity at a capital cost of less than 750 Birr. Though the source of capital to start the business vary from household to household, the majority (62.3 percent) of microbusiness owners start their business out of their own saving that is accumulated from their monthly wage income.

About 24.6 percent of the respondents reported they have taken credit from friends, relatives, and neighbors to start microbusiness activity. About 21.3 percent have taken from traders (table 4).

Table 4. The source of capital required to start microbusiness in Gewane woreda

	The source of capital to start microbusiness is									
	Own saving		Credit from friends, relatives, neighbors		Credit from traders		Property sale		Free gift from friends, relatives, neighbors	
	Count	%	Count	%	Count	%	Count	%	Count	%
Yes	38	62.3	15	24.6	13	21.3	10	16.4	4	6.6
No	23	37.7	46	75.4	48	78.7	51	81.6	57	93.4
Total	61	100	61	100	61	100	61	100	61	100

Regarding the overall volume of their microenterprise, about 52.4 percent reported that their activity has increased in the last three years. The remaining 36 percent complained that the performance of their enterprise has decreased during the specified period. The respondents underlined shortage of capital and marketing problems as the prime causes for the decline in volume of their activities (Table 5). About 45.5 percent of the respondents reported price of their products has been decreasing from time to time. Some 20 percent who are engaged in informal activities[11] have also reported that they are being chased by government employees because they are considered as outlaws or illegal.

[11] *These groups include those who are engaged in activities such as the sale of second hand cloths that is mainly imported illegally from Djibouti.*

Table 5. Main problems faced in running the microbusiness in Gewane woreda

	Problem faced in running the microbusiness activities							
	Shortage of capital		Marketing		Low sales price		Licensing	
	Count	%	Count	%	Count	%	Count	%
Yes	35	79.5	29	65.9	20	45.5	9	20.5
No	9	20.5	15	34.1	24	54.5	35	79.5
Total	44	100	44	100	44	100	44	100

4.1.5 Credit history

The credit history of the sampled households revealed that 54.5 percent of the households took at least 20 Birr of loan in the last three years from different sources. The main source of credit for the sample households include credit from relatives, friends, and neighbors and credit from traders. Only 4.1 percent reported that they have taken loan from formal banks (table 6). About 52.6 percent of the sample households used the loan to cover health expenses while the remaining 38.1 and 24.7 percent used it operate microbusiness activities and to fill the gap in household food consumption, respectively.

The average maximum amount of loan they took was about 669.69 Birr (annex 2). About 66 percent of the households who took loan have settled their outstanding debt within the period specified by the agreement between them and their creditor (table 6). The remaining 34 percent failed to settle their loan on time mainly because of the severe market problem (72.7 percent) and the outbreak of cattle disease (60.6 percent) in the Woreda.

Table 6. Credit history of sample households in Gewane woreda

	Yes (percent)	No (percent)
Source of loan		
• Relatives, friends, or neighbors	66.0	34.0
• Traders	41.2	58.8
• Formal banks	4.1	95.9
Purpose of the loan		
• To meet health expenditures	52.6	47.4
• To invest in microbusiness activity	38.1	61.9
• To by food (household consumption)	24.7	75.3
Collateral required	2.1	97.9
Outstanding debt	34.0	66.0

4.1.6 Demand for loan

Significant proportion of Gewane woreda households (92.1 percent) showed considerable interest for microcredit, out of which 68.3 percent want to take a loan amount of 2,000 or less while the rest 31.7 want to take loan of above 2,000 Birr (table 7). In the following sections we will attempt to estimate the amount of loan required by the household head in relation to different characteristics.

Table 7 shows that above $3/4^{th}$ of household heads in Babur-Fagie required a loan amount of more than 2,000.00 Birr. On the other hand, in Gewane town the demand for the same amount of loan is reported to be only 17.7 percent. These relatively high amount of loan demand around Babur-Fagie area and small loan demand around Gewane is mainly due to the difference in economic activities in the areas. Babur-Fagie is predominantly agricultural area where private investors are engaged in mechanized farming. The participation of households in such

development activities as daily laborer, foreman, or guard make them observe the benefit that is extracted out of farming activities. Such exposure will help them to start thinking about producing their own crop and making the best out of their land. On the other hand, about 82.3 percent households of Gewane town prefer a small amount of loan because of their interest to be engaged in small petty urban trades.

Table 7. The amount of Loan required by the sample household heads in Gewane woreda

	Name of the Town				
	Gewane	*Ura-Feita*	*Babur-Fagie*	Total	chi-square
Amount of loan required					36.693 ***
More than 2,000.00 Birr					
Count	17	12	23	52	
% within Name of the town	17.7%	31.6%	76.7%	31.7%	
2,000.00 Birr or less					
Count	79	26	7	112	
% within name of the town	82.3%	68.4%	23.3%	68.3%	
Total					
Count	96	38	30	164	
% within name of the town	100.0%	100.0%	100.0%	100.0%	

*** - Significant at 1% level

Out of a total of 12 respondents that require a loan amount of 2,000 Birr or less, about 29.5 percent are found in rural areas, while the rest 70.5 percent in urban area of Gewane Woreda. On the other hand, out of the 68 rural households who showed interest for microcredit, about 51.5 percent require a loan amount of more than 2,000 Birr. Thus, we can observe that the higher proportion of rural households demand relatively higher amount of loan compared with the urban sample respondents.

Table 8. The amount of loan demanded and capital required to start a microbusiness by location in Gewane woreda

	Residence	Mean	Std. Deviation
Amount of loan Required	*Urban*	1,362.19	2,378.35
	Rural	4,604.41	5,759.55
Capital required to start microbusiness business	*Urban*	1,339.64	1,463.13
	Rural	1,804.24	2,022.24

The comparison of mean using independent sample test revealed that there is significant difference at 1% significance level in the amount of loan required between urban and rural small households. The average amount of loan required by rural households is found to be about 4,604.41 and the amount is lower in urban households, 1362.19 Birr per household (table 8).

Table 9. The amount of loan required by sex and ethnic group in Gewane woreda

	Sex		**Ethnic group**	
	Male	*Female*	*Afar*	*Non-Afar*
Amount of loan required				
More than *2,000 Birr*				
Count	9	43	34	18
% within sex/ethnic group	33.3%	31.4%	28.8	39.1
2,000.00 Birr or less				
Count	18	94	84	28
% within sex/ethnic group	66.7%	68.6%	71.2	60.9
Total				
Count	27	137	118	46
% within sex/ethnic group	100.0	100.0	100.0	100.0

The demand for a given amount of loan shows no significant difference between male household heads and female household heads. Neither does it show any difference between Afar household heads and non-Afar household heads and between those who are illiterate, can read and write and

attended formal education (table 9 and table 10). However, out of those sample households who require a loan amount of Birr 2,000 or less, the illiterate group constitutes a significant proportion (58.0 percent) (table 10).

Table 9 shows that the majority of both male (68.6 percent) and female (66.7 percent) household heads need a loan amount of 2,000 Birr or less. Similarly, 71.2 percent of Afar household heads and 60.9 percent of non-Afar household heads require a loan amount of Birr 2,000 or less.

Table 10. The amount of loan required by educational level in Gewane woreda

	Educational level			Total	chi-square
	Illiterate	*Informal education*	*Formal education*		
Amount of loan required					4.446
More than 2,000.00 Birr					
Count	22	5	25	52	
% within the amount of loan	42.3	9.6	48.1	100.0	
% within educational level	25.3	29.4	41.7	31.7	
2,000.00 Birr or less					
Count	65	12	35	112	
% within the amount of loan	***58.0***	***10.7***	***31.3***	***100.0***	
% within educational level	74.7	70.6	58.3	68.3	
Total					
Count	87	17	60	164	
% within the amount of loan	53.0	10.4	36.6	100.0	
% within educational level	100.0	100.0	100.0	100.0	

The analysis of demand for loan based on asset holding size revealed that there is significant difference (at 5% significance level) in the amount of loan required between households who have asset holdings worth of 10,000 Birr or less and those who have asset holdings worth more

than 10,000 Birr. Table 11 shows that the demand for small loan is significantly higher in the poorer groups (74.7%) than in the other group (60.3%).

Table 11. The amount of loan required by asset holding size in Gewane woreda

	Total value of assets[12]		Total	chi-square
	More than 10,000 Birr	*10,000 and Less Birr*		
Amount of loan required				3.907 **
More than 2,000.00 Birr				
Count	29	23	52	
% within total value of assets	39.7%	25.3%	31.7%	
2,000.00 Birr or less				
Count	44	68	112	
% within total value of assets	60.3%	74.7%	68.3%	
Total				
Count	73	91	164	
% within total value of assets	100.0%	100.0%	100.0%	

** - Significant at 5% level

Similarly the comparison of the amount of loan required according to monthly income shows a significant difference (at 1% significant level) between households with monthly income of 550 Birr or less and those with more than 550 Birr. A significant proportion (81.6%) of the former require a loan amount of 2,000 Birr or less (table 12).

[12] *The average amount of asset owned by a household head is estimated at Birr 11,464.61 (annex 2)*

Table 12. The amount of loan required, by monthly income of sample households in Gewane woreda

	Monthly income[13]		Total	chi-square
	More than 550 Birr	*550 and less Birr*		
Amount of loan required				30.483 ***
More than 2,000.00 Birr				
Count	31	21	52	
% within monthly income	62.0%	18.4%	31.7%	
2,000.00 Birr or less				
Count	19	93	112	
% within monthly income	38.0%	81.6%	68.3%	
Total				
Count	50	114	164	
% within monthly income	100.0%	100.0%	100.0%	

*** - Significant at 1% level

The close examination of the results in table 11 and 12 indicates that household heads in the lower wealth status and income class require a small amount of loan primarily to be engaged in small petty trades in urban and rural areas. Most of the respondents reported that they do not want to take large amount of loan at the outset lest the risk of loss or bankruptcy. On the other hand, household heads in the relatively upper wealth status and income class have best interest on small and medium scale businesses including agriculture.

4.1.7 Lending interest Rate

Out of those sample respondents who showed interest for microloan, about 95 percent are willing to pay for the service they obtain as lending interest rate or service charge. About 57 percent of the respondents are willing to pay 12.5 percent or more lending interest rate while the remaining 43 percent are willing to pay less than 12.5 percent (table 13).

[13] *the average amount of monthly income of a household is estimated at Birr 547.61 (annex 2)*

Table 13. The willingness to pay different amounts of lending interest rates in Gewane woreda

Interest willing to pay	Count	Valid percent	Cumulative percent
Less than 12.5 %	55	35.3	35.3
12.5 – 20 %	18	11.5	46.8
21 – 30 %	36	23.1	69.9
31 % and above	8	5.1	75.0
I will pay what the government asks	27	17.3	92.3
I will share profit equally	12	7.7	100.0
Total	156	100.0	

The sample survey on the willingness to pay shows that there is significant difference (at 1% level) on the lending interest rate willing to pay between rural and urban areas. Table – 14 indicates that more than 3/4th of the rural households are willing to pay interest rates of 12.5 percent or more for the loan they would receive compared to 50 percent of urban household heads.

Table 14. The willingness to pay lending interest rate in rural and urban areas

	Location		Total	chi-square
	Rural	*Urban*		
The amount of interest the household head is willing to pay				11.244 ***
Less than 12.5 percent				
Count	14	41	55	
% within location	22.6%	50.0%	38.2%	
12.5 percent or more				
Count	48	41	89	
% within location	77.4%	50.0%	61.8%	
Total				
Count	62	82	144	
% within place of town	100.0%	100.0%	100.0%	

*** Significant at 1% level

The amount of interest the household is willing to pay does not show significant difference (even at 10%) between male and female and Afar and non-Afar household heads. Moreover, there is no

significant difference in the willingness to pay between household heads who require loan amount of 2000 Birr or less and those who require more than 2000 Birr.

However, the willingness of the household heads to pay a given amount of lending interest rate shows significant difference between the two different income groups. In both cases, the relatively well to do families are willing to pay 12.5 percent or more lending interest rates for the service they obtain from MFIs (table 15).

Table 15. Willingness to pay lending interest rate by asset holding size and monthly income in Gewane woreda

	Total value of asset owned in Birr			**Monthly income of the household head in Birr**		
	More than 10,000	*10,000 & less*	chi-square	*More than 550*	*500 &less*	chi-square
The amount of interest the household head is willing to pay			21.308***			2.825*
Less than 12.5 percent						
Count	10	45		13	42	
% within value of assets/monthly income	16.4%	54.2%		28.3%	42.9	
12.5 percent or more						
Count	51	38		33	56	
% within value of assets/monthly income	83.6%	45.8%		71.7	57.1%	
Total						
Count	61	83		46	98	
% within value of assets/monthly income	100.0	100.0		100.0	100.0	

* and *** Significant at 10% and 1 percent level, respectively.

4.1.8 Food insecurity problem

As is the case in many of drought prone areas of Ethiopia, food insecurity is a chronic challenge to households in Gewane Woreda. The majority of the sample households experienced persistent outbreak of cattle disease, marketing problem, and shortage of grazing land. The unabated conflict with Issa (one clan of Somali) has also caused considerable loses in terms of human and livestock. Other causes for the recurrent food deficit problem includes the widespread of probosis (Derghi-Hara) shortage of credit for consumption and inadequate rain. Problems associated with the provision of agricultural implements and modern agricultural inputs contribute less to food deficit problems in Gewane Woreda (table 16).

Table 16. Causes of household food insecurity problem in Gewane woreda

	Cause for household food insecurity problem									
	Cattle disease		Marketing		Conflict with Issa		Shortage of grazing land		Probosis	
	count	percent	count	percent	count	percent	count	percent	count	percent
Yes	55	80.9	55	77.9	53	77.9	52	76.5	44	64.7
No	13	19.1	15	22.1	15	22.1	16	23.5	24	35.3
Total	68	100.0	68	100.0	68	100.0	68	100.0	68	100.0

	Cause for food deficit problem							
	Absence of credit for consumption		Insufficient rain		Absence of agricultur implements		Absence of modern agricultural inputs	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent
Yes	26	38.2	25	36.8	12	17.6	9	13.2
No	42	61.8	43	63.2	56	82.4	59	86.8
Total	68	100.0	68	100.0	68	100.0	68	100.0

4.1.9 Possible weaknesses of Gewane woreda to the development of MFIs.

The possible weaknesses of Gewane woreda to the development of sustainable microcredit program may be those that are linked with the very causes of household food insecurity problem in the area. Such weaknesses would induce the risk of default and constrain the successful operation of the microfinance institution. In the following section major weakness of Gewane to the development of MFIs are presented.

Instability

Conflict is a common ailment around Gewane Woreda. The conflict over limited resource (grazing land and water) use between the Afar and Issa costs a lot in terms of human as well as animal lives. Despite the chronic shortage of grazing land, large amount of Pastureland around this area remains to be the property of nobody because of instability. The risk of death of the client, loss of property, inconvenient environment for microbusiness activities and psychological disturbance because of the instability may result in inability of clients to settle their debt.

Marketing Problems

The final objective of any informal microenterprise operator is to maximize his/her profit by providing the product/service s/he produced to the market. But in Gewane woreda the problem of market is very serious. One can hardly find market places for livestock in the woreda. Households have to travel 3-4 days to the neighboring regions in order to access market places. By the time they reach to those distant market places, their cattle are very weak and lose weight and hence will be forced to sell at cheaper price. Such conditions may discourage operators/farmers to expand their activity and produce more. This in turn may influence their demand for microcredit.

Poor infrastructure

Economic and social infrastructures are in the worst condition in Gewane Woreda. Construction and maintenance of feeder roads has been neglected. The electric supply is very unsatisfactory. There is no regularly functioning telecommunication service. Because of the limited supply of health facilities for both human and livestock, both human and animal diseases are very rampant. Such poor conditions of infrastructure may influence the microbusiness environment and results in low demand for microcredit services and/or high risk of default.

Grazing land problem

The shrinkage of pasturelands is mainly due to the expansion of state farms, over stocking and the wide spread of probosis (Drghi-Hara). With the decrease in size of the natural forage, pastoralists start to overstock their cattle in the remaining meager land they are left with. This leads to the danger of soil degradation and compaction and finally results in siltation problem, which is now becoming the most common phenomenon in most of Afar areas. Some households will also be forced to deploy their cattle into the agricultural farms of private investors and the state when their natural Pastureland is depleted. This in turn caused conflict in the society and make households unable to settle their outstanding debts on time.

Population settlement pattern

The secret behind the success of Grameen Bank is the relatively higher population density in Bangladesh. This higher population density creates market for small business enterprises in urban areas. Furthermore, the provision of financial services would be efficient if the population to whom the services are ready for is settled in specific areas. But in Afar the population density is remarkably low. Such sparsely settled population increases cost of reaching large number of potential borrowers and makes the operation of microcredit activity very difficult.

Lack of Skills and awareness

Even if the economically active section of the population have an interest to diversify their source of income, they lack managerial, technical and marketing skills to identify new business opportunities and to take calculated business risks to enter into new areas of microbusiness activities. They also misunderstand microcredit and tend to consider the loan as a free gift from '***ferenjis***' or NGOs.

Mono culture – dependence on single activity for livelihood

The livelihood of the community is primarily dependent on the production of livestock. The income they earn from the sale of their livestock and livestock products contributes the largest proportion of their total income. However, such dependence of households on a single activity was proved to cause chronic food deficit problem during drought seasons. During these periods, as the number of livestock significantly decreased, the life of the households will also be endangered and there will be high risk of default.

Recurrent drought

Because of man-made disasters (conflict with Issa) and natural disasters (shortage of rainwater, depletion of grazing land due to overstocking, and soil degradation), drought is becoming a common phenomenon in Gewane woreda. It is a part of their day to day activity. Because of this there is high morbidity and mortality rate of both human and livestock.

Cultural limitation

High expenditure on chat and cigarette in the study area may probably result in diverting the loan to such types of consumption and failure to repay loan on time. Furthermore, household heads who are more addicted to chat and cigarette may be less likely to be effective in their microbusiness activities.

4.1.10 Informal financial services

According to the survey result, about (table 17) 90.1 percent of Gewane woreda household heads have savings experience in cash (78.7 percent), and in kind (81.0 percent). Out of those households who have the experience of savings in cash, 93.7 percent keep their money in hidden places at home and 21.4 and 12 percent use formal banks and traders, respectively.

The extent of user owned informal financial services are not significant in Gewane woreda. Only 26.4 and 22.5 percent of the sample households are members of Equib and Iddir, respectively. The non-Afar households are relatively much involved in both Equib and Iddir compared with Afar households.

Table 17. The prevalence of informal financial services in Gewane woreda

	Yes (Percent)	No (Percent)
Savings experience	90.1	9.9
Forms of Savings		
Cash	78.7	21.3
Kind	81.0	19.0
Place of Savings		
Home	93.7	6.3
Formal banks	21.4	78.6
Traders	12.0	88.0
Member ship		
Equib	26.4	73.6
Iddir	22.5	77.5
Purpose of Equib money		
To invest in microbusiness activities	34.1	65.9
To meet health expenditures	29.5	70.5
For household consumption/ to buy food	27.3	72.7
To construct/repair house	20.9	79.1
To buy consumer durable	13.6	86.4

Table 17 also shows that sample household heads were engaged in Equib primarily to supplement their income in order to start microbusiness. About 34.1 percent of the sample households have used the Equib money to operate microbusiness activities. About 29.5 and 27.3 percent used the money to meet health expenditure and to fill the gap in household food consumption, respectively.

The prevalence of informal financial services for profit (such as moneylenders) is not also significant in Gewane woreda. Kinship and extended family assistance fill the gap during shortage of finance and unexpected loses/ disasters. Credit in kind (mainly food items) is the most common way of credit in the study area. Households usually take this credit from shop owners and private investors whom they are working with.

4.1.11 Farm-Africa's initiative savings and credit cooperative schemes in Gewane woreda

The initiative of Farm-Africa in improving the food security and welfare of pastoralists around Gewane woreda is worth discussing.

In order to increase participation of the local community and to enable them access essential extension services, Farm-Africa tried to establish linkage with the communities through Mobile Outreach Camp (MOC). With this approach, Farm-Africa launched programs related to animal health and livestock and livestock products marketing.

In order to address the problem of animal health, the project trained individual herders about livestock disease diagnosis, control and prevention. Farm-Africa has also contributed in assisting milk and livestock marketing activities. In order to increase the economic return out of the sale of livestock and livestock products, the project made studies on milk and livestock marketing and underlined the importance of complimenting dairy marketing activities with other income generating activities because of the seasonal nature of milk production. Thus, different income generating activities were identified and initiated with two formally organized and registered women associations (Debel and [Eglamo'o] Women Associations) and two informal women groups (Enteadoita and Galeeladora).

Saving and credit revolving scheme was established for Debel Women Associations. Eight members of the association have been engaged in microbusiness activities using the first loan. They were making 10 percent loan repayment, 1.50 Birr group and 10.00 Birr individual savings on a monthly basis as agreed.

Farm-Africa has also facilitated the establishment of two formal (Beida [now it is dismantled because of marketing problem, drought, cattle disease, and excess supply of food aid] and Ura-Feita) and two non-formal (Halidebi and Gewis) livestock/grain marketing associations. To improve the management capacity of the groups, training was given on leadership and financial management. Awareness has also been created among the groups on the marketing of skin and hides as alternative means of income generating activity.

The project has supported the marketing of cattle milk and created awareness on processing and marketing of camel milk. To test the milk collection and marketing system, small-scale milk marketing trial has been conducted using the two women milk groups at Enteadoita and Galeeladora kebeles. These groups collect the milk from the community (at a cost of 1.00 birr per 850 gm) at their milk collection sheds in their respective areas and sell it to [Eglamo'o] Women's Association for 1.50 birr. The [Eglamo'o] Women's Association in turn sell the milk to the community for 3.00 birr. The two women milk group and members of [Eglamo'o] Women's Association have been trained on dairy collection, marketing and hygiene. Both milk collection sheds and the [Eglamo'o] milk shop were well equipped with the necessary dairy utensils. Two donkeys were bought for transporting the milk from the milk sheds to the shop.

Farm-Africa has also provided initial seed capital for the associations. It gave Gewis livestock/grain marketing association an initial seed capital of 5,600 Birr to initiate their activity. The Enteadoita and Galeeladora women milk marketing groups have also received seed money of 2,580 Birr and 2,602 Birr, respectively, from the project to exploit other non-traditional income generating activities. Each members of a women group has contributed a certain amount of money so as to increase their capital.

The project has facilitated a pilot small-scale irrigation scheme to produce cash crop and forage in Amassabure and Galeeladora. Training was given on land preparation and farming.

Source: The Fourth Narrative Report of the Pilot Phase (first and Second Quarters: January – June, 2000), Farm-Africa: Ethiopian pastoralists' Project (EPP), PP 1-25; Focused group discussion; and in-depth interview with key informants

4.1.12 Designing of microcredit products

In designing microcredit products to Gewane woreda households, first and for most, the financial service giving institutions must undertake need assessment so as to find out what kinds of microcredit design features (individual lending or group based lending) are appropriate to that locality. The result of this assessment should be tested using pilot test.

The use of social and peer pressure would be the most effective method in Gewane woreda to replace property collateral. The clan leader will play paramount role especially in facilitating repayment. Because of the culture of chat and the prevalence of smoking, character based individual lending would be the recommended method to screen potential defaulters. However, still there need be further study to determine the appropriate design of microcredit products to the people.

4.2 Quantitative Analysis

4.2.1 The Logistic Regression Model

The model used to analyze the data is logistic regression model. This model helps to predict the presence or absence of an event based on values of a set of predictor variables. It is suited when the dependent variable is dichotomous and of the type that have a yes or no response. Using logistic regression coefficients, odds ratios for each of the independent variables in the model can be estimated as follows

$$P_i = E(Y=1/Xi) = (e^{\beta o + \beta iXi}) / (1 + e^{\beta o + \beta iXi})$$
$$= 1/(1 + e^{-(\beta o + BiXi)}) \quad \text{..... Equation (1)}$$

Where,

- P_i is the probability of a household demanding a loan amount of 2,000.00 Birr or less.
- E (Y = 1/Xi) is the conditional expectation/probability that the household head will require a loan amount of 2,000 Birr or less, given the independent variables, Xi.
- e is the base of the natural logarithm, usually estimated at 2.718.
- βo and βi – represent the parameters or coefficients of the model, which are estimated using the Maximum-likelihood method.
- Xi – independent variables

For simplicity, we can write Equation (1) as

$$P_i = 1 / (1 + e^{-Zi}) \quad \text{..... Equation (2)}$$

Where, Zi is the linear combination given by βo + βiXi.

From equation (2) it is easy to verify that

1. As Zi ranges from negative infinity to positive infinity, Pi ranges between 0 and 1. This means that as Zi approaches positive infinity, Pi tends to one and as Zi approaches negative infinity, pi tends to zero.
2. Pi is non-linearly related to Zi (i.e. Xi). This means the relationship between the independent variables and the probability is nonlinear. The plot of a logistic curve is S-shaped.

Given Pi the probability that a household head demands a loan amount of 2000 Birr or less, 1-Pi is the probability that the household will demand a loan amount of more than 2000 Birr.

Mathematically we can write $1-P_i$ as

$$1 - P_i = 1 / (1 + e^{Zi}) \quad \text{..... Equation (3)}$$

The ratio of Equation (2) and Equation (3) gives us the odds ratio in favor of demanding a loan amount of 2,000 Birr or less. Mathematically we can represent it as

$$Pi / (1 - Pi) = (1 + e^{Zi}) / (1 + e^{-Zi}) = e^{Zi}$$
$$= e^{\beta o + \beta i Xi}$$
$$= e^{\beta o} * e^{\beta i Xi} \quad \text{..... Equation (4)}$$

The e raised to the power βi in equation (4) is the odds ratio. It reflects the factor by which the odds change when the i^{th} independent variable changes by one unit. If βi is positive, this factor will be greater than one and if βi is negative the factor will be less than one. But when βi is zero, the factor equals one, which leaves odds unchanged.

By taking the natural log of Equation (4), we obtain the logit model which is given by

$$L_i = \ln (P_i / (1 - P_i)) = Z_i$$
$$= \beta_o + \beta_i X_i \qquad \text{..... Equation (5)}$$

Now we can see that unlike Pi, Li, which is the log of the odds ratio, is linear in the independent variables Xi and in the parameters βo and βi. Now the logistic coefficients can be interpreted as the change in the log odds associated with one unit change in the independent variable.

4.2.2 Econometric analysis of the Model

The understanding of household characteristic that affects households' willingness to take a given amount of loan is useful in the designing of microfinance products to a certain locality and in the process of targeting. Although the household's decision to take a given amount of loan is a function of the supply of microcredit itself, this will not be considered in the analysis as there are no institutions, which are rendering the service. However, previous studies underlined the households willingness to take a certain amount of loan is also influenced by some other household characteristics and socioeconomic circumstances that prevailed in the area.

In the model used in this study some of the household characteristics which are meant to dictate the households' decision on the amount of loan required are included. However, socioeconomic circumstances such as the supply of roads, the presence of market, the provision of educational and health facilities and the availability of business opportunities are excluded from the model. Because these characteristics are common to all households and hence are considered to be constant. However, in the descriptive part attempt has been made to see the effect each characteristic has on the decision of households to take a certain amount of loan and to pay a certain amount of interest rate.

Before analyzing the effect of each of the independent variables on the dependent variable, all variables which are hypothesized to govern the decision of the household head for a given amount of loan were checked for multicollinearity using bivariate correlation matrix and contingency table. The result of this table shows that number of dependents and number of economically active people in the household showed moderate (0.51) collinearity. The rest of the variables did not show significant collinearity between each other.

Table 18. The Logit Maximum-Likelihood estimates of coefficients

Variable	β	Wald	Partial correlation	Odds ratio
PLACE (cat)	-0.2445	0.1206	0.0000	0.7831
AGE	-0.0851	9.0090***	-0.1850	0.9184
SEX (cat)	0.1123	0.0326	0.0000	1.1189
ETHNCGRP (cat)	-1.1255	2.9300*	-0.0674	0.3245
MARTLSTS (cat)	-0.3826	0.2900	0.0000	0.6821
LVLEDCTN (cat)	0.9138	3.2065*	0.0767	2.4937
NMDPNDHH	-0.2873	11.6655***	-0.2172	0.7503
NECOAPHH	0.3832	4.1503**	0.1024	1.4670
TTLVLAST(cat)	0.4168	0.4117	0.0000	1.5171
MNTHINCM(cat)	-1.2422	3.2338*	-0.0776	0.2888
Constant	4.0005	12.1904		

***, ** and * represents significant at 1, 5, and 10 percent significant levels, respectively.

In table 18 the maximum likelihood estimates of the parameters of the logit model are presented. From the table it is possible to see that out of a total of 10 predictor variables, only six of them (age, ethnic group, level of education, number of dependents in the household, number of economically active people in the household, and monthly income of the household head) significantly affect the households' decision on the amount of loan requirement at different significant levels. The rest are not statistically significant even at 10% significant level.

The parameters of the model are presented in the second column (β). A statistic that is used to see the contribution of individual variables, partial correlation, on the dependent variable is shown in the fourth column. The value of the partial correlation can range from –1 to +1 and take a sign of the corresponding coefficients.

The negative value of the partial correlation corresponding to age, ethnic group, number of dependents in the household and monthly income indicates as the value of the variables increase, the household is less likely to demand a loan amount of 2,000 Birr or less, than more than 2,000 Birr. On the other hand, the positive partial correlation value associated with the variables level of education and number of economically active people in the household indicates that as the household head is educated and as the number of economically active people in the household increases, so does the likelihood of the household to demand a loan amount of 2,000 Birr or less, relative to more than 2,000 Birr.

Generally, by looking at the signs that are attached to the parameters and the partial correlation values, we can say that younger, non Afar, and literate household heads, and households who have small number of dependents and who earn monthly income of 550 Birr or less are more likely to demand a loan amount of 2,000 Birr or less, than more than 2,000 Birr. The logit model shows that all the above five variables have the expected signs[14].

Table 18 indicates that as the age of household heads increase by one year and the values of other independent variables remain the same (usually at their mean value), the odds and the log odds of demanding a loan amount of 2,000 Birr or less will decrease by a factor of 0.0851 and 0.9184, respectively. Similarly, as the number of dependents in the household increase by one person and the values of other independent variables remain the same, the odds of demanding a loan amount of 2000 Birr or less will decrease by a factor of 0.2873.

[14] *The analysis of the model using both age and age squared as regressor indicated both of these variables are statistically significant. This shows that as age increases the demand will also increase up to certain age and declines then after.*

On the other hand, the number of economically active people did not take the expected sign. Households with large number of economically active people tend to take a small amount of loan, which is less than or equal to 2,000 Birr. This means as the number of economically active population in the household increases by one person and the values of other independent variables remain the same, the odds of demanding a loan amount of 2,000 Birr or less will also increase by a factor of 0.3832.

Examination of the marginal contribution of the variables verifies that, number of dependents in the household and age have almost the highest (21.72 and 18.50 percent, respectively) marginal effect on the dependent variable. The other variables, number of economically active people in the household (10.24 percent), monthly income of the household head (7.76 percent), educational status (7.67 percent), and ethnic group (6.74 percent) have the lowest marginal effect on the dependent variable.

To assess whether or not the model fits the data, classification table is used (table 19). Using the diagonals and the off-diagonals of this table, we can see how many households are correctly classified and how many are misclassified.

Table 19. Classification Table

			Predicted		
			More than 2,000	2,000 or less	Percent
Correct					
			m	l	
	More than 2,000	m	26	26	50.00%
Observed	2,000 and less	l	12	100	89.29%
				Over all	76.83%

The diagonal entries of the table shows that 100 out of 112 households whose loan demand is 2,000 Birr or less are correctly predicted by the model as requiring a loan amount of 2,000 Birr or less. Similarly 26 out of 52 households who require a loan amount of more than 2,000 Birr were correctly predicted as demanding a loan amount of more than 2000 Birr. On the other hand, the off-diagonal entries of the table show that a total of 38 households were misclassified. Of the households who require a loan amount of 2,000 Birr or less 89.29 percent were correctly classified. Out of the households who require a loan amount of more than 2000 Birr 50 percent were correctly classified. Overall 76.83 percent of the 164 valid cases were correctly reported.

Chapter Five – Conclusion and Recommendations

5.1 Conclusion

The provision of small financial and non-financial services to rural poor farmers and urban microbusiness operators by MFIs has long been considered as an efficient means of poverty reduction. The effect of these programs in improving household well being, social relations, and women's empowerment has proved to be very satisfactory in different corners of developing countries including Ethiopia. The programs have also played significant role in expanding the market of formal financial institutions.

Microfinance institutions emerged a couple of decades ago to address the financial problem of rural households who are unfairly (and for no logical and rational justification) excluded from the benefit of formal sector financial services. Emerging in the form of state delivery subsidized credit scheme, now the thinking is shifting towards the development of sustainable and market based programs. However, debates are still continuing between advocates of financial systems and poverty lending approaches and between minimalist and integrated approaches.

In the process, new-poor friendly lending methodologies and contractual structures and organizational forms have been developed so as to reduce the riskiness and costs of making small and uncollateralized loans to the poor. Such innovations help the poor to settle their debts without difficulty. Efforts have also been made to improve the screening techniques in target selection. Among others visual indicators of poverty test and participatory wealth ranking Process have been used in order to select potential beneficiaries of MFIs.

The contribution of informal financial services has also been acknowledged in the development of sustainable microfinance institutions. The initiative to draw lesson (especially about controlling screening costs and default rates) out of these informal financial services is increasing from time to time.

Simultaneously with the increase in its achievements, the challenge to the microfinance industries has also been increasing from time to time. Among these, credit diversion, lack of product diversification, recurrent drought, poor infrastructure, and policy constraints are the prominent challenges that the industry is facing.

From the study made in Gewane woreda we can safely conclude that Gewane is a place where there are a great deal of microbusiness opportunities on which microfinance intervention could make considerable contribution. Among these opportunities, crop and livestock production and rural and urban small trades are found to be very profitable businesses that can be promoted with microfinance. Though the average amount of microfinance required to start a business is estimated to be about 1,590.98, majority of business opportunities require only a loan amount of less than 750 Birr.

The most important potential challenge of microfinance intervention in Gewane woreda are those that are associated with the very causes of food deficit problem. Cattle disease, marketing problem, instability, and shortage of grazing land can be considered as potential weaknesses in the development of microfinance services to the poor in Gewane woreda. Population settlement

pattern, poor infrastructure, dependence on one activity for livelihood and lack of literacy programs are also weaknesses, which would possibly constrain the intervention.

More than half of the population of Gewane is found to have credit history in the last three years. Their main sources of credit were relatives, friends, and neighbors. Given profitable microbusiness opportunities, there is a significant demand for microcredit in the woreda. Out of this significant demand, more than $2/3^{rd}$ constitute the demand for 2,000 Birr or less. The comparison of loan requirement in urban and rural areas shows that rural household heads demand higher amount of loan than urban household heads. The average amount of loan requirement in rural and urban areas estimated at 4,604 Birr and 1,362 Birr, respectively. However, the demand for a given amount of loan shows no significant difference between male and female and between Afar and non-Afar household heads. Neither does it show between those who are illiterate, can read and write, and attended formal education.

The amount of loan requirement based on asset holding size and monthly income revealed that most of the households that have smaller value of assets and earn smaller amount of monthly income demand a loan amount of 2,000 Birr or less. This result generally goes with the founding principle of microfinance that promotes the provision of small amount of finance to economically poor but active section of the society.

The result on the willingness to pay interest for the service that will be given is also very promising. More than 95 percent of the households who showed interest for microcredit are willing to pay for the service they would receive. About 77.4 percent of rural and 50 percent of

urban household heads are willing to pay 12.5 or more percent lending interest rate. About 57 percent of households whose monthly income is 550 Birr or less and slightly less than 46 percent of households who have asset holdings worth of 10,000 Birr or less are willing to pay the indicated amount of interest.

By using logistic regression model household characteristics that influence household decision on the amount of loan required are identified. Based on this, age, ethnic group, level of education, number of dependents and economically active people in the household and monthly income of the household head are found to significantly affect the household demand for a given amount of loan. Except the number of economically active people in the household, all the five statistically significant variables take the expected sign. By looking at the coefficients of these variables we can safely conclude that younger and non Afar household heads, and those household heads who have smaller number of dependents and who earn monthly income of 550 Birr or less are very likely to demand a loan amount of 2,000 Birr or less.

Similarly, households with large number of economically active population and literate household heads are very likely to demand a loan amount of 2,000 Birr or less. The partial correlation coefficients in the model indicated that number of dependents in the household (21.72 percent) and age of the household head (18.50 percent) have relatively higher marginal effect on the dependent variable than the other variables.

5.2 Recommendation

Based on the major findings of the study the following recommendations are made so as to develop sustainable microcredit programs in Gewane woreda.

The maintenance of security of persons and property

The maintenance of security of persons and property are the primary preconditions for all human activities and development efforts. In the presence of intertribal conflict between Afar and Issa, it will be naïve to think about sustainable development of microbusiness and application of mobile banking system. The government should consider any possible measures to resolve the conflict between Afar and Issa before thinking about intervening in any form of development activities. .

Evaluation of the existing system and the provision of savings-led microcredit based on the results of the evaluation

In Gewane woreda where most of the households are very poor credit is the only way to meet the financial needs of households who are poor but economically active and willing to pursue gainful microbusiness activities. Therefore, efficiently administered savings and demand-led credit programs, which extend microcredit to these households remain to be an important component of rural development. Savings requirement could help to inculcate the habit of savings and impose financial discipline in the mind of clients (Gebrehiwot, 1998). It could also help to provide additional protection to the lender by assuring the return of loan in case the borrower becomes financially depleted (Wolday: 2002[1]). The provision of microcredit services should be accompanied by risk sharing activities with the people as they start new businesses

However, the introduction of microcredit services to Gewane woreda households without assessing the initiative made by Farm-Africa may not give the expected result. In Gewane woreda more contribution can be made to the development of microcredit programs by improving the initiatives of Farm-Africa.

The design of microcredit programs should be based on the settlement pattern of the households around Gewane woreda. The development of mobile banking system may be considered after studying the mobility pattern of the pastoral society. Studies should also be made to understand the cash flow pattern of the community so as to set the loan repayment schedule at the best convenient of client to repay loan without undue hardship. Clan leader based collateral and individual-lending methodologies should be promoted to deal with the problem of default.

Training, skill developing programs

An integrated approach to microcredit in Gewane woreda will contribute a lot towards reducing poverty. In areas like Gewane where most of the households are uneducated and lack basic business knowledge, one cannot afford to be minimalist. Thus, literacy programs that focus on building the capacity of clients to utilize financial services remains to be one component of microcredit programs in the area.

Training programs that focus on business management, identification and dissemination of new business ideas and opportunities, improved farm practices (agropastoral activities), and marketing skills should be promoted. Training in low cost product handling, packaging, and storing operations should also be given to households so as to enable them increase the quality of

their products and hence the price of their products. Training of local blacksmiths in making low cost milking equipment would assist households to purchase the equipment at low cost and at their doorsteps.

Existing livestock marketing associations should be strengthened through training on cooperative management and development. They should be trained the basic principles of leadership, bookkeeping, and financial management skills. Training should also be given about the importance of savings and voluntary group actions in taking credit, marketing their crops, extending credit to one another, and developing a Pastureland using irrigation.

Concerned government authorities (such as the cooperative unit) and NGOs should facilitate the formation of ROSCAs in Gewane woreda. They should organize the group and train them to develop slightly more sophisticated systems of operation than the traditional one. They should also encourage and train members to deposit their savings in formal financial institutions.

The development of market and the provision of market information

The provision of credit to economically active households so as to enable them engage in microbusiness activities is not the end objective of the provision of microcredit programs. Even if all the problems of microbusiness are solved and microentrepreneurs start to produce more out put than ever, this increase in output alone doesn't change the life of microenterprise operators. With the increase in out put there should be strong market demand for the products produced.

In order to increase the demand of the produced output, market research should be undertaken. Since microbusiness is an information-oriented activity, microenterprise operators should also be provided with information as to how the market operates in a particular area. So that they can make rational decision to be engaged in a particular type of activity on the basis of their expectation about the future.

By increasing the quality of products and by improving the efficiency of the marketing system the government could assist households to get a price that is high enough to repay their costs (including the credit they would receive from MFIs). To improve the efficiency of the marketing system and hence to enable microbusiness owners to sell their products to non-farm people in the urban areas, prior attention should be given to the development and rehabilitation of transportation systems, storage facilities and small scale processing equipment (especially for milk). Local buying agents (as is already done by local milk agents in Gewane Woreda) should be promoted in the doorsteps of rural households. The purchase of storage and small scale processing equipment should be financed by the intervention of group based microcredit programs so as to increase the quality of the products.

Infrastructure development

The maintenance, rehabilitation and expansion of economic and social infrastructures play a significant role in the development of microbusiness activities in a certain locality. Efficient and low cost transport has proven to have significant role in improving the efficiency of the marketing system. In addition to government effort, the society should be promoted to undertake labor investment through group action in building a road. The low cost transportation systems like light donkey drawn carts should be introduced to the society.

Provision of grazing lands

As the livelihood of Afar households is mainly dependent on livestock production, the regional government should think about the development of grazing land to the society. This will probably assist pastoralists to settle in one area and undertake microbusiness activities in an organized manner. The effort made by Farm-Africa in small-scale fodder production should be promoted.

Macro level/policy recommendations

The recent effort that was made by the NBE (directive No MFI/17/2002) to improve the drawbacks of the earlier directive (No. MFI/05/96) is a good start towards integrating the overall microfinance industry in Ethiopia to the overall market economy. However, still much has to be done in order to overcome structural and institutional constraints facing Ethiopian MFIs.

To supplement the effort of MFIs, the government should develop credit guarantee schemes so as to induce commercial banks to lend to the economically active poor who are unable to secure

sufficient collateral. In such cases, the government itself could act as collateral for the poor by promising the banks to repay the lender in the event the borrower defaults.

The policy should also allow direct and indirect linkages between formal and informal financial institutions. Since informal financial institutions are acknowledged as an efficient and quick means of credit delivery to the rural poor at their locality, arrangements should be made so as to enable informal moneylenders to obtain bank loans for their lending businesses.

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Annexes

Annex 1. Outreach, Average Loan and Interest Rate of Ethiopian MFIs, 2001

Microfinance Institutions	*Number of Active borrowers*	*Women as % of borrower*	*Rural %*	*Urba %*	*Averag loan (Birr)*	*Interest on credit (%) per annum*	*Interest on deposits & savings*	*Amount of loans outstanding*	*Averag repaym ent %*
Amhara Credit & Savings Institution S.C.	160,000	47	75	25	900	12.5	6	103,359,247	98.7
Dedebit Credit & Savings Institution S.C.	210,000	41	80	20	600	12.5	6	106,974,014	98
Oromia Credit & Savings Institution S.C.	37,000	12	99	1	1,000	12.5	8	27,834,311	92.5
Omo Micro Finance Institution S.C.	39,342	35	95	5	600	12.5	6	23,618,546	97
Specialized Financial & Promotional Institutions	3,700	80	1	99	1,000	16	7	1,982,982	98
Gasha Micro-financing S.C.	3,217	85	0	100	800	13	6	1,911,056	86
Wisdom Micro-financing Institutions	8,535	30	85	15	755	14.5	6	2,309,728	98
Sidama Micro-financing Institutions S.C.	4,286	60	90	10	1,800	15	6	2,744,821	90
Mekket Microfinance Institution S.C.	2,300	85	100	0	400	25	6	248,176	-
PEACE Microfinance Institution S.C.	974	62	100	0	682	12.5	6	622,144	-
Addis Credit and Savings Institution S.C.	7,000	70	-	100	1,300	12.5	7	-	-
Eshet Microfinance Institution S.C.	516	54	70	30	500	24	6	174,507	100
Wassa Microfinance Institution S.C.	562	31	69	31	498	24	6	177,546	100
Asser Micro-financing S.C.	3,100	-	73	27	750	16	7	-	-
Africa Village Financial Service S.C.	450	60	-	100	1,500	16	-	380,722.56	93.3
Buussa Gonofa Microfinance S.C.	2,758	85	87	13	-	24	8	661,044	93.3
Meklit Microfinance Institution S.C.	1,001	73	-	100	700	16	6	578,777	99.39
Benishangul Microfinance Institution S.C.	425	60	100	-	-	12.5	6	208,598	-
Shasemene Eddir Yelimat Agar MFI	200	58	-	-	1,275	16	6	-	-

Source: Wolday, 2002[1]

Annex 2. Descriptive statistics

		Age of the Household head	*Number of dependents*	*Number of economically active*	*Capital required to start microbusiness*	*Total value of assets owned*	*Monthly income*
N	Valid	*178*	*178*	*178*	*61*	*178*	*178*
	Missing	*0*	*0*	*0*	*117*	*0*	*0*
Mean		*36.54*	*6.11*	*3.37*	*1,590.9836*	*11,464.6124*	*547.6124*
Std. error of mean		*0.70*	*0.35*	*0.14*	*228.9989*	*1,150.9187*	*57.4598*
Median		*36.50*	*5.50*	*3.00*	*700.0000*	*8,563.0000*	*387.0000*
Mode		*40*	*3*	*2*	*100.00* [a]	*502.00* [a]	*135.00*
Std. deviation		*9.36*	*4.70*	*1.93*	*1,788.5382*	*15,355.1704*	*766.6093*
Skewness		*0.656*	*0.839*	*1.147*	*1.333*	*4.051*	*7.096*
Std. error of skewness		*0.182*	*0.182*	*0.182*	*0.306*	*0.182*	*0.182*
Range		*60*	*24*	*10*	*6,990.00*	*125,645.00*	*8,378.00*
Minimum		*18*	*0*	*1*	*10.00*	*105.00*	*75.00*
Maximum		*78*	*24*	*11*	*7,000.00*	*125,750.00*	*8,453*

[a] Multiple modes exist. The smallest value is shown

		The maximum amount of loan received in the last 3 years	*Amount of loan required*	*The amount of interest willing to pay*	*Monthly payment of to Equib*	*Monthly payment to Iddir*
N	Valid	*97*	*164*	*156*	*46*	*39*
	Missing	*81*	*14*	*22*	*132*	*139*
Mean		*669.6907*	*2,706.5244*	*17.5064*	*88.0870*	*6.1538*
Std. error of mean		*84.4258*	*344.8145*	*0.9849*	*7.3088*	*1.8015*
Median		*400.0000*	*500.0000*	*16.0000*	*100.0000*	*3.0000*
Mode		*50.00* [a]	*500.00*	*10.00* [a]	*100.00*	*2.00*
Std. deviation		*831.4977*	*4,415.7807*	*12.3018*	*49.5705*	*11.2502*
Skewness		*2.098*	*2.984*	*2.539*	*2.091*	*3.519*
Std. error of skewness		*0.245*	*0.190*	*0.194*	*0.350*	*0.378*
Range		*3,970.00*	*29,900.00*	*98.00*	*298.00*	*48.00*
Minimum		*30.00*	*100.00*	*2.00*	*2.00*	*2.00*
Maximum		*4,000.00*	*30,000.00*	*100.00*	*300.00*	*50.00*

[a] Multiple modes exist. The smallest value is shown

Annex 3. Directives of NBE - Comparison between the recent (improved) and the previous

Old	New
Directive No. MFI/05/96 **Loan Policy, Limit, Period And Provisions**	**Directive No. MFI/17/2002 - Limits On Loans, Repayment Period and Provisioning Requirement**
2. Loan Policy In granting of loans, the institution shall give preference to the application of marginal farmers of the rural community and the application of the rural and urban communities engaged in micro-economic activities whose cash requirements are small	
3. Single Borrower Loan Limit Loans extended to any one borrower by a licensed institution shall not at any one time exceed Birr Five Thousand (Birr 5,000.-)	**3. Limitations on Loans** **3.1** A micro-finance institution may grant fresh loans exceeding the ceiling prescribed by Directive No. MFI/05/96. However, the aggregate amount of such loans extended in any one year shall not exceed 20% (twenty percent) of the total disbursement of the micro-finance institution in the preceding year. **3.2** The maximum loan amount extended to any one borrower in line with article 3.1 herein above shall not exceed 0.5% (half a percent) of the total capital of a micro-finance institution **3.4** All other loans of a micro-finance institution (a) extended to any one borrower shall not at any one time exceed Birr 5,000 (five thousand Birr)
4. Single Loan Period Repayment of loans shall not exceed 12 (twelve) months; however, considering the nature of the enterprise for which the loan is extended and repayment performance the institutions may reschedule such loans	**3. Repayment period** **3.3** The maximum repayment period for the loans extended in line with article 3.1 and 3.2 herein above shall not exceed 5 (five) years **3.4** (b) repayment period of [all loans other than specified in article 3.1] shall not exceed 24 (twenty-four) months.

Old	New
	4. Lending to Non-members and Type of Collateral Micro-finance institutions shall predominantly make credit available on the basis of group guarantee and to borrowers who have joined a membership arrangement. However, they may also lend on a limited scale to non-members on the basis of physical or other collateral
	6. Scope of Application The provisions of article 3(1), 3(2), [and]3(3) ... of these directives shall be applicable only on microfinance institutions re-registered with the national Bank of Ethiopia according to article 10 of the Licensing and Supervision of he Business of Micro-financing Institutions Proclamation No. 40/1996 and micro-finance institutions whose total deposits equal or exceed Birr 1 (one) million. Article 3(4) and 4 of the directives shall be applicable on all micro-finance institutions licensed in accordance with Proclamation No. 40/1996.
Effective Date These directives shall enter into force as of 21st day of October 1996	***7. Effective Date*** These directives shall come into force as of the 1st day of May 2002.
Directive No. MFI/10/98 **INTEREST RATES**	**Directive No. MFI/11/98** **Amendment of INTEREST RATES**
Micro-financing institutions may charge up to 15.5 % (fifteen and half a percent) interest per annum on their loans. However, the maximum interest rate so charged shall not exceed 15.5 % (fifteen an half a percent)	***2.2 Lending Interest rates*** The interest rates to be charged on loans and advances extended by a micro-financing institution shall be determined by the Board of Directors of each micro-financing institution.
5. Effective Date These directives shall be effective as of the 1st day of May, 1998	***5. Effective Date*** These directives shall be effective as of the 1st day of June, 1998

Annex 4. Household Survey questionnaire to assess the potential demand for microfinance services in the Afar National Regional State – the case of Gewane Woreda

General information

Region _____ Zone _____

Woreda _____ Kebele _____

House No. _____

Farmer's association _____

Household head code _____

Household head name _____

Part I - Demographic and social characteristics

1. Age (full year) ☐☐
2. Sex ☐
   1. Male 2. Female
3. Household size ☐
4. Ethnic group ☐
   1. Afar 2. Amhara 3. Oromo 4. Gurage 5. Tigre
   6 . Others/specify _____
5. Religion ☐
   1. Muslim 2. Orthodox 3. Protestant 4. Catholic
   5. Traditional religion 6. Others/specify
6. Marital status ☐
   1. Never married 2. Currently married 3. Widowed 4. Divorced
7. Level of education ☐
   1. Illiterate 2. Non-formal (read and write)
   3. Primary (1-6) 4. Junior secondary (7-8)
   5. Senior secondary (9-12) 6. University diploma
   7. University degree 8. Above university degree
8. Others/specify _____
9. Information on household members

No.	*Family members name*	*Relation-ship to the household*	*9.1 Sex Male Female*	*9.2 Age*	*9.3 Level of education*	*9.4 Marital status*	*9.5 occupation*
1							
2							
3							

- 9.2 age – age of children less than 1 year should be recorded as 0

- Code to 9.3

  1. Illiterate
  2. Non-formal (read and write)
  3. Primary (1-6)
  4. Junior secondary (7-8)
  5. Senior secondary (9-12)
  6. University diploma
  7. University degree
  8. Above university degree
  9. Others/specify _____

- Code to 9.4

  1. Never married 2. Currently married 3. Widowed 4. Divorced

- Code to 9.5

  1. Off-farm (specify)

     _____

     _____

  2. on farm (specify)

     _____

     _____

  3. unemployed

10. How many of your family members depend on your income (those who do not generate income totally) ☐
11. Do you have dependents that you support outside the household? ☐

    1. Yes 2. No

12. If yes, how many ☐
13. Total number of dependents inside and outside the household ☐

Part II – Economic Characteristics

14. Your status of employment ☐

    1. Currently working 2. Do not have job (unemployed/seeking employment)

15. If you are currently working, what is your primary occupation? ☐

    1. Off-farm (microbusiness activities) 2. On-farm 3. A combination of the two

(Encircle the number that states the occupation of the person)

On farm	*Off farm*
1. Crop production 2. Livestock production	3. Incense production 4. Wood works 5. daily laborer 6 Trader/merchant (Cereals, pulse, etc) 7 Local drink sale 8 food processing 9 weaving 10 traditional healer 11 selling of fire wood 12 selling of charcoal 13 'Gulit' and other petty trade 14 carpet making 15 handcrafts (embroidery, 'sifet', Selen (Gadeta), basket, Pottery) 16 government/non-government organization employee 17 others specify

16. Are you engaged in microenterprise activities? ☐

1. Yes 2. No

17. If yes,

17.1 How much capital was needed to start the business _____ Birr

17.2 What was the source of finance to start the activity?

1. Yes 2. No					
Own Saving	Equb	Credit from friends, relatives..	Given from friends, relatives..	Credit from moneylenders	Credit from traders/clan leaders

1. Yes 2. No				
Formal banks	NGOs credit programs	Property sale, (livestock, durable goods, production materials)	Wage income, self employment income, Apprenticeship payment	Inheritance

1. Yes 2. No			
Partner investment	Retrenchment (providence) capital	No finance required	Others/specify

17.3 Do you face any problem in running your enterprise? ☐

1. Yes 2. No

17.4 If yes, what do you think is the main problem of your business

1. *Yes* 2. *No*		
Shortage of capital/Lack of finance (credit) to expand it	Shortage/lack of raw materials	Inadequate work premise

Shortage of capital/Lack of finance (credit) to expand it	Shortage/lack of raw materials	Marketing	Low sales price

1. *Yes* 2. *No*				
Information	Problem in licensing	Inadequate skill	Taxes	High price of raw materials

1. *Yes* 2. *No*
Others/specify

17.5 How has the overall volume of your enterprise changed over the past three years?

1. Significantly increased 2. Slightly increased 3. Not changed

4. Slightly decreased 5. Significantly decreased ☐

18. If no to question No. 16, do you have any interest to be engaged in microbusiness activities?

1. Yes 2. No ☐

Part III – Basic social and Economic services

19. What is the condition of the market place for your products ☐

1. Excellent 2. Very good 3. Good 4. Fair 5. Poor

6. Bad

20. Is the distance to the market convenient? ☐

1. Yes 2. No

21. What is the current condition of market prices for your products? ☐

1. Significantly increased 2. Slightly increased 3. Not changed
4. Slightly decreased 5. Significantly decreased

Part IV – Household assets

22. Indicate which one of the following assets you have and quantify it in Birr

Indicate which one of the following assets you have	***Type of asset***	***if yes Quantify in Birr,***
• Livestock [1]		
• House/private		
• Agricultural implements	Plough/dagger 1. Yes 2. No	
	Sickle 1. Yes 2. No	
	Axe 1. Yes 2. No	
• Household consumer durables/utensils	Bed (metal, wood) 1. Yes 2. No	
	Table 1. Yes 2. No	
	Lamp, kerosene stove 1. Yes 2. No	
	Water vessel (clay, plastic, metal) 1. Yes 2. No	
	Others/specify 1. Yes 2. No	
• Expensive items	Tape recorder 1. Yes 2. No	
	Radio only 1. Yes 2. No	
	Jewelry (gold, bronze ...) 1. Yes 2. No	
	Others/specify	
• Savings in different places	1. Yes 2. No	

[1] Code for livestock (the fifth column is to be filled by the researcher)

Type of livestock	***No. of livestock you own***				***Estimated average unit price***	***Total value of livestock***
	Total number of livestock in the household	***Number not owned but cared for***	***Number owned but away***	***Number owned and present at your home & out of home)***		
Ox						
Camel						
Bull						
Cow						
Heifer						
Calves						
Sheep						
Goat						
Horse						
Donkey						
Hen						

Part V – Household Monthly Income

23. How much is your total household income per month from all sources?

Source of income		***Amount in Birr***
Enterprise (off farm activities) (site the activities) • _____Amount earned _____ Birr • _____Amount earned _____ Birr • total earning _____ Birr		
Sale of livestock/year [1]		
Government/NGO employment	Salary	
	Pension (retired)	
Dairy		
Agricultural crop (cereal production)		
Borrowing from other source (site the sources)		
Gift in the form of article (specify the item)		

Source of income	*Amount in Birr*
Property sale	
Renting house	
Remittance in the form of cash from relatives	
Food aid	
Others/specify	
Total	

Note: ask the household its weekly income out of off-farm activities and try to estimate the value for one month. I.e. weekly income * 4 = monthly income

[1] Code to income from sale of livestock.

Type of livestock	*Sold in the last 12 months*		
	Quantity	*Unit price*	*Total revenue*
Ox			
Camel			
Bull			
Cow			
Heifer			
Calf			
Sheep			
Goat			
Horse			
Donkey			
Hen			

24. Is your monthly income enough to cover your monthly expenditure? ☐

1. Yes 2. No

25. If no, how do you supplement your monthly income ☐

1. Borrowing from informal moneylenders 2. Borrowing from relatives, friends
3. Borrowing from formal banks 4. Borrowing from traders 5. Borrowing from NGOs 6. Selling assets 7. Borrowing from rural cooperatives
8. Others/specify _____

Part VI – Problems and Coping Mechanisms

26. Have your household faced the problem of food shortage in the last five years? ☐

1. Yes 2. No

27. If yes, what are the main causes

Causes of the problem	*1. Yes* *2. No*
Absence of finance/credit facilities	
Shortage of grazing land	
Cattle disease	
Shortage of water/lack of rain	
Shortage of agricultural implements and improved inputs	
Infertile land	
Inadequate market	
Inadequate social & economic services	
Product price fluctuation	
Shortage of farm ox	
Others/specify	

Part VII - Saving and Credit Habit

28. Did you take at least 20 Birr credit in the last three years? ☐

1. Yes 2. No

28.1 If yes,

No.	*Application*	*28.2 Amount asked*	*28.3 Amount received*	*28.4 time (in days) required to process the loan. OR time between applying for the loan and receiving it*
	1st application			
	2nd application			
	3rd application			

Characteristics	1. Yes 2. No
28.5 Sources of the loan	
• Formal banks	
• Relatives, friends, or neighbors	
• Traders	
• Informal moneylenders	
• NGO (name)	
• Rural cooperatives	
• Others (formal financial sector)	
28.6 Purpose of the loan	
• To invest in livestock production	
• To invest in farming/agricultural activities (buy agricultural implements and improved input)	

Characteristics	1. Yes 2. No
• To invest in non farm activities (promote small business, Transformation of enterprise, business expansion For income generation activities, to buy inputs)	
• For consumption (To buy food, to overcome shocks)	
• Other purposes (Hedging against risk, to improve home, to construct house)	
• To repay earlier debts	
• To buy consumer goods/durables such as house, radio, tape, television, bed, table, chair, electric 'mitad', gold, watch, sofa, cupboard, etc…	
• To cover the cost of ceremonies	
• To cover the cost of education, and health	
• To cover the cost of housing	
• Others	
28.7 Collateral required	
• land, cattle, or house	
• Peer pressure	
• others	
• none	
Household head who obtained loan	
• male	
• female	

28.8Have you settled all the outstanding debts you borrowed from different sources?

1. Yes 2. No ☐

28.9If you did not settle all of your outstanding debts, why?

	1. Yes 2. No
Inadequate/Low commercial activity/limited market	
Family illness	
Natural disaster	
General national problem	
In accessibility to market and services at reasonable price	
Improper use of credit (Utilization of the credit for consumption)	
Religious belief	
Crop failure/animal disease	
Non-affordability	

	1. Yes 2. No
Low prices for my products/livestock	
Repayment scheduled at leaner seasons	
Other administrative disincentives (mention it)	
Other/specify	

28.10 Did you pay interest for the loan you receive? ☐

1. Yes 2. No

28.11 If yes, how much was the lending interest rate? _____ Percent

28.12 If no, why? _____

29. What are the traditional means of accessing credit in your country? _____

_____

30. Do you need credit ☐

1. Yes 2. No

31. If you need credit,

31.1 How much credit do you need?_____ Birr

31.2 Are you willing to pay interest rate or fee for the loan you obtain? ☐

1. Yes 2. No

31.3 If yes, how much interest do you think reasonable to pay for the services?

_____ Percent

31.4 If no, please give us your reasons _____

31.5 What types of lending methodology do you prefer and why? ☐

1. Individual lending with collateral (specify the type of collateral you have)
2. Individual lending without collateral
3. Group lending
4. Compulsory savings
5. Others/specify

32. Do you regularly save? ☐

1. Yes 2. No

33. If yes

33.1 in what form

1. Yes 2. No		
In kind	In cash	Others/specify

33.2 If in kind, in what form?

	1. Yes 2. No
grain and cash crop	
Animal	
Gold, silvers, jewelry, & other valuables	
Raw materials and finished goods	
Construction materials	
Agricultural inputs	
Saving in labor obligations & expected reciprocation for past contribution	
Others/specify	

33.3 If in cash, where

1. Yes 2. No					
Home	Formal banks	ROSCAs	NGO assisted programs	Informal moneylenders	Others /specify

34. What are the traditional means of saving in the community? _____

35. Are you a member of any of the ROSCAs in your place? ☐

1. Yes 2. No

36. If yes,

36.1 how much is the monthly payment _____ Birr

36.2 how much money do you get when you finish the Equb _____ Birr

36.3 for what purpose did you use the Equib money ☐

1. For Household consumption/to buy food 2. To buy consumer durables
3. To meet health expenditures 4. To construct/repair house
5. To invest in microbusiness activities 6. Others _____

37. are you a member of Iddir in your locality ☐

1. Yes 2. No

38. If yes,

38.1 how much is the monthly payment _____ Birr

38.2 how much money do you get when you finish the iddir_____ Birr

39. What are the traditional means of insurance in the community?

When there is disaster (like death of cattle, cattle disease, robbery …)

_____

Assessment of the enumerator on the respondent

No.	***Name of the enumerator*** ----------	***Code of the enumerators*** _____		
		Date of survey		
		1st	2nd	3rd
1	Completed			
2	Not found			
3	Not willing to respond			
4	Partially completed			
5	Others/specify			
	Time started			
	Time completed			

Survey control roster

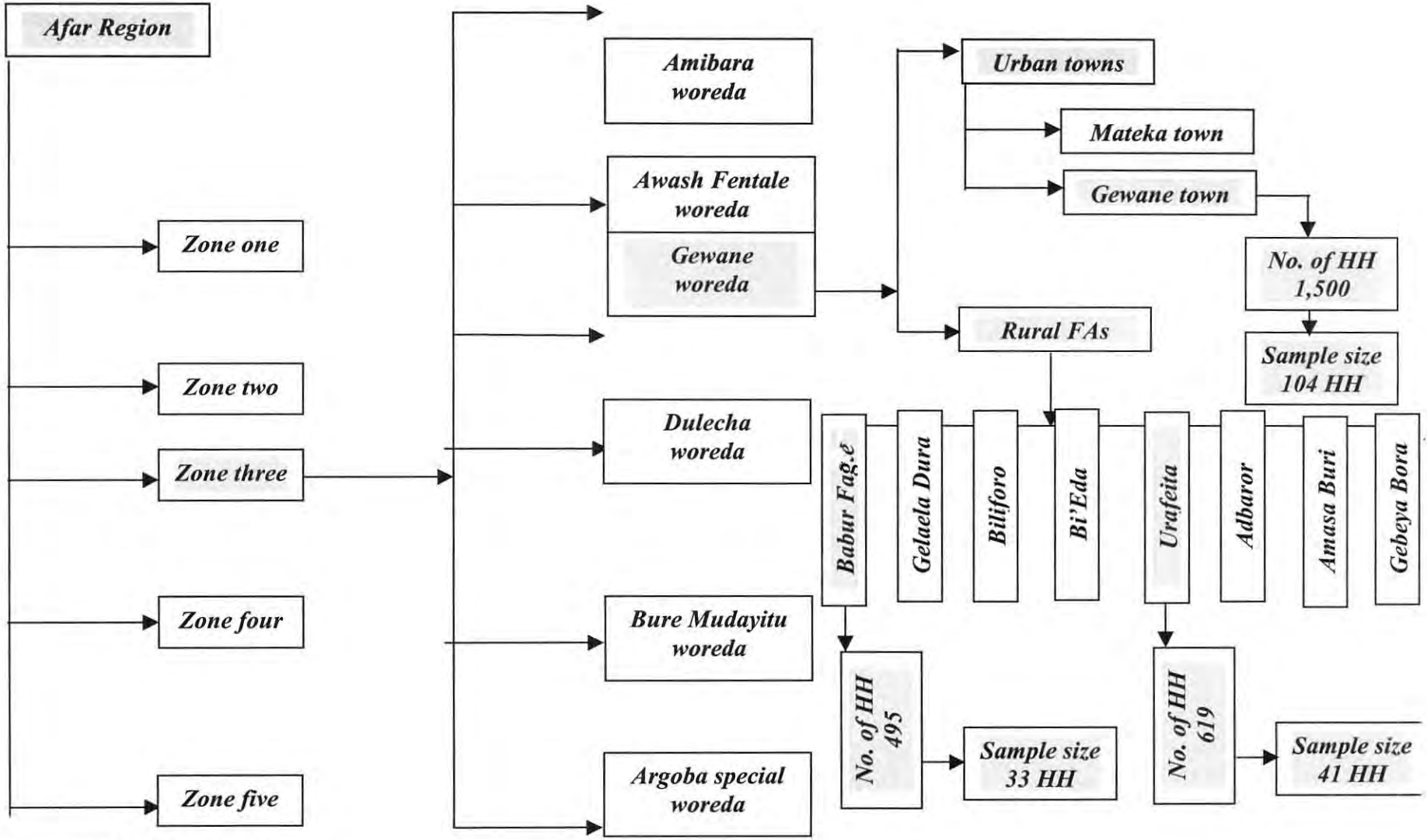
(to be filled by the supervisor and editor)

Name of the researcher	***Date/Month/Year***	***Remark***
Date of supervision		
Date of edition		
Date of approval by the researcher		

Remark by the supervisor/editor _____

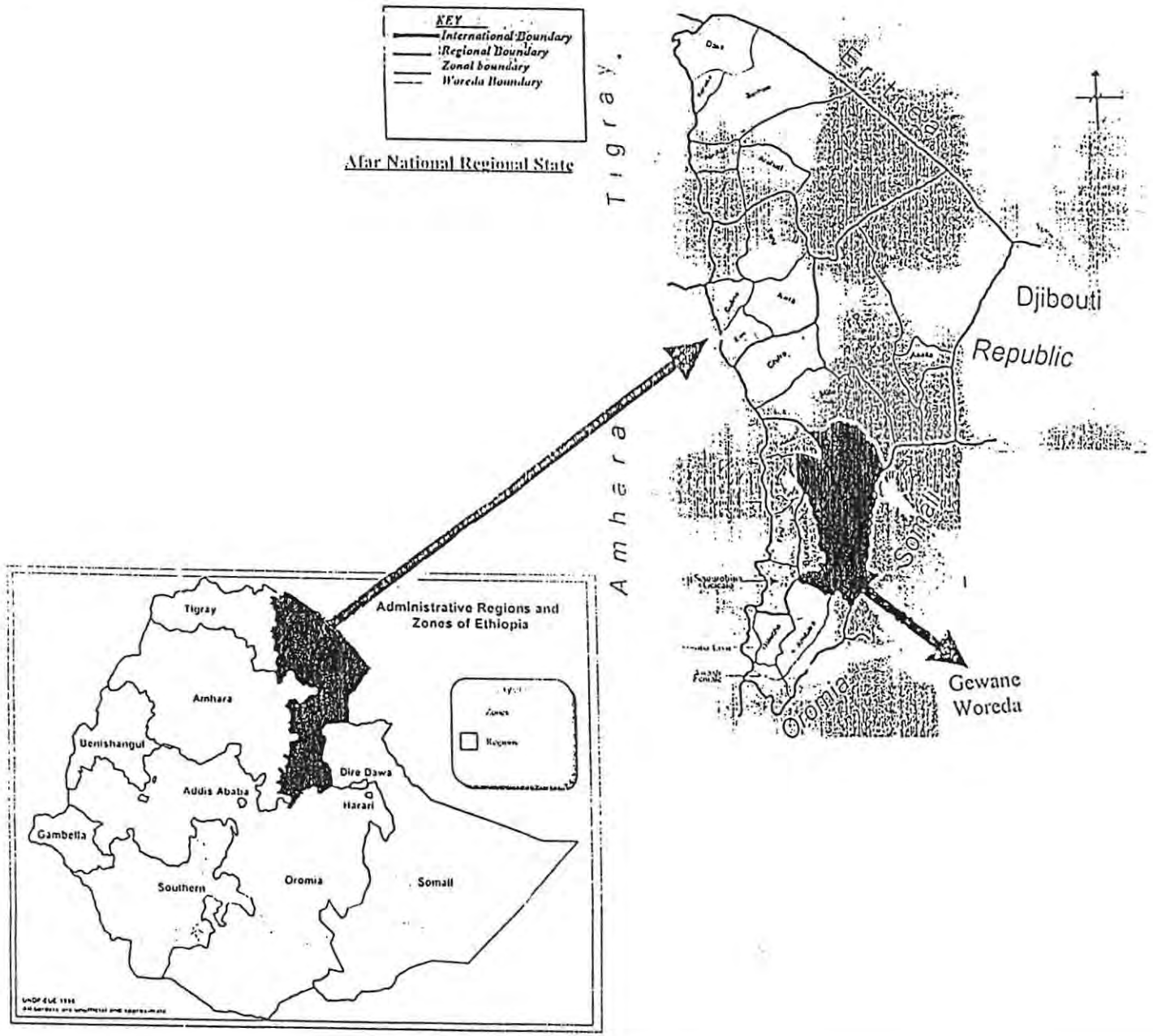
_____

Annex 5. Sampling of zone, woreda, town, farmers associations and households



Annex 6. Map of the study area

Annex 6. Map of the study area



DECLARATION

I declare that this thesis is my original work and has not been presented for a degree in any University and all the sources of materials used for the thesis are duly acknowledged.

Name: Seifu Ali

Signature: _____

Date: June, 2002

Place: Addis Ababa University

This thesis has been submitted for examination with my approval as a university advisor

Wolday Amha (Ph.D.)

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