

# *Microfinancing and Poverty Reduction in Ethiopia\**

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## ***Abstract***

*Following the success of the Grameen Bank in Bangladesh, the importance of microfinancing for poverty reduction has gained momentum in the policy agenda of several countries. Despite the fact that results are inconclusive, a bulk of the literature indicates that microfinance could help the poor in many respects such as serving as a buffer against shocks and could work as an instrument of consumption smoothing. It could also help households to increase their income and assets; help them increase consumption expenditure and develop savings habits.*

*This study was conducted with the objective of investigating the impact of Amhara Credit and Savings Institute (ACSI) in Ethiopia taking a sample of 500 households from five different zones in the Amhara Region. Using different statistical techniques (such as Chi-Square, Paired T-test and ANOVA) and econometric analysis (Logistic Regression), the study has found out that the poor have smoothed their income in the study area. However, there was fungibility in the sense that clients were using the loan for unintended purposes. It was also observed that clients lack technical skills to engage in more profitable business activities. This may indicate that financial services alone could not be sufficient enough to raise the living conditions of the poor. Therefore, as a pointer to future endeavors, the current services of ACSI need to focus on business training skills apart from loan provision to help the poor move beyond day-to-day survival and plan for their future. In short, it is important that ACSI facilitates or directly involves in providing 'credit-plus' services to its clients.*

**Key Words:** Poverty, Poverty Reduction, Microfinance, Impact, ACSI

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## ***1. Introduction***

### ***1.1 Poverty, MDGs and PRSP in Ethiopia***

Ethiopia, a country of more than 70 million is grappling with all sorts of problems that range from lack of food (to feed its expanding millions) to poor governance. Its people derive their livelihood mainly from traditional, subsistence agriculture and suffer from lack of access to the essentials for humane existence. In terms of the recommended calorie intake, which is 2,200 per adult per day, Ethiopia is by far behind many least developed countries. Considering food baskets and non-food items, an estimate by MoFED (2002) shows that 44% of the population are below the poverty line. The problem is highly pronounced in rural areas more than it does in urban centers with coverage of 47 and 33 percent of the respective population. As far as Human Development Index is concerned (which is 0.244 as per the report of UNDP 1998), Ethiopia is positioned 170 out of 174 countries in the year 2000/1 (World Bank, 2001).

The above-mentioned facts and figures indicate that the government's promises are not realized. Even at worse, Ethiopia is still fraught with recurring famines, low literacy, widespread poverty and lack of good governance. Other challenges include stemming HIV/AIDS, reducing discrimination against women, building infrastructure and creating jobs. The country also remains highly dependent on foreign aid (though some of the donor communities indicated to withhold direct budgetary support following disputed elections of May 15, 2005).

Ethiopia is one of the 70 countries that developed a poverty reduction strategy paper (PRSP). This PRSP is becoming the operational framework to translate the global MDG targets into national actions. This document is serving as a practical building block to address the country's challenges. As per the UN declarations, by the year 2015, the poverty situation of the country should decrease by half from its level in 1999. The most important strategies through which this goal is to be achieved include capacity building, improvement in the legal system, civil service reform, devolution and empowerment. More importantly, the PRSP document emphasized that the economy of the country should grow by 5.7% per year to get its Millennium Goal achieved. In the PRSP document, institutions and the political economy of society are considered key in influencing economic growth and its impact on poverty. It also indicates that reform of the legal system, enforcing contracts, ensuring property rights, reducing conflicts (internal/external), and improving the efficiency of the bureaucracy can

generate a growth pattern that ensures faster reduction of poverty and the achievement of the Millennium Development Goals in the country (MoFED, 2002).

The major concern of the Ethiopian government in its PRSP is to give due emphasis to the country's all and basic industry-agriculture through its strategy called ADLI. In the document, microfinance is indicated among the specific means that is given greater emphasis and is expected to play essential role for reducing poverty in rural areas of the country where the bulk of its populace dwell. Thus, most of the microfinance services providing institutes have articulated creating a small and easily accessible loan to the poor as their primary objective with the expectation of fostering pro-poor growth.

Despite these ambitious plans, however, the MDG (2004) report on the country has indicated that some of the goals are already off target (Table 1).

**Table 1. Status of Selected MDG Targets for Ethiopia**

Selected MDG Indicator	1990	2000	2004-05 PRSP Goals	Achieve Global MDG by 2015?
National Poverty	48%	44.2%	40%	Off target
Gross Enrolment (Primary)	32%	57.4%	65%	Possible
Female Enrolment (Primary)	29.4% <sup>x</sup>	52%	62%	Possible
Under Five Mortality Rate	190	167	160	Off target
Maternal Mortality Rate	1400 <sup>x</sup>	500-700	400-450	Off target
HIV/AIDS Prevalence Rate	N/a	7.3%	7.3%	Possible
Access to Clean Water	19%	30%	39.4%	Possible in urban areas

**Source:** - Ethiopia MDG Report, 2004 (<sup>x</sup>) data refer to 1995-96

The above table indicates, however, that there are still potential possibilities for the microfinance industry and other sectors of the economy to play their level best in pushing the country's economy forward to achieve some of the goals specified.

### **1.2 Statement of the Problem and Justification**

Although microfinance programs and institutions have become increasingly important safety nets of the poor, knowledge about the achievements of these strategies remains only partial and controversial. Several studies indicate that microfinance has positive impacts in reducing poverty (Holcombe, 1995; Hossain, 1988; Remenyi, 1991; Schuler, Hashemi and Riley, 1996; Hulme and Mosley, 1996; Pitt & Khandker, 2003 and Khandker, 2003). On the other hand, there are studies that indicate pessimistic kind of result on the impacts of microfinance program initiatives towards reducing poverty (Buckley, 1997; Montgomery, 1996; Rogaly, 1996; Wood and Shariff, 1997). There are also quite a number of research works that have been done on microfinance-poverty linkages in Ethiopia. However, some of the studies focus

on very small areas and produce hard-to-generalize statistics on a wider perspective. More importantly, in the *Amhara* Region, where this study was conducted, studies are scanty. Therefore, this study is designed to fill this gap.

### ***1.3 Objectives and Research Questions***

The general objective of this research is to analyze the impact of MFIs on poverty reduction in the *Amhara* Region of Ethiopia through both qualitative and quantitative data gathered from the study area. "*Man is a chooser. All his rational choices involve the weighing up of costs and benefits.*"<sup>1</sup> Hence, the writer's conjecture here is to explore the benefits gained from applying microfinancing as a mechanism to reduce poverty and pave ways to meet MDGs in the country.

Therefore, it is hoped that the study will answer the following questions:

- How well is ACSI working regarding outreach?
- What welfare difference has ACSI brought on the clients?
- What alternative strategies could be envisaged to help the poor escape poverty?

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<sup>1</sup> Gerard Radnitzky and Peter Bernholz (1986:285). *Economic Imperialism: A Professors World Peace Academy Book*. Paragon House Publishers, New York

## **2. Review of Literature**

### **2.1 The Emergence of MFIs**

For quite a long time, formal financial institutions were not serving a useful purpose for the poor. In developing countries the poorer section of the community did not get access to formal financial sectors. They were simply kept out of the reach of the formal financial institutions for several reasons. First, formal financial sectors require collateral and credit rationing. Second, they prefer for high-income clients and large loans. Third, the processes and procedures of providing loan are bureaucratic and lengthy. Fourth, they are often urban-based and give lending to those engaged in trade and industry. Fifth, they usually consider the demand for loan by the poor as unattractive and unprofitable (Bouman, 1984, cited in Padma and Getachew, 2005; Chowdhury (N.D); Ghate, 1992); Khandker, 1998; and Henk M, 1998). There is no exception in Ethiopia as rightly pointed out in several studies (See Gebeyehu, 2002; Mulat *et al*, 1998 and Wolday, 2000, 2001 and 2002).

On the other hand, informal financial sectors were not good either. They usually require high interest rates, which the poor cannot afford to pay. These situations have also found to restrict the access of the poor towards informal financial sectors. Morduch (1998) argued in his study conducted in Bangladesh that since moneylenders operate with little competition, they charge high interest rates. Generally, according to Hulme (2000), capital markets in developing countries do not work well so much so that they do not favour any development endeavour by the poor.

The year 1974 is a landmark in the history of microfinance development. It was by then that Professor Muhammad Yunus, a Bangladeshi economist introduced the idea of providing the poor with small loans. While he was on a field trip to an impoverished village with his students, he met a woman and interviewed her. She was making a living from the sale of stool (prepared from bamboo). From the interview he understood that the woman was making only a penny margin of profit for each stool. Then he reasoned that the woman would raise herself above subsistence level if she were given the loan with a more advantageous rate: then, he did it from his own pocket. In 1983 he formally established the Grameen Bank (meaning “village bank”). Today, in Bangladesh, Grameen has 1,175 branches, 12,500 staff and 2.4 million borrowers. The geographical coverage is 41, 000 villages, which means more than 60% of the total villages in the country (Visit <http://www.globalenvision.org/library/4/537/>).

Thus, the limitations of financial institutions in providing the poor with credit have become the driving forces behind the emergence of MFIs. Nowadays, microfinance institutions are burgeoning to provide the poor with financial as well as technical assistance. Today replications of the model are proliferating all over the world owing to its importance. While emphasizing the importance of microfinance, Kofi Anana, Secretary General of the United Nations once said, *“Microcredit is a critical anti-poverty tool—a wise investment in human capital. When the poorest, especially women, receive credit they become economic actors with power. Power to improve not only their own lives but, in a widening circle of impact, the lives of their families, their communities, and their nations.”* The accomplishment of MFIs is, therefore, a manifestation of a paradigm shift that defeated the old notion that the poor are not “creditworthy.”

## ***2.2 Brief Description of MFIs in Ethiopia***

Since the takeover of the present government in 1991, considerable attempt has been made to liberalize the financial sector. To this effect, Proclamation No. 84/94 was issued, which allows private domestic investors to participate in banking and insurance activities, which were previously monopolized by the government. However, the issuance of this proclamation alone did not totally solve the financial problem of the economically active poor people in rural and urban areas (Seifu 2002).

Another Proclamation, No. 40/96 was issued to solve the problem of the delivery of financial services to the poor. Following the issuance of this proclamation the microfinance industry of Ethiopia showed a remarkable growth in terms of outreach and sustainability. Furthermore, the National Bank of Ethiopia issued a new directive on May 2002 to improve the regulation limits on loan size (Br. 5000), repayment period (one year), and lending methodology (social collateral).

The government also started micro-enterprise lending program after signing a development credit agreement (that is Market Town Development Project) with International Development Association (IDA) on March 30, 1990) which has been managed by Development Bank of Ethiopia. The objectives of the program were to finance very small businesses and household income generating activities, and to provide at least 50 percent of the loan to women entrepreneurs (implementation completion report, MTDP, 1999, cited in Asmelash, 2003).

Currently, there are 23 microfinance institutions registered and licensed under the National Bank of Ethiopia and reaching 905,000 credit and some saving clients (Getaneh, 2005). The industry is non-competitive and provides uniform credit and saving products to all clients (Wolday, 2002). The development of these MFIs could be viewed from two angles: (i) *as potential market growth for financial services* and (ii) *as a paradigm shift by the government and NGOs from mere relief assistance to mobilizing the community towards sustainable development* (Fiona, 1999, cited in Wolday, 2000). The table given below indicates the MFIs in the country.

**Table 1 MFIs in Ethiopia**

No	MFI	Year established	Region Operating	Main Funding Sources	Products
1	ADCSI	2000	Addis Ababa	Shareholder capital, Savings and Grants	Loans and Voluntary Savings
2	AVFC	1998	Addis Ababa	Grants, Loans, Savings and Shareholder Capital	Loans, Voluntary Savings
3	Aggar	2004	Addis Ababa		
4	ACSI	1997	Amhara	Grants, Loans	Loans, voluntary savings, fund transfer services and pension management
5	Asser	1998	Addis Ababa, SNNP	N.A	N.A
6	BMI	2001	Benishangual	N.A	N.A
7	BGM	1999	Oromia	Grants, Loans, Savings and Shareholder Capital	Loans, voluntary savings
8	DCSI	1997	Tigray	Grants, Savings and Shareholders' capital	Loans (regular, agricultural input and agricultural package), savings and money transfer
9	EMI	2000	Oromia	Grants, Loans, Savings and Shareholder Capital	Loans, voluntary savings
10	GMI	1997	Addis ababa	Grants, Loans, Savings and Shareholder Capital	Loans, voluntary savings
11	Mekket	1999	Amhara		
12	Meklit	2000	Addis Ababa & Oromia	Grants, Loans, Savings and Shareholder Capital	Loans, voluntary savings
13	Metemamen	N/A	Addis Ababa	Grants, Savings and Shareholder Capital	Loans
14	Omo	1997	SNNPRS	Grants, Savings and Shareholder Capital	Insurance, Voluntary savings, Loans
15	OCSI	1997	Oromia	Grants, Loans, Savings and Shareholder Capital	Insurance, Voluntary savings, Loans
16	PEACE	1999	Oromia, Amhara & SNNP	Grants, Loans, Savings and Shareholder Capital	Voluntary savings, Loans
17	Shashemene	2001	Oromia	N.A	N.A
18	Sidama	1998	SNNP	Grants, Loans, Savings and Shareholder Capital	Loans, Voluntary savings, Insurance
19	SPFI	1997	Addis Ababa	Grants, Loans, Savings and Shareholder Capital	-
20	Wasasa	2000	Oromia	Grants, Loans, Savings and Shareholder Capital	Loans, Voluntary savings
21	Wisdom	1998	Amhara & SNNP	Grants, Loans, Savings and Shareholder Capital	Loans, Voluntary savings, Insurance

Source: [http://www.mixmarket.org/en/home\\_page.asp](http://www.mixmarket.org/en/home_page.asp)

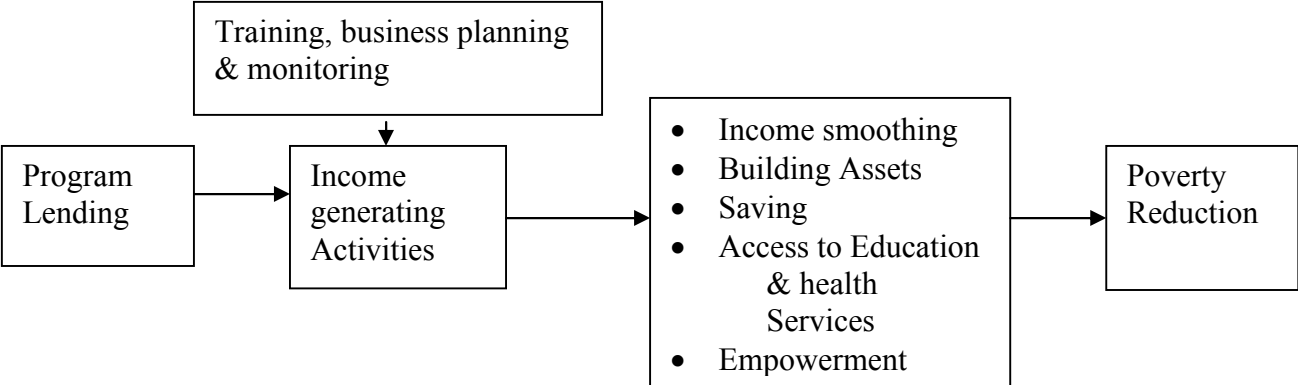
The proliferation of microfinance institutions could indicate the emphasis given to the strategy to fight against poverty in the country. Microfinance initiatives are policy instruments (prime components of the new development strategy). They can create an enabling environment for the poor to increase output and productivity by inducing technology

adoption, improving input supply, increasing income, reducing hunger and thereby reducing poverty (Wolday, 2001).

**2.3 The Impact Analysis Framework**

The impact of microfinance initiatives can be seen from three different but interrelated aspects. These are economic, socio-political/cultural and personal/psychological. It means that large MFIs reaching hundreds of thousands of clients may have three aims: 1) bringing changes in economic growth in a region or sector, 2) bringing a shift in the political aspect of a particular district, and 3) improving borrowers’ sense of self. These impacts could be evaluated from two perspectives. The first one is the financial system approach (*the intermediary school*) and the second one is the client-oriented impact analysis approach (*the intended beneficiary school*). The first one focuses on changes in the organization (MFI) and its operations. And as such, its proxy indicators are out reach and sustainability of the program (Goetz and Gupta, 1996; Hulme, 2000, Ledgerwood, 1999 and Yaron, 1997). However, what clearly indicates ‘who benefits’ and ‘how’ is *the intended beneficiary school*, which is the focus of this study.

Studies suggest that many microfinance programs have attained the objective of reaching a large number of clients with small amounts of resources. Women are believed to be the main participants and beneficiaries of microfinance programs in many countries. Yet, many women lack enough power within households to use their loans to improve productivity and welfare (Goetz and Gupta, 1996). In this study, the impact of microfinance is assessed taking both households as a unit of analysis, but definitely both male and female-headed heads are considered. The model given below specifies the linkages of variables involved in the study.



*Source: - Adapted from Hulme (2000)*

The above model indicates that the independent variable is the program lending. The mediating variables indicate that there are modified behaviours and practices over a period of time. These behaviours are depicted under the idea that clients will engage in income generating activities that would help them smooth their, otherwise, meager incomes, accumulate assets, save more, send their children to schools, and have a say on matters that affect their and their families' lives etc. Training, business planning & monitoring are other intervening variables.

#### ***2.4 Microfinance and the Poor: Empirical Literature***

When one goes through the bulk of literature on the impact of microfinance, one can find quite different results, which are generally inconclusive. In some cases, microfinance is said to have brought positive impacts on the life of the clients. A growing database of empirical studies shows that microfinance has positive impacts to boost the ability of poor people to improve the conditions in which they live. Research works indicate that the poor have taken advantage of increased earnings to improve consumption levels, send their children to school, and build assets.

In some other instances, microfinance is said to play insignificant role towards mitigating the problem of the poor. But looking at the positive impacts, several studies indicate that microfinance allows poor people to increase their incomes by starting new enterprises or expanding existing ones. The argument is that through diversified sources of income, the people could be able to shield themselves against external shocks. Savings and micro-insurance services could also allow poor individuals to plan for future expenses, cope with stochastic crises and cover unanticipated expenses. Studies of microfinance programs and their clients indicate the following impacts on poverty and hunger. In Indonesia, 90% of BRI clients surveyed on the island of Lombok had moved above the poverty line, with income increases averaging 112 percent (Panjaitan-Drioadisuryo and Cloud, K, 1999). In Zimbabwe, extremely poor clients of Zambuko Trust, a local MFI, increased their consumption of high-protein foods at a time when food expenditures across the country as a whole were decreasing (Barnes, 2001). In Tanzania/Zanzibar, the income and assets values of borrowers are almost twice that of non-borrowers (REPOA, 2005). In India, in addition to increased economic well-being, SHARE clients have shown a striking shift from irregular, low-paid daily labour to more diversified sources of income, with a strong reliance on small businesses (Simanowitz and Walters, 2002). Studies of two separate microfinance institutions in Bangladesh

documented a similar shift from informal labour to self-employment among MFI clients. As a result, overall wage rates in the villages served by the microfinance programs also increased (Zaman, 2000 and Khandker, 1998).

Pitt and Khandker (1998) also indicated that microfinance has brought positive marginal impacts on consumption in Bangladesh. They showed that microfinance has become a promising strategy to shield the poor from vulnerability through consumption smoothing as well as building assets.

Using the assumption of perfect targeting, Khandker (1998) estimated that for every 100 taka lent to a woman and a man, household consumption increased by 18 taka and 11 taka respectively. He indicated that moderate poverty and ultra-poverty were reduced by 15% and 25% respectively for households in BRAC. The rate was even lower for old borrowers than new ones. This is to mean that number of loans was found to be important in impacting the life of clients positively. Strengthening this assertion, Montgomery *et al* (1996, cited in Zaman, 2001) pointed out that third time borrowers were found to get higher incomes and register growth in their enterprises. Mustafa *et al* (cited in Zaman, 2001) also found out that older borrowers were found to have greater asset values and household expenditures on average than new borrowers.

Using the same data as Khandker did, Morduch (1998) did not find the same result. Morduch noted that Khandker's eligibility threshold was flawed. Thus, he used an alternative approach and corrected for the selectivity biases. Eventually, he did not find an evidence to suggest that microfinance can reduce poverty *per se*. Using the difference-in-difference strategy, he found out that microfinance has proved to be a viable tool towards reducing vulnerability showing that consumption variability was 47%, 54% and 51% lower for eligible Grameen, BRAC and BRDB households respectively. However, he indicated the difficulty he faced to show whether microfinance could increase consumption levels or schooling as compared to control groups in contrast to what Khandker indicated.

In another study, Khandker (2003) found out that microfinance is serving a useful purpose in benefiting the poorest segment of the clients and in reducing poverty in Bangladesh. The result of his study was inconsistent with what Hulme and Mosley (1996) argued. He indicated that females are found to benefit more than males from microfinance services. But, the poor are found to spend much on food, not on other income-generating activities. According to

Khandker, enhancing the skill of the clients is very important in addition to providing them with credit. The benefit of microfinance is evaluated from the perspective of meeting people's short-term problems as far as Khandker's analysis is concerned.

It is well known that the majority of microfinance programs specifically target women clients and provide them with direct control over resources because access to microfinance services is believed to open up greater livelihood opportunities for women and thereby allow for their increased participation in the economy. As a result, many MFIs consciously design their programs to empower women, with the goal of increasing their voice in decisions (family, economic, social, political) that affect their lives. The following studies could substantiate this.

After joining Freedom from Hunger affiliates in their respective countries, women clients in Ghana were found to play a more active role in community life (MkNelly and Dunford, 1998) and those in Bolivia (Ibid, 1999) were found to be actively involved in local government. On the other hand, a survey of 1300 women in Bangladesh showed that MFI clients were significantly more empowered than non-clients in terms of physical mobility, asset ownership, control of productive assets, decision making, and political and legal awareness (Hashemi, Schuler, and Riley, 1996).

A gender impact study of four microfinance programs in Bangladesh concluded that women clients experienced positive change at a personal level, in the form of increased self-worth, as well as the household level, in the form of decreased violence and increased affection resulting from their contribution of resources (Kabeer, 1998).

Apart from the above-mentioned positive impacts of microfinance, access to financial services whether credit, savings, or insurance enable many poor people to access better health care services. A study of client households of CRECER, an MFI in Bolivia showed higher rates of breast-feeding, and DPT immunizations among children, as compared to non-client households (MkNelly and Dunford, 1999). A similar study in Ghana showed higher rates of breast-feeding among MFI clients and better health outcomes among their year-old children, as compared to non-clients (MkNelly and Dunford, 1998). In Uganda, clients of FOCCAS demonstrated better health-care practices: 95 percent used improved nutritional techniques for their children and 32 percent tried at least one AIDS prevention technique. Respective rates for non-clients were 72 percent and 16 percent (Barnes, Morris, G. and Gaile, G. 1998).

Another study indicated that a 10 percent increase in credit to women MFI clients was associated with a 6.3 percent increase in mid-arm circumference of daughters a common measure used to identify malnourished children (Pitt and Khandker, 20003). Two other studies in Bangladesh show that contraceptive use was significantly higher among Grameen clients (59 percent) than among non-clients (43 percent) (Hashemi, Schuler, and Riley, 1996).

Thus, given the overwhelming evidence, it appears that microfinance could unlock ways to achieve some of the MDGs (at least MDGs 1-5).

The empirical literature in Ethiopia is summarized in the table given below.

**Table 2 Studies on Microfinance in Ethiopia**

<i>Study</i>	<i>Coverage</i>	<i>Methodology</i>	<i>Results</i>
Tsehay & Mengistu (2002)	Addis Ababa (Meklit and Addis Credit and Saving) & Oromia (Oromia Credit & Savings S.C and Bussa Gonfa)	New borrowers as control group and frequent borrowers (> one year) as treatment group. Only women samples were taken. Cross-tabs and ANOVA were used.	Most women lack entrepreneurial skill. But still what the MFIs providing was only finance. Other aspects of assistance like business planning and monitoring, training etc are missing. The activities women are engaged are small and traditional like petty trading, pottery and basket making, which are less risky and have low return. Despite these shortfalls, positive impact has been observed in socio-economic empowerment of women in the study areas.
Wolday (2000)	All MFIs in Ethiopia	Sustainability (measured in terms of generating enough revenues) and Outreach (measured in terms of the number of clients, loan size, percentage of loans to clientele below the poverty line, percentage of female clients, range of financial and non-financial services offered to the poor, the level of transaction costs levied on the poor and the extent of client satisfaction with respect to financial services.)	Over a brief period of time, MFIs in Ethiopia have shown remarkable improvement in terms of loan outstanding and savings. The clientele served by the MFIs in Ethiopia are mainly the rural poor. About 44 percent of the clients of MFIs in Ethiopia are female, relatively higher outreach of MFIs by all standards of measurement. The two government supported MFIs are ACSI and DECSI, which account for 80% of total clients in the industry. MFIs in Ethiopia have high repayment rate, which varies from 94 to 100 percent.
Kejela (2005)	Economic diversification at six districts (a total of 35 watersheds) in Central	Data were collected through focus-group discussions, key informant interviews, case	While the rich constitute 13% of the total population in the area, the poor and destitute consist 41% and 20% respectively. The

	Tigray	studies and observations. For data analysis, proportionate pilling exercises were done, and financial returns to labour and capital were analysed.	remaining is medium. Financial returns to labour and capital are positive for wheat, barley, horse bean production, goat and oxen fattening, irrigated onion and pepper production. Petty trade is of little importance for the household's income in the study area. Peer group collateral approach of credit service delivery needs to be replaced by another mechanism such as lending individual farm enterprises.
Daba (2004)	Eastern Wollega Zone of Oromia Region	108 Clients and 108 non-clients were considered. Logit model and descriptive statistics were used. Outreach and sustainability were used for the analysis.	Clients have shown improvement in their incomes. The out reach has shown increment and the loan repayment performance has been 100% for several years. But adequate business advising and supervision are missing.
Berhanu (1999)	The Case of the project office for the creation of small-scale business opportunities in Addis Ababa	Probit Model to investigate determinants of loan repayment performance	While education, timely loan granting and the use of accounting system negatively affect the proportion of loan funds diverted, loan size, dependency ratio and consumption expenditure positively affect loan diversion.
Abreham (2002)	Private borrowers around Ziway	Determinants of loan repayment performance using tobit model	Education, access to other sources of income, and related work experience prior to taking the loan were found to enhance loan diversion.
Bekele <i>et al</i> (2003)	309 borrowers of input loan in Oromia and Amhara Regions	Logistic Regression	Borrowers who took larger loans were able to show better repayment performances. Ownership of livestock was also a positive factor affecting loan repayment performance. On the other hand, late disbursement of inputs was found to be a problem.
Jemal (2004)	11 PAs out of 14 in Gebreguracha town, Oromia region. The sample size was 203 (9.3% of the total beneficiaries of the program)	Determinants of loan repayment performance two limit Probit Model. Impact on clients was analyzed as before and after.	The most significant determinants of loan repayment are education, loan size, loan diversion, availability of other credit sources, loan supervision, loan repayment period, income and value of livestock. Clients' income has shown improvement after they have joined the program; the credit scheme has

			contributed positively towards improving the living standards of the clients in terms of income, access to education, medical facilities and nutritional status.
Padma M. and Getachew (2005)	Women Clients of Omo and Sidama MFIs in Awassa town, SNNP	200 women were randomly selected out of the total 1962 active clients. Simple percentages were calculated for the analysis.	Some clients were able to send their children to private schools and build assets. However, lack of entrepreneurial skills is observed in the study area so much so that 63% of the respondents indicated low returns in business and marketing problems as major obstacles.
Getaneh (2005)	Amhara Credit and Saving Institution	A before and after the program analysis of impact on clients	ACSI has brought very little impact in poverty reduction and enterprise development. The outreach performance is also minimal. The poor marketing situation, lack of infrastructure (road network in particular) and lack of business skill by the borrowers have negatively affected the performance of ACSI.
Haileselassie (2005)	Specialized Financial and Promotional Institution (SFPI), and Poverty Eradication And Community Empowerment Microfinance Institution (PEACE)	Level of outreach to the poor and financial sustainability of the institutions were used for analysis	Both MFIs have achieved a good balance in terms of reaching the poor and women, repayment performance and increment in savings. Though these institutions are not financially self-sustainable, there is evidence that their progress is promising, but can achieve it with adjusted lending interest rates.
Tassew (2005)	35 Watersheds in Central Tigray	Focus-group discussions involving 430 people were held. Cost-benefit Analysis of different economic activities were done for analysis	The most important activities that best fit into the current micro-credit system in the region are petty trading, goat fattening and poultry development. Loan size needs to be increased and repayment period needs to be lengthened to make income diversification work better.
Berhanu (1998)	North Shoa, Amhara Region	Improvement in income as proxy indicator for improvement in living standards of the poor	Credit has brought positive impact on the life of borrowers
Fiona (2000) and Zaid (2000)	DECSI, Tigray	Secondary data as well as descriptive analysis	DECSI has brought a positive impact on living standards of people in Tigray
Asmelash (2003)	Tigray	Descriptive Statistics, Chi-Square Test and ANOVA	The credit provided to the poor has brought a positive impact on the life of the clients as compared to those who do not get access to these microfinance services. He

			showed that micro finance has brought a positive impact on income, asset building, and access to schools and medical facilities in the study area.
Bekele (2002)	Financial Institutions in Mali, India and Bangladesh (Grameen Bank)	Review of empirical literature	Microfinance serves a useful purpose in enhancing food security and in alleviating poverty. Not <i>one-fits-all</i> , but area-specific approaches are important for MFIs to be successful in meeting their objectives.
Berhanu T. (2002)	MFIs in Addis Ababa	Review of secondary data sources	MFIs in Addis Ababa need to: consider individual and cooperative credit delivery system, increase lending interest rates, lengthen the period of loan repayment, and open up additional financial services to meet the demands of the poor.

### ***3. Sampling Designs, Data Collection Mechanisms and Method of Analysis***

#### ***3.1 Sampling Designs***

ACSI, a population of interest in this study, has ten branches operating in the different parts of the *Amhara* Region. These branches were considered as strata. For each stratum, a list of Primary Sampling Units (denoted as PSU's) were built (PSU's are sub-branches in this case). The first random selection took place from a list of PSU's in each stratum. 5 Sub-branches were randomly selected. This random selection of PSU's could provide "clusters" of information. Cost and time considerations to cover units in each of these clusters could be difficult to manage. Therefore, further stages of random selection within each selected PSU were done. Within each area where the sub-branch is operating, a number of households were randomly selected taking the list of borrowers and non-borrowers (those in the waiting list) from the sub-branch offices as a sampling frame. Finally, 500 (*frequent borrowers, 48.7%; non-borrowers, 46% and ex-clients, 5.4%*) households were randomly selected, from which 483 valid cases were obtained. Women made up 43.9% of the total respondents.

#### ***3.2 Data Collection Mechanisms***

The writer used a structured questionnaire containing both close and open-ended questions that were developed by USAID's AIMS project (2000) and CGAP's poverty assessment tool (2003). In accordance with the situation of the study area, some modifications were made. These questionnaires were administered to the sample respondents of the study area. For this purpose, a total of six enumerators and 2 research assistants were employed. Focus group discussions were conducted with the clients of the program in order to identify salient problems of the institution and the program.

#### ***3.3 Method of Analysis***

After collecting the data, both descriptive statistics and econometric tools were employed so as to investigate the impact of credit on improving the life of the clients. From the statistical tools, Chi Square analysis was used to investigate the difference in welfare between the borrowers and non-borrowers. A summary of statistics and tabulation of field data was used to examine the impact of ACSI's intervention towards improving the welfare of the clients. The cross tabulations could highlight differences in the mean values of the hypothesized impact variables between borrowers and their counter parts. ANOVA and Paired T-test were also used to analyze mean differences of welfare between borrowers and the control group.

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

$$Y=f(X_i, U_i)------(1)$$

Where: Y=Average yearly income of respondents

X<sub>i</sub>=is a vector of explanatory variables that include: type of the respondents, oxen ownership of the respondents, land size, sex of the household head, age of the household head, education of the household head, family size.

U<sub>i</sub>= Error term

Since the dependent variable is dichotomous, Logistic Regression Model was used as suggested by several studies for its manageability, simplicity and appropriateness (Maddala, 1983). While specifying the distribution of the model, the steps followed by Gujarati (1992) were considered, as shown below:

$$P = \frac{1}{1 + e^{-z_i}}------(2)$$

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

$$P_i = \frac{1}{1 + e^{-(\beta_0 + \beta_1 x_{1i} + \beta_2 x_{2i} + \dots + \beta_n x_{ni})}}------(4)$$

Where:

P<sub>i</sub>=probability of improvement in income/ or other variables considered in the study in relation to the explanatory variables (such as improvement in housing)

e<sup>z<sub>i</sub></sup>=irrational number to the power of z<sub>i</sub>

Z<sub>i</sub>= A function of n explanatory variables

β<sub>s</sub>=explanatory variables

#### 4. Descriptive Statistics

##### 4.1 Description of the Amhara Region

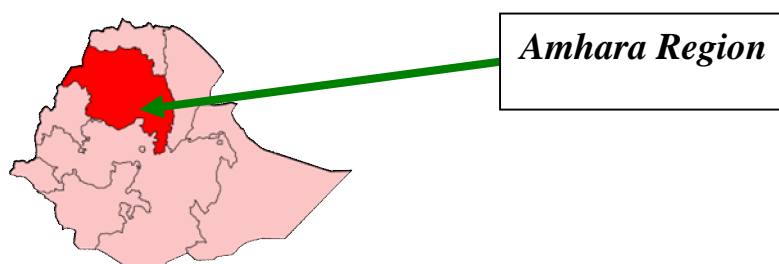
The Amhara Region is one of the poorest regions in Ethiopia. Against the backdrop of its low development indicators, the region is characterized by degraded environment, low life expectancy, and small-scale subsistence and drought-affected rural population with high birth rates. The table given below clearly indicates the socio-economic background as far as the Region is concerned.

**Table 3 Socio-economic Development Indicators of the Amhara Region**

	<b>Ethiopia, 2003/2004</b>	<b>Amhara, 2003/2004</b>
Total Population	71.1 million	18.15 million
Rural Population	84 percent (or 59.9million)	88.75 percent
Population Density	62.4:1 sq.km	1119:1 sq.km
Annual Growth	2.9 percent	2.67 percent
Life expectancy at birth	53-55 years	50.8 years
Fertility rate	6 births per woman	5 births per woman
Infant mortality	96.8 per 1000 live births	112 per 1000 live births
Children under 15 years		43 percent
GDP (in million Birr)	69,195.7	16,167
GDP per capita	USD 112.7	USD 103.50
GDP growth rate	11.6%	3.56%
Inflation rate (annual - 2004)	6.4%	17.3%
Exchange rate (average - 2004)	Approx 9 Birr to 1 USD	Approx 9 Birr to USD

**Source:** - USAID (2006)

ACSI was formed by the Organization for the Rehabilitation and Development in *Amhara* (ORDA). ORDA was an indigenous, local NGO engaged in development activities in the *Amhara* region. It was established in 1991 to provide relief to people affected by drought and the war against the previous Dergue regime. ACSI is basically operating in the *Amhara* Region, which is roughly located in the northcentral and northwestern part of Ethiopia (See fig. 1 red-coloured part). According to CSA (2005), the Region has an estimated total population of 19,120,005, consisting of 9,555,001 (49.97%) men and 9,565,004 (50.03%) women. 88.5% of the population are estimated to be rural inhabitants, while 11.5% are urban dwellers.



**Fig. 1 The Study Area**

## 4.2 Description of the Impact of ACSI

### 4.2.1 Outreach Performance Indicators of ACSI

The recent shift in development paradigm hinges on the provision of small credit to the poor so as to shield them from the adversities of poverty. It was with this context that ACSI has started its service, which includes credit, training about the uses of saving, payment of pension fees (for government employees only), provision of money transfer, delivery of money for the farmers so that they could be able to buy agricultural inputs. From this, one can possibly observe that the services of ACSI are really diverse.

With the prime vision of reducing poverty through making financial services available to the needy and thereby creating a scenario where people could live *'with all the power determining their future in their own hands'*, ACSI is operating in the different parts of the Region. Currently, it has 171 branches, covering 77% of the total *Kebeles* (lowest administrative units), and serving a total of more than 400,000 active credit clients. ACSI has shown a remarkable progress in terms of outreach since its establishment. The figures given below (Table 4) would illustrate this best.

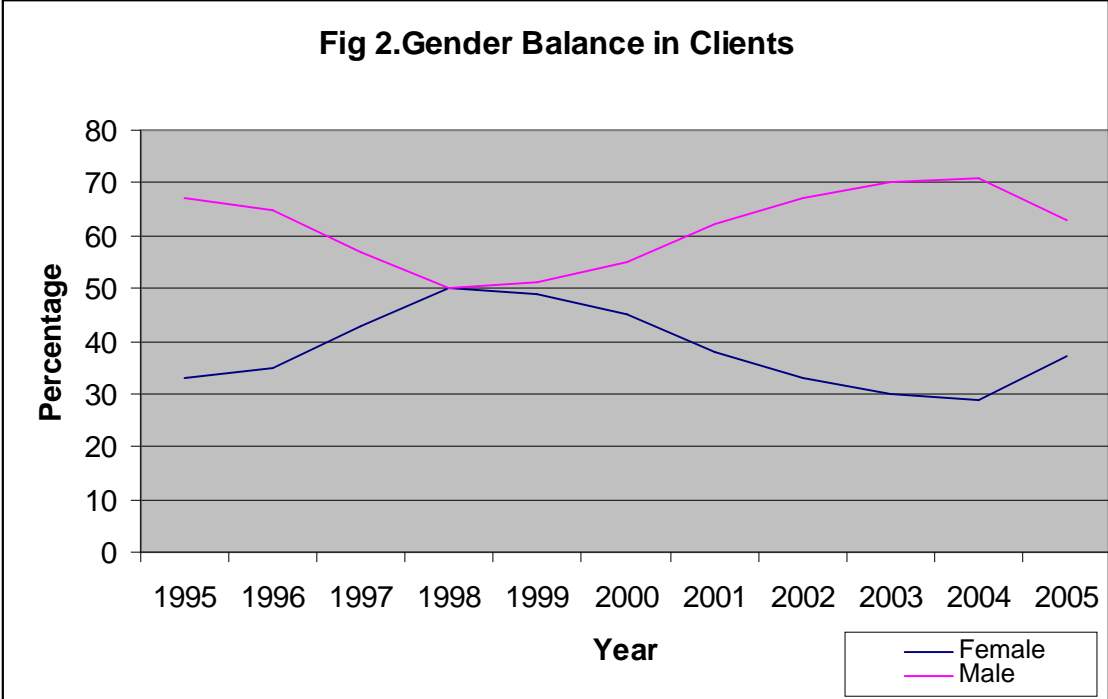
**Table 4: Outreach Indicators**

	Item	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
1	No of Branch Offices	6	10	15	21	15	15	13	10	10	10	10
2	No Sub branch Offices	-	-	67	132	157	162	162	162	171	171	171
3	No active credit clients	672	7799	38190	68580	107143	131330	152565	215970	288681	351163	434814
4	Loan dispersed /year	271590	4972706	28625211	41890292	65809533	94686526	116040897	164124228	232793641	332895046	426629658
5	Total net saving mobilized	13254	536653	4915137	17721796	33729344	55479819	31800085	98856347	128649146	172797439	239410576

**Source:** - ACSI Annual Report (2006)

With respect to the total population in the region and the coverage ACSI currently has managed to address, one could argue that it still needs to go further. However, the geographical coverage made so far within a short period of time since its establishment is impressive as indicated above. In terms of balancing the gender aspect of its clients however,

it was only in 1998 that it was 50% each. In other years, men are represented by far more than women. Graph 1 illustrates this better.



Source: - Ibid

Fig. 2 indicates that there is a marked gender gap and that much remains to be done to include more women to benefit from the services of ACSI.

**4.2.2 Demographic Characteristics**

The average family size of all the respondents was 4.87 (5.01 for borrowers, 4.68 for the non-borrowers and 5.33 for the ex-clients-see at the end of this chapter for ex-clients). The average age was 37.33 years for the total respondents taken together, while for borrowers and non-borrowers it was 39.13 and 35.27 respectively. From the survey, it was also obtained that 58.4% of the respondents could read and write; where as the remaining 41.6% could not. A comparison of borrowers and non-borrowers could show that 46% of the former and 38% of the latter could read and write. In addition, 40.1% of females from the borrower group and 48.9% females from that of the non-borrower group were chosen for the interview.

**Table 5 Demographic Characteristics**

<i>Characteristics</i>	<i>Type of Respondents</i>	<i>N</i>	<i>Mean</i>	<i>Std. Deviation</i>
Family size of the respondent	Borrowers	235	5.01	2.088
	Ex-clients	26	5.31	2.768
	Non-borrowers	222	4.68	2.258

	Total	483	4.87	2.211	
Age of the	Borrowers	235	39.13	9.832	
	Ex-clients	26	38.54	10.633	
	Non-borrowers	222	35.27	9.630	
	Total	483	37.33	9.947	
Sex and Educational status	<b>Type of Respondents</b>	<b>Sex (%)</b>		<b>Education Status (%)</b>	
		Male	Female	Literate	Illiterate
	Borrowers	51.1	48.9	46	54
	Ex-Clients	69.2	30.8	34.6	65.4
	Non-Borrowers	59.9	40.1	37.8	62.2
Total			58.4	41.6	

**Source:** - Survey Data, 2006

In general, as shown in Table 5, borrowers and non-borrowers did not have significant differences in terms of the basic demographic and socio-economic characteristics considered.

From a list of several socio-economic variables, it was observed that the people in the area are very poor. Their major economic activity is subsistence agriculture. It is rain-fed and hence susceptible to the vagaries of nature. The sanitation conditions are very poor. In this regard, most of the respondents-92% of the respondents in rural areas and 79.7% of those in urban areas-indicated that they use bush/open field and shared/private pit toilets respectively, while the remaining use a combination of other possibilities. Although the current sanitation coverage is said to be on the rise, the problem still persists in the study area.

With regard to fuel wood, respondents indicated that they use collected dung and wood (93.7% of the respondents) in rural areas and purchased wood (63.6% indicated this) as well as collected dung (20.7%) in urban areas. One could argue that almost all the source of fuel energy is obtained from trees and animal dung. We could observe here the pressure people could create on the environment. Since it is a question of survival, these people make their lives possible at the expense of the environment-they sacrifice future benefits against current consumption. A closer observation of the environment in the study area could show the very degraded environment in the study area. To investigate the determinant factors for environmental degradation in the study area and to see any possible linkages with this assumption, further and detailed research is essential.

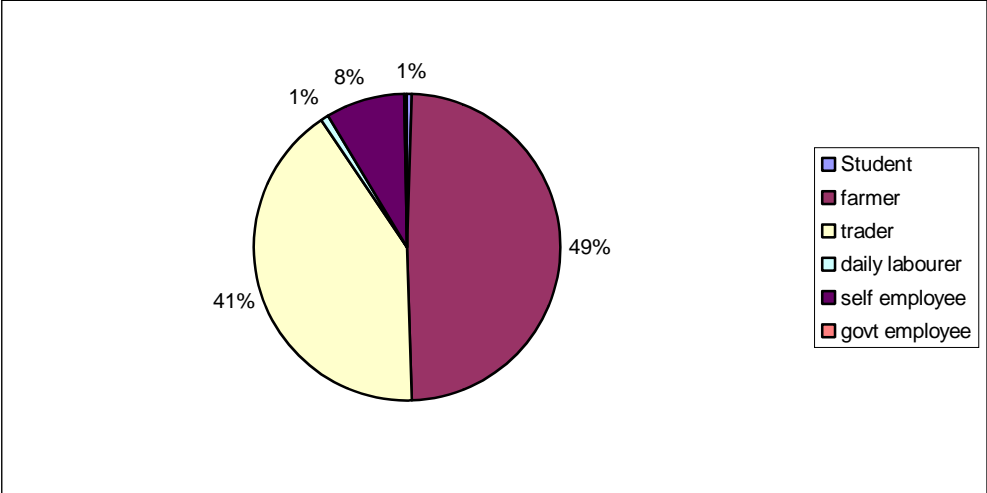
With regard to source of drinking water, it was found that many people do not have access from an improved source. In rural areas, only 9.3% indicated that they have access to piped public pipe or well sealed with pump. But the remaining 81.7% drink from springs, rivers and wells. In urban areas, 89.4% indicated that they use from piped public water or public well

sealed with pump, whereas the remaining percentage use from wells in residence yard or fenced springs. In the rural areas in particular, one could possibly observe the problems that could emerge due to sanitation problems associated with the risks of cholera, typhoid and dysentery.

### 4.2.3 Economic Activities

Respondents were found to engage in various activities. The most important ones are agriculture and trade (retailing of agricultural products such as cereals and coffee). In the region, agriculture basically involves a mix of crop production and animal husbandry. Mostly, the former is dominant; where as animal husbandry is considered only secondary in the study area.

**Fig 3: Main occupation of the respondents**



**Source: - Field Survey, 2006**

As can be seen from the figure above, ACSI has tried to address a larger stratified group of the people who are engaged in different economic activities. However, the majority of the respondents were engaged in agriculture and trade and as such they took the loans for these two major activities. As mentioned above, agriculture involves traditional crop production and cattle rearing. In addition, trade was not far from buying and selling crops with only small marginal profits. Respondents were asked why they could not involve in other activities. In the focus group discussions conducted, respondents indicated that they lack the skills to engage in highly income generating ventures. A statement by one respondent in *Enemay Woreda* could clarify this:

*It is my fourth time to take the loan. I use the money to buy cereals from the farmers and then to sale to the urban consumers. At the end of the year I realize that I don't have enough start up capital to engage in another activity because the profit I make in this business is very small...and even if I get some just sometimes.. I don't know what to do with it other than buying and selling cereals. That is why I am always borrowing for the same purpose all the time.*

From this, we could observe that the major problem of clients is not only small loan but also lack of the basic skills on how to operate business. One could observe that only loan provision could not bring the desired changes as far as the life of the poor is concerned. Equally important are business-skill trainings.

#### **4.2.4 Loan History and Use**

According to the information obtained from the branch office in the study area, group collateral was the mechanism by which the poor were allowed to get credit. Accordingly, the average group size of the institution during the survey was approximately 5-7 persons of the same sex. There were 25 centers in the study area with 10-15 groups each. Provided that the clients repay the loan in time, there was no upper limit about the number of times an individual could borrow from the institution.

There were respondents who took the loan as many as 10 times, the average being almost four times. In these loan cycles, the most important activities for which clients have taken loans were trade (32.3%), agriculture/crop production (28.9%), sheep/goat fattening (20.4%) and local food processing (12.3%). These activities could indicate that clients are becoming market-oriented. However, observation could testify that business skills are lacking that would guide these people to operate in modern ways. In addition, loan size was found to be very small to operate business on a `fairly` large-scale basis (Table 6).

**Table 6 Loan Size**

<i>Variables</i>	<i>N</i>	<i>Minimum</i>	<i>Maximum</i>	<i>Mean</i>	<i>Std. Deviation</i>
Number of loans	235	1	10	3.92	1.990
Amount of the first loan	235	100	5000	887.49	723.076
Amount of current loan	235	300	5000	2191.91	1419.469

**Source:** - Survey Data, 2006

With regard to location, urban clients have taken higher loans as compared to the rural clients. The average first loan amount of urban clients was Br. 1191.42, where as that of rural clients was Br. 570.35. On the other hand, the average current loan amount of urban and rural clients was Br. 2717.50 and Br. 1573.04 respectively.

Questions were also included to ask whether respondents had savings habits. It was found that except some urban people, the rest did not have any habit of depositing money in a bank on cash basis. In fact saving could have different forms. But client-bank relationships on a formal and regular basis were established when people joined ACSI as a member, because there are compulsory savings that should be made on monthly basis. These compulsory savings could help clients to develop the habit of money depositing for later use.

#### ***4.2.5 Impacts on Income and Assets***

While 54.7% of the total respondents indicated an increase in their annual income, 26.7% showed a declining trend. A Chi-Square test showed that 59.1% of borrowers and 50.5% of non-borrowers have shown an increase in their income. On the other hand, 24.3% of the former and 28.4% of the latter group indicated a declining trend in their income. From these figures one could see that borrowers are in a better position. However, these differences were not statistically significant (results of the regression model indicate a significant difference-see Table 8). The reasons for either increase or decrease of income could vary from place to place and from respondent to respondent in the study area. While some attributed income gains to the very good climatic market conditions, others simply said good business returns. On the other hand, low agricultural production and lower market prices and sickness of a household member contributed to a decrease in their income. Added to this was an issue whether their contribution to household income has increased or not. The survey indicated that 67.2% of the borrowers and 45.9% of the non-borrowers have shown an increase in their contribution to the household income, while 8.5% of the borrower and 17.6% of the non-borrower group said they feel their contribution has declined. These differences were statistically significant at 1% significant level on a Chi-Square test.

With regard to household durables, respondents were asked to indicate a list of different assets. However, only the following two were found to be dominantly accumulated in both locations (rural and urban) and respondent groups (borrowers and non-borrowers).

**Table 7. Assets of Respondents**

<i>Type of Respondents</i>	<i>Radio or Tape</i>		<i>Bed</i>	
	<i>no</i>	<i>yes</i>	<i>no</i>	<i>Yes</i>
Borrowers	156 (66.4%)	79 (33.6%)	155 (66.0%)	80 (34.0%)
Non-borrowers	161 (72.5%)	61 (27.5%)	158 (71.2%)	64 (28.8%)

**Source:** - Survey Data, 2006

It was found out that 30.2% of the total respondents said they have radios (56 rural and 90 urban dwellers). But the differences in terms of location were not statistically significant. On the other hand, a total of 152 respondents (56 rural and 96 urban, a sum of 31.5% of the total), indicated that they have beds. From this figure, 80 were clients, while 64 were non-borrowers respectively. The differences were statistically significant on a Chi-square test.

For comparison with the descriptive statistics, results of the regression model are indicated below.

**Table 8 Parameter Estimates for Determinants of Income Increment**

<i>Variables</i>	<i>B</i>	<i>S.E.</i>	<i>Wald</i>	<i>Exp(B)</i>	<i>Prob. (%)</i>
AGERES	-.015	.013	1.310	.986	
SEXRES (dummy for female)	.158	.215	.539	1.171	
Oxen Ownership	.092	.123	.561	1.097	
EDUCRES (dummy for illiterate)	.328	.237	1.918	1.389	
Size of Land	<b>.007</b>	<b>.004</b>	<b>3.261*</b>	<b>1.007</b>	<b>50.2</b>
Type of respondent (dummy for non-borrower)	<b>.368</b>	<b>.217</b>	<b>2.877*</b>	<b>1.445</b>	<b>59.1</b>
Location of the respondents (rural = 0)	-.782	.778	1.010	.457	
Family Size	-.045	.055	.672	.956	
Constant	.100	.515	.037	1.105	

\* Significant at 10% level

-2 Log likelihood = 532.852180,  $X^2 = 6.364$ , Sig. = 0.007, Number of observations = 483

Over all Model Prediction = 75

The direction of change in the probability of improvement in income in relation to the explanatory variables is explained based on the sign of the coefficients. The parameters tell how the economic status of the borrowers and non-borrowers changes with the change in explanatory variables. On the other hand, the positive sign of the parameters show the trend that the effect of changes of the variables on the probability of the odds is greater in borrowers than in their counter parts. Therefore, Table 8 indicates that two variables have strong impacts on the odds of increment in income since the odds of these variables are

greater than one and significant. These are size of land and program participation. More specifically, the odds of yearly per capita income (Y) is positively related to program participation indicating that the probability of improvement in income increases with the increase in program participation. In other words, borrowers are 59.1% times more likely to have an increment in income than non-borrowers. The coefficient is statistically significant at 10% significance level. The probability of increase in income had positive relation with size of farm of the respondents-large farm size was advantageous, which indicates that respondents with higher land size are 50.2% times more likely to get increment in income than their counter parts.

To augment our arguments on the differences of incomes between borrowers and non-borrowers, expenditures were also investigated to indirectly assess the other side of the income variable of the respondents. In many of the cases considered, borrowers had significantly higher expenses as compared to non-borrowers. For instance in a Paired T-test, it was observed that borrowers had higher mean annual expenditures for food (Birr 2988.60) than non-borrowers (Birr 2549.51). This may indicate that borrowers are smoothing their incomes by far better than their counter parts (for ANOVA results see Appendix I).

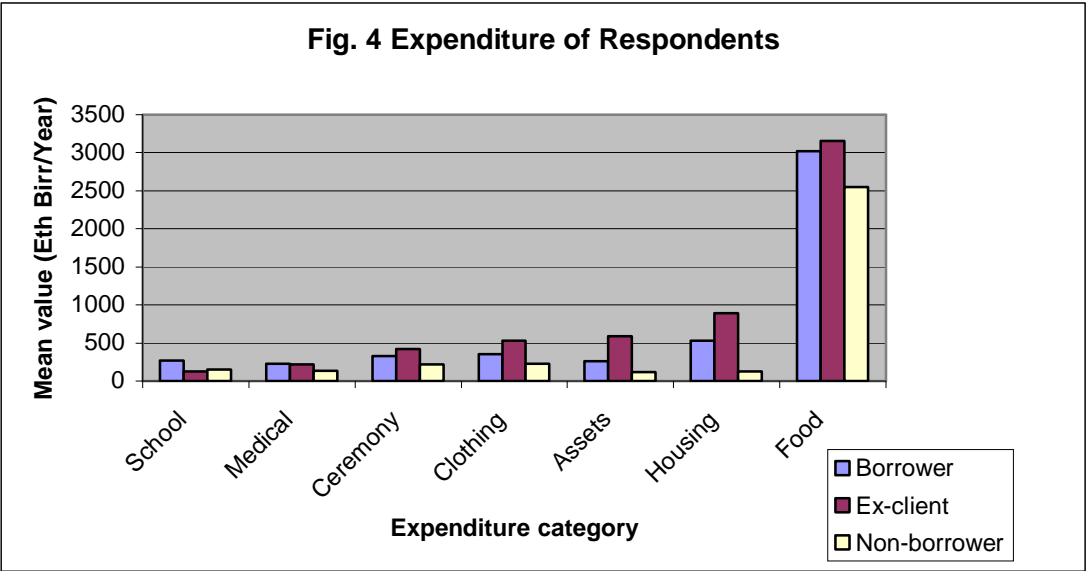


Fig.4 shows that respondents have higher expenditure in food. While ex-clients had the highest in most of the expenditure categories considered, borrowers are in the second place. In Schooling and medical expenses however, borrowers have the highest expenses.

**4.2.6 Impacts on Housing Conditions**

It is a well-established fact that housing and its related investment is a key indicator of a country's development. This is because investments can serve a useful purpose both to increase the household's standard of living and to improve its income-generating opportunities. Apart from serving people as shelter, a house is the most valuable asset people should have. When the house is improved, its value boosts and thereby increases a household's material wealth. In urban areas, housing improvements may create a storage space for inventory or other enterprise-related items. Rooms and storefronts can be added to the house to be used for rental or enterprise purposes. Such improvements can help households to diversify and to add a steady income stream to their economic portfolio. Rental units can provide a source of income after retirement. In these ways, housing improvements can be an integral part of the household members' long-term economic strategies. Hence, the assumption of this variable is that, participants of microfinance scheme have better housing condition than new clients. That is, if households have access to a large capital through loan, they will be engaged in more profitable and productive activities, thereby increasing their income level. As a result, they will have better capacity to improve their residential and business houses through repair or building additional rooms from the profits of loan activities. Housing improvements can range from adding new rooms to installing electricity or telephone (Table 9).

**Table 9 Housing Conditions of Respondents**

<i>Variables</i>	<i>Borrowers</i>	<i>Non-borrowers</i>	<i>X<sup>2</sup></i>
Moved to a bigger house	13.4	8.1	<sup>a</sup>
Purchased Land	9.6	5.4	<sup>a</sup>
Purchased a house	9.2	5.9	-
Made repairs	33	35.1	-
Added rooms to existing house	29.5	21.2	<sup>b</sup>

**Source:** - Survey Data, 2006

<sup>a</sup> <sup>b</sup> Significant at 1% and 5% respectively, - Not significant

Table 9 indicates that a significantly higher number of borrowers have made improvements in their housing conditions. But the regression results do not support all of the differences observed above (Table 10).

**Table 10 Variable Estimates for Investments to Improve Housing Conditions**

<i>Variables</i>	<i>B</i>	<i>S.E.</i>	<i>Wald</i>	<i>Exp(B)</i>	<i>Prob. (%)</i>
Age of the respondents)	-.011	.022	.229	.990	
Sex of the respondents (female =0)	-.192	.375	.262	.825	
Family Size	.150	.089	2.874	<b>1.162*</b>	<b>53.74</b>

Education Status (illiterate=0)	.687	.398	2.975	<b>1.987*</b>	<b>66.52</b>
Type of respondents (non-borrower = 0)	.585	.384	2.328	1.796	
Size of the farm	-.278	.098	8.093	.758	
Location of the respondents (rural = 0)	24.956	9.088	7.542	<b>6.9E+10***</b>	<b>100</b>
Constant	-1.584	.840	3.556**	.205	

*\* and \*\* Significant at 5 and 1 significant levels respectively*

*-2 Log likelihood: 239.444*

*Overall Model prediction: 92.3%*

*X<sup>2</sup> = 7.564, Sig. =0 .005*

*Number of observations = 483*

The most significant factors that determine investment on housing are family size, education status, being a member of ACSI or not, size of the farm and location of the respondents. Particularly, having larger family size, being educated and being in urban areas could increase the probability of improving housing conditions by 53.74%, 66.52% and 100% respectively. The most probable explanations could be (that) more family size could mean more family labour to supply for the needs to improve the housing conditions. On the other hand, educational status of farmers was very important in influencing their decision whether to improve their dwellings. Urban dwellers had higher odds ratios in terms of making housing and its related investments.

On the other hand, variables such as age, sex and size of the farm have odds ratios less than one and hence, they have less likely impacts on the occurrence of an event (investment on housing in this case).

#### ***4.2.7 Psychological Impacts***

Apart from helping poor households in maintaining or increasing income flows (which improve food security), providing them with an opportunity to acquire savings habits, and thereby enabling them to avoid irreversible coping strategies (i.e., those that lead to destitution), and enabling households to share resources at community level, microfinance services are also believed to increase the borrowers' positive emotions about satisfaction in life and thereby develop their sense of self (Ledgerwood, 1999). The presence of positive emotions and good sense of self are believed to foster a positive purpose in life and are considered essential components of a healthy emotional, physiological and mental growth. In these regard, a couple of questions were administered to married women of both borrowers and non-borrowers in order to identify to what extent they had positive values about themselves. As it is truly a human nature, most were found to have positive emotions and

values about themselves. Although the differences between borrowers and non-borrowers may seem small, they are statistically significant tested on a Chi-Square (Table 11).

**Table 11 Psychological Issues**

<i>Items</i>	<i>Borrowers (%)</i>	<i>Non-Borrowers (%)</i>
I believe that the future of my life will be good	50.2	46.4
I have good feeling about myself	46.8	42.3
I feel respected by the community	47.2	37.4
I feel I can take part actively in my community problems	50.6	46.0

**Source:** - Field Survey, 2006

Table 11 indicates that respondents had positive values about themselves and are optimistic about the future. These are very important virtues to capitalize on so as to help the poor make their dreams come true with the help of financial and technical assistance.

#### **4.2.8 Impact for Emergency Cases**

In the forgoing discussions, we have seen that microfinance allows poor people to increase their sources of income-the essential path out of poverty and hunger. From the survey in the study area, it was observed that borrowers were using money either directly from the loan or from business profits or just from sale of assets to pay for medical treatments (Table 12).

**Table 12 Sources of Finance for Medical Treatment**

<i>Items</i>	<i>Frequency</i>	<i>Percent</i>
borrowed from friends	8	5.93
from the loan	27	20
sale of asset	42	31.11
withdrew saving	12	8.89
from business profit	43	31.85
others	3	2.22
Total	135	100

**Source:** - Survey Data, 2006

Table 12 indicates that business profit (financed by the loan), sale of assets and loan are the three most important sources of financing medical expenses for the borrowers in the study area. The assumption is that the ability of poor people to borrow money is an important advantage to open up a business opportunity, or to bridge a cash-flow gap. This is what one could observe here, which is definitely a first step in breaking the cycle of poverty. Because, poor households will use a safe and convenient savings account to accumulate enough cash to pay for health care, or they could accumulate assets and thereby sale in case of emergency as indicated in Table 12.

Microfinance also helps safeguard poor households against the extreme vulnerability that characterizes their everyday existence. Loans, savings, and assets help poor people smooth out income fluctuations and maintain consumption levels even during the lean periods. The availability of financial services acts as a buffer for sudden emergencies, business risks, seasonal slumps, or events such as a flood or a death in the family that can push a poor family into destitution. In the study area, it was observed that a great deal of borrowers have smoothed their meagre incomes and shield themselves from the adversities of vulnerability with the help of financial resources they have got from ACSI (Table 13)

**Table 13 Copying Mechanisms for Food Shortages in the last 12 months**

<i>Items</i>	<i>Frequency</i>	<i>Percent</i>
Borrowed from friends	8	6.5
From the loan	24	19.4
Sale of asset	37	29.8
Withdrew saving	10	8.1
From business profit	43	34.7
Others	2	1.6
Total	124	100

*Source:* - Survey Data, 2006

Table 13 indicates that out of 235 borrowers, 52.8% faced food shortages. And they managed to smooth their incomes with the help of financial and household assets they have accumulated. In line with this, a 45 old man from Woreta, Debub Gondar says:

*If I had not got money from ACSI, I would have migrated to another place for a daily paid work. But thanks to God I managed to sustain my and my family’s life.*

One could see that the loan from ACSI has been vitally important for the poor in terms of solving short-term food/non-food sudden shocks. However, there seems to be fungibility in the sense that clients manipulate the loan for their immediate needs. In fact consumption smoothing is by itself an important impact ACSI has brought so far. However, in terms of long-term development issues, clients need to get into production systems that could help them generate incomes sustainably. The case of ex-clients and borrowers is an important example here. Ex-clients and borrowers (as indicated in Appendix I), had higher expenditures perhaps because they were using the loan for ‘unintended’ purposes (for consumption other than productive business activities). Several factors could enforce clients to use the loan for short-term benefits. One is the poverty situation they live in, which forces the poor to offset long-term benefits due to the urgent need for daily survival. The second factor could be the

lack of business skills to engage into a productive business, which is not basically weather-based unlike crop production.

For comparison purposes, non-borrowers were also asked about their sources of income during lean periods. Most indicated that they looked for paid work, borrow from money lenders and relatives, sale charcoal and cut down the number of meals. This could indicate the importance microfinance could play to smooth incomes in lean periods. A lady in *Shebel Berenta Woreda*/district said the following:

*We have no choice...if we eat in the morning, then we will not have dinner. For children we give them anything we get. Sometimes we borrow from our relatives or neighbours. But this could not either solve our problem. We are healthy and can work. We lack only money to do that...*

From this quotation, one could observe that the poor believe that they can work and solve their problems. They lack only the financial capital and the technical skills on how they can operate a profitable business so as to earn income on a sustainable basis.

#### **4.2.9 Ex-Clients**

A total of 26 (8 were females and 18 males) ex-clients were interviewed. Their mean age was 38.54 and mean family size was 5.31. 65% of them were illiterate and joined ACSI when it began the service. The mean loan size was Birr 1692.31 for the first and Birr 1486.38 for the last loan cycles. When asked as to why they left the program, 80.8% of them indicated that they feared the risk of getting into bankruptcy. This reasoning could be true because they might have spent the money for activities other than what they took the loan for. ANOVA results show that ex-clients have significantly higher expenses for ceremonial activities, clothing, household durables and house maintenance/expansion (See Fig. 4 and Appendix I).

## 5. Conclusions

Ethiopia, a country of more than 70 million is grappling with all sorts of problems that range from lack of food (to feed its expanding millions) to poor governance. Its people derive their livelihood mainly from traditional, subsistence agriculture and suffer from lack of access to the essentials for humane existence. The major concern of the Ethiopian government in its PRSP is to give due emphasis to the country's all and basic industry-agriculture through its strategy called ADLI. In the document, microfinance is indicated among the specific means that is given greater emphasis and is expected to play essential role for reducing poverty in rural areas of the country where the bulk of its populace dwell. Thus, most of the microfinance services providing institutes have articulated creating a small and easily accessible loan to the poor as their primary objective with the expectation of fostering pro-poor growth.

Currently, there are 23 microfinance institutions registered and licensed under the National Bank of Ethiopia and reaching 905,000 credit and some saving clients. ACSI was formed by the Organization for the Rehabilitation and Development in *Amhara* (ORDA). ORDA was an indigenous, local NGO engaged in development activities in the *Amhara* region. It was established in 1991 to provide relief to people affected by drought and the war against the Dergue regime. It is operating in the different parts of the Region. Currently, it has 171 branches, covering 77% of the total *Kebeles* (lowest administrative units), and serving a total of more than 400,000 active credit clients. It has shown a remarkable progress in terms of outreach since its establishment.

In the study area, ACSI has helped its clients to smooth their income, shield them against shocks during lean periods and have some productive assets. Although consumption smoothing is by itself an important impact ACSI has brought so far, there is a problem of fungibility in the sense that clients manipulate the loan for their immediate needs. Reasons could be either the poverty situation they live in, which forces the poor to offset long-term benefits due to the urgent need for daily survival or the lack of business skills to engage into a productive business. Therefore, in terms of long-term development issues, clients need to get into production systems that could help them generate incomes sustainably. Currently, most of the activities clients engaged are very traditional and agriculture-based, which are easily exposed to the vagaries of nature. As a pointer for future measures, while the poverty problem of the region calls for an integrated action from all the concerned bodies at both federal and

regional levels, providing training skills on how to go about making business may fall under the realm of ACSI itself. Therefore, the current services of ACSI need to focus on business training skills apart from loan provision to create sustainable micro-enterprise and other economic activities to help the poor move beyond day-to-day survival and plan for their future. In short, it is important that ACSI facilitates or directly involves in providing '*credit-plus*' services to its clients.

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## Annex I. Expenditure of Respondents

Expense/Year						Lower Bound	Upper Bound	95% C.I	M in	Max
School	Borrowers	235	267.59	546.779	35.668	197.32	337.86	0	4000	
	ex-clients	26	130.19	318.272	62.418	1.64	258.75	0	1500	
	Non-borrowers	222	155.03	368.617	24.740	106.27	203.78	0	4000	
	Total	483	208.46	464.808	21.149	166.90	250.01	0	4000	
	Borrowers	235	228.24	440.940	28.764	171.57	284.91	0	3000	
	ex-clients	26	217.50	308.996	60.599	92.69	342.31	0	1000	
	Non-borrowers	222	130.79	217.033	14.566	102.08	159.49	0	2000	
	Total	483	182.87	351.080	15.975	151.48	214.26	0	3000	
	Borrowers	235	330.17	454.758	29.665	271.73	388.62	0	5000	
	ex-clients	26	418.08	311.612	61.112	292.21	543.94	0	1000	
	Non-borrowers	222	221.63	250.535	16.815	188.49	254.76	0	2000	
	Total	483	285.01	371.504	16.904	251.80	318.23	0	5000	
	Borrowers	235	351.84	471.634	30.766	291.22	412.45	0	5000	
	ex-clients	26	529.62	746.895	146.478	227.94	831.29	0	4000	
	Non-borrowers	222	226.82	199.881	13.415	200.38	253.25	0	1000	
	Total	483	303.94	402.302	18.305	267.98	339.91	0	5000	
Household	Borrowers	235	259.19	723.174	47.175	166.25	352.13	0	8000	
	ex-clients	26	592.35	1464.294	287.172	.91	1183.79	0	6000	
	Non-borrowers	222	115.45	217.794	14.617	86.64	144.25	0	1500	
	Total	483	211.06	632.485	28.779	154.51	267.60	0	8000	
Maintenance or	Borrowers	235	532.04	1981.716	129.273	277.36	786.73	0	20000	
	ex-clients	26	892.31	2606.442	511.165	-160.46	1945.07	0	10000	
	Non-borrowers	222	130.13	341.605	22.927	84.94	175.31	0	2100	
	Total	483	366.70	1538.324	69.996	229.17	504.24	0	20000	
Food	Borrowers	235	3018.1787	1708.88262	111.47521	2798.5554	3237.8020	60	9600	
	ex-clients	26	3152.3077	1666.42205	326.81225	2479.2253	3825.3901	12	7200	
	Non-borrowers	222	2549.5135	1462.46128	98.15397	2356.0760	2742.9511	60	9600	
	Total	483	2809.9876	1612.79715	73.38481	2665.7939	2954.1812	60	9600	

### ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
School	Between Groups	1614666.955	2	807333.477	3.780	.024
	Within Groups	102519736.838	480	213582.785		
	Total	104134403.793	482			
Medical	Between Groups	1117143.317	2	558571.659	4.599	.011
	Within Groups	58292976.724	480	121443.702		
	Total	59410120.041	482			
Ceremonial	Between Groups	1831625.237	2	915812.619	6.795	.001
	Within Groups	64691611.661	480	134774.191		
	Total	66523236.899	482			
Clothing	Between Groups	3183816.054	2	1591908.027	10.212	.000
	Within Groups	74826391.437	480	155888.315		
	Total	78010207.491	482			
Household Durables	Between Groups	6353802.372	2	3176901.186	8.178	.000
	Within Groups	186464279.119	480	388467.248		
	Total	192818081.491	482			
Maintenance or expansion	Between Groups	26032035.081	2	13016017.541	5.605	.004
	Within Groups	1114592333.581	480	2322067.362		
	Total	1140624368.663	482			
Food	Between Groups	28294470.434	2	14147235.217	5.541	.004
	Within Groups	1225442789.492	480	2553005.811		
	Total	1253737259.925	482			