THE ROLE OF SAVING AND CREDIT COOPERATIVES IN EMPOWERING THE RURAL POOR: A CASE STUDY FROM KOLLA TEMBIEN WOREDA

BY
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The Role of Saving and Credit Cooperatives in Empowering the Rural Poor: A Case Study from Kolla Tembien Woreda.

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<th>Acronym</th>
<th>Description</th>
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<tbody>
<tr>
<td>AAU</td>
<td>Addis Ababa University</td>
</tr>
<tr>
<td>ACCOSCA</td>
<td>African Confederation of Cooperative Savings and Credit Associations</td>
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<tr>
<td>ADLI</td>
<td>Agricultural Development Led Industrialization</td>
</tr>
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<td>AEMFI</td>
<td>Association of Ethiopian Micro Finance Institutions</td>
</tr>
<tr>
<td>CGAP</td>
<td>Consultative Group to Assist the Poor</td>
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<td>DA's</td>
<td>Development Agents</td>
</tr>
<tr>
<td>ESA</td>
<td>Ethiopian Statistical Association</td>
</tr>
<tr>
<td>ESCAP</td>
<td>Economic and Social Commission for Asia and the Pacific</td>
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<tr>
<td>FCA</td>
<td>Federal Cooperative Agency</td>
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<td>FDRE</td>
<td>Federal Democratic Republic of Ethiopia</td>
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<tr>
<td>FSS</td>
<td>Food Security Strategy</td>
</tr>
<tr>
<td>ETB</td>
<td>Ethiopian Birr</td>
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<td>ICA</td>
<td>International Cooperative Alliance</td>
</tr>
<tr>
<td>IFAD</td>
<td>International Fund for Agricultural Development</td>
</tr>
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<td>ILO</td>
<td>International Labor Organization</td>
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<tr>
<td>IMF</td>
<td>International Monetary Fund</td>
</tr>
<tr>
<td>KTWBARD</td>
<td>Kolla Tembien Woreda Beuro of Agriculture and Rural Development</td>
</tr>
<tr>
<td>KTWSACCOs</td>
<td>Kolla Tembien Woreda Saving and Credit Cooperatives</td>
</tr>
<tr>
<td>NGOs</td>
<td>Non Government Organizations</td>
</tr>
<tr>
<td>OCDC</td>
<td>Overseas Cooperative Development Council</td>
</tr>
<tr>
<td>REST</td>
<td>Relief Society of Tigray</td>
</tr>
<tr>
<td>SACCOL</td>
<td>Saving and Credit Cooperative League</td>
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<tr>
<td>SACCOs</td>
<td>Saving and Credit Cooperatives</td>
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<tr>
<td>SDPR</td>
<td>Sustainable Development and Poverty Reduction Program</td>
</tr>
<tr>
<td>SPSS</td>
<td>Statically Package for Social Science</td>
</tr>
<tr>
<td>SNNP</td>
<td>Southern Nations, Nationalities and peoples</td>
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<tr>
<td>WOCCU</td>
<td>World Council of Credit Union</td>
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ABSTRACT

Effective empowerment of persons has always been essential to the cooperative thoughts. Poor individuals who have joined cooperative groups can endow themselves with better socio-economic power they need. Considering this situation, this study has made a good effort to assess the role of Saving and Credit Cooperatives (SACCOs) in upholding the empowerment of the rural poor, taking members of Kolla Tembien Woreda SACCO in focus.

The methodology of this study is a combination of quantitative and qualitative methods based on the data collected from primary and secondary sources. Data were collected from 110 respondents following simple random sampling method. In order to strengthen the household survey, FGDs and key informant interviews were conducted. Besides the descriptive statistics, Wilcoxon Signed Rank Test (WSRT) was employed to look at the socio-economic benefits derived by members after joining the SACCOs.

Accordingly, the WSRT result shows that the average monthly income, consumption and education expenditure, and total amount of monthly savings are significantly improved after joining the SACCOs. Besides, good improvements were observed in respondent’s participation, respondents’ exposure to mass media, members contact with DA’s and cooperative official, respondent’s living standard and occupation.

To identify the major problems of the cooperatives, FGDs and interviews were conducted and the results have shown that lack of skilled and educated man power, extreme dependence on external funds, need of immediate dividend payment, poor saving habits, loan insufficiency, insufficient training and education, and firm competition from microfinance institutions are among the main problems of SACCOs identified in the study areas.

Finally, the study concludes that members’ income, savings, credit and participation have the possibility improving members’ empowerment. Therefore, valuable and successful scheme or initiative should be undertaken by government, NGO’s and other stakeholders to realize members’ socio-economic empowerment through saving and credit cooperatives.
Chapter One

Introduction

1.1. Background to the Study

Cooperatives play a meaningful role in uplifting the socio-economic conditions of their members and their local communities. Cooperatives as socio-economic and self-help organizations empower people to think, join and work together for development in tandem with the accepted social, cultural and ethical values. Unlike other forms of organizations, members are users of cooperatives and every individual who claims ownership right with a cooperative should feel empowered. This means cooperatives empower people to define, decide and direct the affairs of their cooperatives in their interest and in the interest of their communities (Pankajam, 2003).

The concept empowerment includes both controls over resources (physical, human, intellectual and financial) and ideology (belief, values, and attitudes) (Batliwala, 1994). Empowerment is the process of improving and building individuals and groups’ assets, and promoting the efficiency and fairness of the organizational and institutional circumstances which govern the use of these assets. For this reason, cooperatives are playing a substantial role in achieving the process of empowerment of individuals and groups (World Bank, 1998). Besides, according to Sharma (2005), cooperatives are socio-economic enterprises set up on the basis of equity and democratically managed to empower their members to deal with the challenges of market competition and to safeguard themselves against the exploitation. Each principle of cooperatives gives direction towards empowerment of their members and communities.

No one can deny that the majority of Ethiopia’s poor are those people who live in the rural areas and are engaged in subsistence peasant agriculture. The second major category of the poor is those individuals who are engaged in informal sector whose income are insufficient to provide their basic needs (Bekele, 1996).

Getting out of poverty trap is difficult for the poor unless there is outside intervention. Poverty is a result of many factors and include among others, lack of financial resources for capital formation. Credit is a liquid asset through which the poor can acquire productive capital to improve their capacity to generate income, savings and investment. The increase in income and the possession of asset will enable the poor to fulfill their basic needs (ibid).
Moreover, Coffey (1998) and Schneider (1997) explained that poor farmers have had inadequate access to credit and saving facilities. This has been caused low agricultural output in many developing countries. Similarly, in Ethiopia, among other things, lack of finance is one of the fundamental problems impeding production, productivity and income of rural and urban households. Since access to institutional finance is very limited, the majority of the poor obtain financial services through informal channels, such as private money lenders, Ikub, relatives and others (Wolday, 2003).

Recently, Ethiopia has made considerable effort in supplying loans to the poor, mainly to the rural poor, largely in line with the country’s overall development strategy which is called Agricultural Development Led Industrialization (ADLI). This strategy is part and parcel of Ethiopia poverty reduction strategies, including the Sustainable Development and Poverty Reduction Program (SDPRP) approved in 2002, the 2004 Food Security Strategy (FSS) and most recently, the 2006 Plan for Accelerated and Sustained Development to End Poverty (PASDEP) (FDRE, 2008; cited in Emmanuel et al., 2009). In relation to implementing these strategies, cooperatives are considered as one of the key actors. There have also been a number of initiatives to establish and expand microfinance institutions in the rural and urban areas. Annual report prepared by FCA (2009) pointed out that the Ethiopian government enacted proclamation No. 40/1996 for the institutionalized operation of microfinance institutions and proclamation No.147/1998 to the active creation and strengthening of cooperative organizations in every corner of the country including saving and credit cooperatives.

The relevance of financial institutions as a basic instrument of poverty reduction has been increasing from time to time. The government of Ethiopia has established federal cooperative agency to take measures to improve, organize and supervise the development of cooperatives in the country so that large number of the poor would get out of poverty.

Savings and credit cooperatives provide financial services to poor and low-income people in many countries. Although the saving and credit cooperatives are newly emerging financial institutions they are providing saving and credit services to their members. Therefore, it is against this backdrop on cooperatives that this study attempts to assess the role of saving and credit cooperatives in empowering the socio-economic conditions of the rural poor, taking members of Kolla Tembien saving and credit cooperatives in focus.
1.2. Statement of the Problem

The World Bank (1998) reported that in any low income country, the existing operation of the formal financial institutions is inefficient to provide sustainable credit facilities to the poor. To solve this problem, microfinance institutions like saving and credit cooperatives have been developed. Many of these programs use social mechanisms, such as group based lending, to reach the poor who lack access to formal financial institutions.

Lack of finance is among the main obstacles facing poor households who run and wish to look for small business. One way of overcoming this problem is to go for credit. However, the formal banking services in many developing countries are largely urban based. Formal financial institutions do not deliver credit as and when needed without elaborate paperwork, bureaucratic lending procedures, and stringent collateral requirements. They also operate at high transaction cost. Consequently, the contribution of these banking institutions to the national economic development has remained grossly inadequate (Solomon, 1996)

However, an alternative and innovative approach undertaken in some Asian countries has disproved the myths that the poor are not creditworthy. The Grameen Bank is one (perhaps best example) designed to offer institutional credit to the very poor so as to develop entrepreneurial activities and address rural poverty. The new banking system has been able to meet the objective of serving the poor and providing to become self sustaining. The key to the success of such a bank lies on their efficient credit delivery systems, no loan security requirements, and unbureaucratic lending procedures (ibid).

In this context, cooperative model of rural financial institutions such as saving and credit cooperatives can play a potentially important role in addressing these problems and in empowering the socio-economic welfare of the rural poor.

According to Dejene (1995), saving and credit cooperatives are an autonomous association of groups of individuals with a common bond who have the ultimate objectives of saving and lending money to one another at a relatively lower interest rate for productive and provident purpose. Similarly, saving and credit cooperatives are widespread due to the demand for credit and financial services. The main objective of these cooperatives is to provide financial services to their members who are generally organized in self-help groups
for income generation or small businesses (Tigst, 2008). According to Assefa (2007), even if the total amount of capital that can be accumulated by credit cooperatives operating at the grass root level is often quite low, access to credit is often seen as essential for success.

Cooperatives are truly empowering members, in origin, in mission and in vision, in theory and in action. Empowerment with in cooperatives focuses initially and primarily on the role of members. It originates within and returns to the members, and it can be found in the process of formation, promotion, perpetuation of cooperatives. Empowerment of members goes well with member’s participation in the constitution, management and business of cooperatives in which members influence the direction, scope, operations and activities of their cooperatives in their interest as well as that of the community at large (Ravichandran, 1995).

Cooperatives manifest themselves as a great enabling force providing empowerment benefits to the rural and urban people. In cooperative setting, empowerment is an inherent phenomenon and it is central to the organizational purpose and process. Cooperatives can not be successful with out effective empowerment of their members (ibid).

Kolla Tembien Woreda saving and credit cooperatives are established to provide saving and credit services by targeting the poor people with the decisive objective of household food security, increasing household income and improving the overall economic and social conditions of their community in general and members in particular. The poor participate in such a program with the expectation that taking credit increases their income, saving, employment, access to education and health facilities and enhances the living standard of the poor, and ultimately achieves the objective of socio-economic empowerment and poverty reduction. The assessment of the role of saving and credit cooperative is, therefore, significant to determine whether it has realized its objectives and goals or not.

In the study area, the establishment of saving and credit cooperatives has started since 2004. Though the program has been in place for the last six years, its role on socio-economic empowerment has not been assessed. Thus, based on the above idea, this research attempts to look at the role of providing saving and credit facilities through cooperatives with the intent to enhance and empower the socio-economic realms of the rural poor taking Kolla Tembien Woreda as a case study.
1.3. Objectives of the Study

General Objective:
The central objective of this study is to assess the role of saving and credit cooperatives in empowering the rural poor.

Specific Objectives:
Primarily, this study will address the following two specific objectives:
1. To assess the role of saving and credit cooperatives in the socio-economic empowerment of members’.
2. To identify the major problems and challenges of saving and credit cooperatives in the study area.

1.4. Research Questions
1. What are the roles of saving and credit cooperatives in the socio-economic empowerment of the rural poor?
2. What are the major problems and challenges of saving and credit cooperatives in the study area?

1.5. Significance of the Study
The study is particularly significant at this time because there is a strong push by the government through rural financial service program to deliver financial services through community based and locally owned organizations. A key objective is to support communities to establish a nation wide infrastructure of saving and credit cooperatives to enable communities to access financial services, like savings, credit, money transfers and so forth. Therefore, the evidence will contribute to the theoretical and empirical body of knowledge available on cooperatives and it will give a room for other similar studies, and will contribute for the abundance of literatures in the area.

1.6. Scope and Limitation of the Study
The paper was limited to address the role of saving and credit cooperatives in empowering the rural poor in Tigray region with particular emphasis in Kolla Tembein Woreda, central Zone of Tigray, only in two saving and credit cooperatives.
There were a number of limitations in this study. Firstly, since the study is conducted only in two Tabias of one Woreda of Tigray, it may fail to represent the actual scenario of the whole country. Secondly, at the times of data collection, respondents were unwilling to provide the necessary information. Thirdly, Respondents were coming for interviews with certain expectations which the researcher could not provide. Hence, during the data collection phase every activity conducted were demanded a sum of money. Fourth, since the analysis of socio-economic empowerment was done by assessing and comparing members’ situation on the basis of before and after involvement, respondents may lose their memory to explain their situation before being a member. Besides, all improvement shown after program participation may not be due to the SACCOs. Finally, getting secondary data from the Woreda saving and credit cooperatives and promotion bureau was also challenging. There were no complete records of the activities undertaken by the saving and credit cooperatives in each year.

1.7. Organization of the Study

The paper is organized into five chapters. The first chapter comprises the introduction part of the research consisting of statement of the problem, objectives of the study, research questions and hypothesis, significance of the study, and the scope and limitation of the study. The second chapter deals with review of related literature. The third chapter provides methodology of the research which consists of description of the study area, sampling procedure, source and method of data collection, and method of data analysis. Chapter four presents the findings and discussion part of the research. Finally the paper wraps up its presentation by making concluding remarks and recommendations.
Chapter Two

Review of Related Literature

2.1. Definitions and Basic Concepts of Cooperatives

2.1.1 Definitions

Cooperatives - business terminology is not always clear and different terms are often used to describe the same business concept (Cropp, 2005). Likewise, when we deal with definitional discussion, we may not find universally accepted definitions. The term 'cooperative' may be defined in several ways. However, ICA (1995) defined cooperatives as:

"An autonomous association of persons united voluntarily to meet their common economic, social and cultural needs and aspirations through a jointly owned and democratically controlled enterprise" (ICA, 1995)

The above definition of cooperatives emphasizes the following characteristics:

- The cooperative is "autonomous" that is, it is an independent and free institution.
- It is an "association of persons" means they are not an association of capitals.
- The persons are united "voluntarily" means membership in a cooperative should not be compulsory. Members should be free to join or to leave the cooperative.
- "Members of a cooperative meet their common economic, social and cultural needs". This emphasizes that cooperatives are organized by their members, for their members. Member needs may be singular and limited, they may be diverse, they may be social and cultural as well as purely economic, but, what ever the needs, they are the central purpose for which the cooperative exists.
- "A cooperative is a jointly owned and democratically controlled enterprise". This phrase emphasizes that ownership is distributed among members on democratic basis.

A cooperative is usually perceived as a socio-economic organization that can fulfill both social and economic objectives of its members, and that has its member's interest truly at heart. There are three dimensions of cooperatives-economic, social, and moral, which are equally crucial for its success. The decision making system of cooperative is a perfect democratic institutions of members which is based on the "one member, one vote" system (Singh, 1999).
Savings and Credit Cooperatives (SACCOS) – SACCOS have many names around the world including credit unions. SACCOS are financial institutions that are owned, controlled, and capitalized by their members. WOCCU defines SACCOS as:

"...users owned microfinance institutions that offer saving and credit to their members... membership in a credit union is based on common bond, a linkage shared by savers and borrowers that can be based on a community, organizational, religious or employee affiliation" (WOCCU, 2001; on http://www.sacco.org.za/printdocs/saccos.htm)

The African Confederation of Cooperative Saving and Credit Associations (ACCOSCA) define saving and credit cooperatives as:

"A thrift and credit cooperative is a free association of people with a common bond who save and lend money to one another at low interest rate for productive and provident purposes." (ACCOSCA, 1969; pp.3)

In addition, as per SACCOL (1998) of South Africa, a savings and credit cooperative is a democratic, unique member driven, self-help, not for profit financial cooperatives. It is owned and governed by members who have the same common bond, and membership is open to all that belong to a group, regardless of race, religion, color, creed, and gender or job status. These members agree to save their money together in the saving and credit cooperatives and to make loans to one another at reasonable rates of interest. Interest is charged to cover the interest cost on saving and the cost of administration. There is no profit paid to any one. The members are the owners and the members decide how their money will be used for the benefit of one another (Bailey, 2001). However, it should be noted that, in Ethiopia, saving and credit cooperatives often pay dividends to the members depending on the number of shares one has.

According to Wolday (2008), one of the successful models used world-wide to deliver financial services to the poor sustainably is the development of people owned and managed grass root level saving and credit cooperatives. Those institutions accept both compulsory and voluntary savings from their members. The amount of voluntary savings varies from member to member depending up on his/her capacity.
Savings and credit cooperatives are user-owned financial intermediaries. Members typically share a common bond based on a geographic area, community, or other affiliation. Members have equal voting rights, regardless of how many shares they own. Savings and credit are their principal services, although many offer money transfers, payment services, and insurance as well (CGAP, 2005).

Ahimbisibwe (2007) also noted that financial cooperatives help people to teach how to earn money profitably, how to spend it intelligently for the benefit of members and their community. Saving and credit cooperatives provide financial services to rural areas which are not offered generally by the formal financial sector.

Saving and credit cooperative is democratic organization driven and owned by members regardless of race, religion, and gender or job status. A person can become a member as long as he/she fit the common bond, this means that they perhaps are working for the same objective, labor union and living/working in the same community. Members are shareholders, but no matter how much money they invest, they only get one vote each (www.saccoz.org.za/saccos.htm). Besides, they are cooperative organizations which are guided by the practices, philosophy and principles of the cooperative movement. They differ from the rest of other cooperatives because they are financial cooperative organizations with a social context (Kabuga and Batarineyebwa, 1995; cited in Ahimbisibwe, 2007).

Credit union as a cooperative financial organization owned and operated on a not-for-profit basis by its members according to democratic principles. Its purpose is to encourage savings, to use pooled funds, to make loans, and to provide other related services to members and families (ACCOSCA, 1990). Having this in mind, Dejene (1993) inferred that promoting thrift, providing credit at a low interest rate and teaching people the wise use of their money and efficient management of their limited pooled resources.
2.1.2 Values and Principles of Cooperatives

According to ICA (1995), Cooperatives are defined by the Values and principles under which they operate. They are based on the values of self-help, self-responsibility, democracy, equality, equity and solidarity. In the tradition of their founders, cooperative members believe in the ethical values of honesty, openness, social responsibility and caring for others (ICA, 1995).

The seven principles of cooperatives adopted by the International Cooperative Alliance (ICA) congruence held in Manchester on 23 September 1995 are: voluntary and open membership; democratic member control; member economic participation; autonomy and independence; education, training and information; cooperation among cooperatives; and concern for community.

2.2 Socio-economic Benefits of Cooperatives to the Poor People

2.2.1 Economic Benefits

Cooperatives have the advantages of identifying economic opportunities for the poor, empowering the disadvantaged to defend their interests, and providing security to the poor by allowing them to convert individual risks into collective risks. Consequently, cooperatives are increasingly being presented as a precondition for a successful drive against poverty and exclusion, more so in Africa (Birchall, 2004; 2003; ILO and ICA, 2003; cited in Frederick et al., 2008).

Credit provision is one example of how a cooperative can benefit its members. A formal credit market for small-scale farmers often does not exist in rural areas of developing countries, and cooperatives can therefore be useful. They are important since they can serve as providers of information about the creditworthiness of borrowers, and because it is more profitable for banks and marketing firms to transact in large quantities. In addition, if they operate with a system of joint liability, the risk of default (failure to pay) is reduced (Deiningger, 1995).
A cooperative can also benefit from economies of scale if the members use it to attain collective goods such as roads, vehicles, local stores, shops, hospitals and so on. Usually the provision of collective goods will be the responsibility of the state, and their financing based on tax income. But in many third world countries, the state does not have the means to supply these goods. The cooperative then represents an alternative. In fact, in many rural areas in developing countries, the existing cooperatives might be the only formal institution involved in serving the needs of rural farmers (Hussi, Lindberg, Murphy and Brenneman, 1993).

2.2.2 Social Benefits
Cooperatives that function as democratic organizations, where members actively participate in decision making processes, can have the by-product effect of creating social capital. Social capital is a ‘social organization, such as trust, norms, and networks, which improves the efficiency of society by facilitating coordinated action’ (Putnam, 1995).

A study by Narayan (2002) indicated that the role of grassroots initiatives as tools for development is widely recognized as part of an empowerment strategy. People living in poverty and isolation are voiceless and powerless in relation to their socio-economic feature. A producer organization can become part of a process of empowerment, by increasing social capital, and thereby improving democracy.

Cooperatives, organized as business enterprises for the benefit of their members, offer a model of enterprise that is particularly relevant in difficult economic times and instances of market failures. As a self-help group, a cooperative organization is widely accessible, especially for the impoverished and the marginalized. Where private enterprise or government is weak, particularly in remote rural areas, cooperatives enable local people to organize and improve their conditions. Cooperatives promote and support entrepreneurial development, creating productive employment, raising incomes and helping to reduce poverty while enhancing social inclusion, social protection and community-building. Thus, while they directly benefit their members, they also offer positive externalities for the rest of society and have a changing impact on the economy (United Nation, 2009).
Socially, cooperatives are local institutions rooted in grassroots society which give their members an ownership stake in the economy and connect people with decisions that affect their daily lives. They make an important contribution to building social capital and increasing trust, and also to restoring it when societies have been torn apart by conflict or by ethnic, political or religious divides. Cooperatives can provide social services to remotely located, low income segments of society that may not be otherwise served, including providing critical health services and educating millions on how to work together on common sense (OCDC, 2007).

2.3. Cooperatives and Poverty Reduction

Alleviating global poverty is one of the most significant challenges society faces today. The Millennium Development Goals, drawn from the United Nations Millennium Declaration, are helping to raise awareness of global poverty and goal one (of eight) targets reducing poverty and hunger by half by 2015 (United Nation, 2005).

Poverty reduction is about enabling poor men and women to transform their lives and livelihoods, and supporting governments and civil society in creating and maintaining the conditions that allow them to do so (IFAD, 2006). The condition of poverty has been interpreted conventionally as one of lack of access by poor households to the assets necessary for a higher standard of income or welfare, whether assets are thought of as human (access to education), natural (access to land), physical (access to infrastructure), social (access to networks of obligations) or financial (access to credit) (World Bank, 2000).

Khandker argued that when poverty results from unemployment, reducing poverty requires expanding the opportunity of jobs, where poverty is the result of low productivity and low income, reducing poverty requires investing in human and physical capital to increase workers productivity. But in most developing countries poverty is caused by human and physical capital. Therefore, increasing productivity by creating employment and developing human capital is unquestionable (Khandker, 1998).
Global Cooperative Campaign Against Poverty (GCCAP) emphasizes that cooperative enterprises are “the only form of organization meeting so fully all the dimensions of poverty alleviation as summarized by the World Bank: opportunity; empowerment and security (ILO and ICA, 2004). Besides, UNDP (1997) noted that Cooperatives can engage in the following priority areas to alleviate poverty and to improve the socio-economic wellbeing of the poor: empowerment of men and women; gender equality; pro-poor growth; an enabling environment for pro-poor policies and markets; and special international support. According to ESCAP (2003), the importance of cooperatives in terms of providing job opportunities and socio-economic solutions cannot be underestimated. According to the ICA, cooperatives employ more than 100 million workers and boast 760 million members worldwide, with 450 million members in Asia and the Pacific alone.

Cooperatives are putting people in charge of their own destinies and helping them bring services to their communities; increasing decision making, trust and accountability through democratic participation; building and protecting assets at the community level; limiting the role of government; and working together to resolve problems in post-conflict situations (OCDC, 2007). In addition to this, Birchall (2003) indicated that cooperatives like self-help cooperatives organizations of the poor are a pre-condition for successful anti-poverty work and that cooperatives can play an important role in fighting and reducing poverty. Individuals who have the similar problems and can not solve their own problems by their own means join together and form a cooperative by sharing their capital, knowledge, labor, property etc to solve their common problems jointly.

The capacity of the cooperative movement for creating viable and sustainable enterprises secures productive employment and self-employment, the generation of income and the payment of adequate wages and salaries. Financial cooperatives provide the means for escaping from indebtedness and for effective financial management. Their provision of insurance and services for health and social care, as well as affordable and appropriate housing, and their contribution to food security are clearly major contributions to the alleviation of poverty (United Nation, 1996).

Lack of access to credit is clearly understandable in terms of the absence of collateral that the poor can offer conventional financial institutions, in addition to the various complexities and high costs involved in dealing with large numbers of small, often illiterate
borrowers. The poor have thus to rely on loans from either moneylenders at high interest rates or friends and family, whose supply of funds will be limited (J. Weiss and H. Montgomery, 2004). Hence, financial cooperatives attempt to overcome these barriers through innovative measures such as group lending and regular savings schemes.

Saving and credit cooperatives play a significant role in poverty reduction through the provision of financial services to the poor people of the rural and urban areas. They provide savings and credit and investment opportunities to individuals, institutions and group members. Magill (1994) cited in Ahimbisibwe F. (2007) emphasizes that saving and credit cooperatives perform an active financial intermediation function, particularly mediating from urban and semi-urban to rural areas, and between net savers and net borrowers while ensuring that loan resources remain in the communities from which the savings were mobilized. Saving and credit cooperatives bring institutional financial services to rural areas which are not offered generally by the formal financial sector. Besides, they help teach people how to earn money profitably, how to spend it intelligently for the benefit of their community in general and members in particular to reduce poverty and avoid unemployment.

The people of Ethiopia have got a very long social history of working together to fulfill their socio-economic needs. Agriculture, trade and military operations were carried out through cooperative efforts. Many social events are still taking place in rural Ethiopia through collective effort. In line with this, the Federal Government of Ethiopia has identified cooperative form of business organizations as an instrument of socio-economic change of the society particularly to achieve food security and alleviate poverty (Veerakumaran, 2007).

Similarly, the delivery of financial services in Ethiopia has also been viewed as an anti-poverty tool because it helps the unemployed become employed, thereby increasing their income and consumption and reducing poverty. Improving financial access to the poor can facilitate economic growth by promoting production and by providing capital to start up new production or adopt new technology (Wolday, 2002). Consequently the intervention of financial institutions will have a considerable effect on reducing poverty and unemployment.
2.4 Empowering the Poor Through Cooperatives

2.4.1 Understanding the Concept of Empowerment

The concept of empowerment was the outcome of several important critiques and debates (Wickramasinghe, 2000; cited in Muleta, 2008). Empowerment has been defined in various ways and utilized in different contexts. The concept of empowerment is used in many disciplines. Depending on the discipline, it can be used to describe situations of individuals, groups and organizations at different levels. For example, in the Human Development Report, empowerment is equated with people’s participation and decision making. Oxfam consider empowerment as capacity to challenge oppressions (Oxal and Baden, 1997; cited in Emebet, 1999).

Looking at various perspectives from which empowerment is viewed, it can be said that it involves access to resources such as education and finance, the opportunity to use social services available in the society, for example, schools, health facilities, and other infrastructures, the opportunity to participate in discussions and making decisions on matters of importance to one’s self and to the society (Emebet, 1999).

However, in order to empower people, having access to resources alone would not be sufficient. For example, for a woman, access and control over resources does not guarantee empowerment if she is not unable to make her own choices because of ideology and culture. Due to this reason, empowerment is a very complex concept which includes much political discourse and may need specific definition and indicators depending on the program one is engaged in (ibid).

Perceptions of being empowered vary across time, culture and domains of a person’s life. For example, the World Bank (2002) empowerment sourcebook indicates that in India, a low caste woman currently feels empowered when she is given a fair hearing in a public meeting, which is comprised of men and women from different social and economic groups. In Brazil, in Porto Allegre, citizens feel empowered if they are able to engage in decisions on budget allocations. In Ethiopia, citizens and civil society groups report feeling empowered by consultations undertaken during the preparation of the poverty reduction support program. In the USA, immigrant workers feel empowered through unionization which has allowed them to negotiate working conditions with employers, and in the UK, a
battered woman feels empowered when she is freed from the threat of violence and becomes able to make decisions about her own life (worldbank.org).

Sarah Mosedale (2003) indicated that empowerment is an ongoing process rather than a product. There is no ultimate goal of empowerment. One does not arrive at a stage of being empowered in some absolute sense. People are empowered or disempowered relative to others or importantly relative to themselves at a previous time.

According to Rowlands (1995), empowerment is the ability to obtain an income that enables participation in economic decision making. Individuals become empowered when they obtain the right to control over material and non material resources to determine choices in their life. Similarly, empowerment involves increased in well being, access to resources, increased self-confidence, self-esteem and respect, increased participation in decision making and bargaining power and increased control over resources and own life (Kabeer, 2002).

A group of people coming together to form a cooperative to meet their needs is a self help empowering action that cannot be lost sight of as the organization matures. The responsibilities of members in cooperative differ from the responsibilities of members in social club or non-profit organization. Members in cooperatives are owners and thus, have added responsibilities. Electing the board of directors is an added and primary responsibility of members. This empowering act is specified in the articles and bylaws, accompanied by description of the role and authority of the membership and the board. How the board empowered is and how much authority is given to the board by the membership varies from cooperatives to cooperatives and is a good indicator of empowerment through cooperatives (Shivajirao patil, 1999; cited in Subburaj, 2003).

Huff-Hannon (2004) explained that where individuals are powerless, they can gain greater power by working together collectively and in cooperatives, the process of working together often involves learning on the job, building self-confidence and acting to create the world in which you want to live. In this sense, cooperatives have the potential role to empower and create opportunities for the rural poor to get out of poverty.
Since the concept of empowerment is very complex, different authors use different components to measure individuals or groups empowerment. For example, Parveen and Leonhauser (2004) use contribution to household income, access to resources, ownership of assets, participation in household decision making, perception on gender awareness and coping capacity to household shocks to measure empowerment of women at a household level in Bangladesh. According to the Economic and Social Commission for Asia and the Pacific (ESCAP, 2000), the key ingredient for empowerment are motivation, awareness raising and training, resource mobilization and self-management.

2.4.2 Dimensions of Empowerment

Cooperatives, as economic enterprises and self-help organizations, play a significant role in improving the socio-economic conditions of their members in particular and local communities in general. According OCDC (2007), cooperatives are unique in addressing the following three dimensions of empowerment simultaneously:

Economic Empowerment
Economically, the cooperative business model has helped millions of low income developing country individuals improve their incomes. Cooperatives are institutions of choice to bring economic opportunity to underserved areas. Remote, rural regions, where most poor people live, tend to be less profitable for other forms of enterprises and unattractive to investors because of scattered and low levels of production, high transaction costs and long distances to market. However, cooperatives allow entrepreneurs to overcome many of the market barriers that exist in developing countries. Over time, areas can be transformed when members invest in agricultural cooperatives to lower the costs of farming inputs and improve marketing, saving and credit cooperatives to reach lower-income groups, and insurance cooperatives to protect assets of low income people.

As Jerinabi (2008) discussed, though defining the term empowerment is a tricky concept and identified only when it is experienced, economic empowerment of poor individuals can be considered with the help of increase in assets value, family income, consumption expenditure, savings, amount of loan size, occupation and so on. Muraleedharan (2005) argued that cooperatives play a significant role in economic empowerment of members
an end to capitalist exploitation and to prevent the re-emergence of capitalism in agriculture (Dessalegn, 1990).

The first legal frame work for cooperatives, Farm Workers Cooperative Decree No.44, was enacted in 1960 and repealed by Cooperative Societies Proclamation No.241/1966 in 1966. This proclamation was meant to provide a proper basis for the formation of cooperative societies and the objective of the societies were to promote thrift, mutual help and self help among persons sharing common needs and desires (Mokenen et.al., 2007).

Following the coming to power of the military government in 1974, the socialist economic system was adopted and proclamation No.241/1966 was repealed and replaced by Proclamation No.71/1975. The new proclamation addressed the formation of peasant association in which the objectives, powers and duties of agricultural producers and service cooperatives were stipulated. Subsequently, proclamation No.138/1978 was issued with a view to include the promotion of other type of cooperative societies (ibid).

Similarly, the government issued proclamation No 85/1994 with the objective of restructuring agricultural cooperatives to enable them to contribute to the development of the national economy. The proclamation was generally features by the principles of cooperation such as voluntary association, business orientation and democratic member control (Dessalegn, 1994).

Currently, the Federal Democratic Republic of Ethiopia government has been enacted proclamation No. 147/ 1998 in 1998 to strengthen and provide the greater establishment of cooperative societies in the country, and to bring all types of cooperative societies under one umbrella. Later on the Federal Cooperative Commission (the currently Federal Cooperative Agency) was established in 2002 based on proclamation No. 274 /2002. Moreover to correct the short comings of proclamation No.147/1998, amendment 402/ 2002 and regulation number 106/2002 became important instrumental documents in the cooperative movement of the country. As a result, some improvements have been made in cooperative societies in the country (Veerakumaran, 2007).
Proclamation No. 147/1998 outlines the layered organizational structure of the cooperatives, which was not permitted by the previous regime. An organization can have four layers, i.e., primary cooperatives, unions, federations, and cooperative leagues (Dorsey and Tesfaye, 2005). Another unique feature of the proclamation is that it defines the ratio of dividends between a cooperative organization and its members. Article 33 of No. 147/1998 regulates that the cooperative “society shall deduct 30% of the net profit” and “the remaining net profit shall be divided among members.” Therefore, the unions provide 70% of their net profit to the primary cooperatives and the primary cooperatives in turn provide 70% of their net profit, including the dividends from the union, to cooperative members (ibid).

2.5.1 Historical Background of Saving and Credit Cooperatives in Ethiopia

The first savings and credit cooperative in Ethiopia was established in 1957 by employees of the Ethiopian Road Authority (Dagnew, 2004; cited in Mekinen et al., 2007) and followed by employees of Ethiopian Airlines in 1964 (Abate, 1998; quoted in Mekinen et al., 2007). During the same period (in 1964), credit cooperatives were established by the Ethiopian Telecommunication Agency. These organizations are among the most modern and relatively efficient enterprises in the country. A national promotion committee, known as the Ethiopian Thrift and Credit Cooperative Development, was set up in 1970 in order to promote savings and credit unions in the country. This committee, which was able to host the ninth African Conference on the Mobilization of Local Savings, facilitated Ethiopia’s affiliation with ACCOSCA. It contributed to the increase in the number of saving and credit cooperatives in Ethiopia, and it was able to secure assistance from a number of international donor agencies towards the development of saving and credit cooperatives. However, the national promotion committee was not then granted legal status. That was one reason why it was succeeded by the Ethiopian National Thrift and Credit Cooperative Society in 1973. This society was established by the already existing credit unions under the 1966 Cooperative Societies Proclamation No. 241. It was administered by a board of directors elected by the general assembly of the representatives of each affiliated society. This national society was able to contribute to the further development of savings and credit unions in Ethiopia until its liquidation with the passage of the 1976 Monetary and Banking Proclamation No. 99 and the 1978 Cooperative Societies Proclamation No. 138 (Dejene, 1993).
After the fall of the Derge regime in 1990/91, adoption of Economic Reform Programme helped the organization, promotion and development of co-operative societies within the framework of the free market economy (Emmanuel et al., 2009). Currently, the FCA (2008) reported that saving and credit cooperatives in Ethiopia operates under the provisions of proclamation No. 147/98. They are registered as limited liability companies to perform the much needed functions of financial intermediation, mobilize saving from members and return those savings in the form of loans.

The number of savings and credit cooperative societies organized and operating at primary level in all the National Regional States of the Federal Democratic Republic of Ethiopia as of last June 2008 reported by the FCA (2008) to be 7834 with membership size of 383,311 (224,717 male and 158,594 female) and capital of Birr 312,894,808.00. The following table shows the distribution of savings and credit cooperative societies in each of the National Regional States of the Federal Democratic Republic of Ethiopia as of last June 2008.

Table 2.1 Data on Savings and Credit Cooperative Societies of the FDRE as of June 2008.

<table>
<thead>
<tr>
<th>National Regional States</th>
<th>Number of Savings and Credit Societies</th>
<th>Members</th>
<th>Capital in Birr</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Male</td>
<td>Female</td>
</tr>
<tr>
<td>Amhara</td>
<td>543</td>
<td>28442</td>
<td>12064</td>
</tr>
<tr>
<td>SNNP</td>
<td>869</td>
<td>37010</td>
<td>26234</td>
</tr>
<tr>
<td>Oromia</td>
<td>3114</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Tigray</td>
<td>232</td>
<td>8472</td>
<td>3897</td>
</tr>
<tr>
<td>B/Gumuz</td>
<td>70</td>
<td>2205</td>
<td>951</td>
</tr>
<tr>
<td>Dire Dawa</td>
<td>79</td>
<td>1328</td>
<td>1505</td>
</tr>
<tr>
<td>Harare</td>
<td>13</td>
<td>655</td>
<td>351</td>
</tr>
<tr>
<td>Gambela</td>
<td>27</td>
<td>426</td>
<td>2008</td>
</tr>
<tr>
<td>Somali</td>
<td>20</td>
<td>1012</td>
<td>1778</td>
</tr>
<tr>
<td>Afar</td>
<td>15</td>
<td>245</td>
<td>260</td>
</tr>
<tr>
<td>Addis Ababa</td>
<td>2852</td>
<td>144,922</td>
<td>109,546</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>7834</strong></td>
<td><strong>224,717</strong></td>
<td><strong>158,594</strong></td>
</tr>
</tbody>
</table>

*Source: Federal Cooperative Agency, June 2008*
2.6 Problems and Constraints of Saving and Credit Cooperatives

Financial cooperatives like saving and credit cooperatives provide financial services to poor people who are considered incapable of repaying and managing credit by formal banks. In the process of service delivery, saving and credit cooperatives face various problems and challenges. According to WOCCU and CGAP (2005), globally the major problems of saving and credit cooperatives are governance weaknesses, inadequate regulation and supervision, limited menu of products, and damage done by external credit.

**Governance Weaknesses** - Savings and credit cooperatives are usually governed by a volunteer board of directors elected by and from the membership. Small and young savings and credit cooperatives are also often staffed entirely by volunteers. As they grow, more sophisticated and risky operations require professional managers. Problems occur when volunteer board members continue to make operational decisions, after professional managers have been recruited, instead of focusing on monitoring operations. It is difficult for board members to balance the contradictory interests of net borrowers and savers.

**Inadequate Regulation and Supervision** - Savings and credit cooperative systems in developing countries have a history of instability. Competent external regulation and supervision can identify, avoid, and resolve many common problems. These cooperatives are often supervised by the same government agency that is responsible for all kinds of non-financial cooperatives, including agricultural and marketing. Such agencies do not have the financial skills and political independence needed to oversee financial intermediaries effectively.

**Limited Menu of Products** – Limited type of product is offered, with no variation according to risk levels (borrower repayment capacity, type of activity financed, and other risk factors). These types of loans are not flexible enough to meet members diverse credit needs, including short-term working capital for micro entrepreneurs and agricultural inputs for small holder farmers. Many savings and credit cooperatives are introducing a greater variety of credit products such as housing loans and use better tools to assess and manage loan risk.
Damage Done by External Credit - Donors have channeled funds through savings and credit cooperatives to target specific types of clients. Experience shows that this practice tends to harm participating savings and credit cooperatives: external funds decrease the incentive to mobilize deposits, skew incentives toward net borrowers, and are not managed as carefully as the members’ own money. External funding does have the advantage of being a resource for longer-term loans, but it should be limited in relation to members’ deposits and the internal capacity for managing a larger loan portfolio. According to ICA (2001), failure to recover defaulted loans due to failure to secure such loans or poor securities, lack of diversity in services and products offered which implies a fear by the management to invest in new things and lack of qualified staff with a higher formal education are the main problems of saving and credit cooperatives.

In Ethiopia, a study by Veerakumaran (2008) indicated that the main problems of saving and credit cooperatives are: lack of infrastructure like office buildings and equipments, lack of awareness about saving and credit cooperatives and its benefits among the potential member’s, lack of saving habit among the people, cumbersome lending polices and procedures, lack of trained and educated manpower, lack of external funding for the saving and credit cooperatives, limited audit facilities, small size of membership, lack of member’s participation, limited support by the government, loan overdue, conflict of interest between saving and credit cooperatives and its unions and poor account keeping.

Emmanuel et.,al (2009) studied that the major problems of Ethiopia’s saving and credit cooperatives are: inadequate legal, regulatory and supervisory framework, lack of demand driven organization of saving and credit cooperatives, low capital base, weak linkages with other cooperatives and the formal banking sector, weak governance, weak financial management system, and weak and poor saving and credit cooperative leadership quality.

Inadequate Legal, Regulatory and Supervisory Framework - Saving and credit cooperatives as financial cooperatives offering near banking products and services which lack a specialized legal, regulatory and supervisory framework. Saving and credit societies are involved in financial intermediary role that requires special act and policy that supports the specific roles.
Organization of Saving and Credit Cooperatives are Not Demand Driven - The formation of rural saving and credit cooperatives is not demand driven. Close looks at the history of the formation of saving and credit cooperatives since 2003 break the cooperative principles. They are formed either by NGOs on the basis of self help and mutual help principles or the Cooperative Agency, Regional Cooperative Bureaus and Woreda Offices which have the legal authority to promote cooperatives.

Low Capital Base - Member’s capital subscriptions, registration fees, regular and voluntary savings are the principal sources of the cooperatives capital base. External assistance to strengthen the capital base of the societies is non-existent. Besides, the cooperative act and bylaws have defined the minimum membership size of a primary cooperative society to be 10 persons. The small size of membership coupled with small amount of savings monthly by members is the most important reason to the undercapitalization of the saving and credit cooperatives. This has become a major hindrance to the societies to scale up their financial operations and meet the credit demands of their members.

Weak Governance - Board members have no knowledge of banking business. In some cases, saving and credit cooperatives are unable to employ high competence management staff and the burden of due diligence is left to saving and credit cooperative members who may have limited education on financial management and cooperatives. The financial management system in place is weak and less transparent as financial records are not properly maintained and timely produced in a report form for decision making process. The management committee and control committee elected by the general assembly do not have the necessary capacity to provide good governance, nor attend skill upgrading training programs.

Weak Linkages With other Cooperatives and the Formal Banking Sector - Networking among the saving and credit cooperatives and linkage with other cooperatives as well as formal financial institutions can be an important strategy to tap resources for lending to the members. However, there is very little recognition both at the Regional Promotion Bureaus, Woreda level cooperative offices, and saving and credit cooperative level about the huge benefits of networking, linkage horizontally with other cooperatives and financial institutions.
Weak Financial Management System - The financial system in place including accounting and audit works are very weak. Except in Oromia and SNNP regional states where Self Help covers the costs of recruiting accountants to maintain financial records of the societies and produce reports timely, the accounting work in other regional states is weak and reports are not timely produced. Similarly, the accounts of the societies are not timely audited with three to four years lag in the case of certain primary societies. This is due to limited capacity and inadequate human resource base of the Regional Cooperative Bureaus and Woreda cooperative Offices to provide such type of services timely as required by the cooperative proclamation No. 147/1998 and bylaws.

Weak and Poor Saving and Credit Cooperative Leadership Quality - Cooperative leaders and members particularly in the rural areas are generally illiterate. Creating vibrant Primary saving and credit institutions that can provide efficient financial service to the rural poor in a sustainable basis under the current leadership is unachievable in the current rural context. Therefore, it is imperative to think institutional set up that can provide technical assistance in terms of educating and training saving and credit cooperative leaders and members in different areas in entrepreneurship, financial management, cooperative principles and values, saving mobilization and credit extension activities, and the need to diversify service products to members.

2.7 Study Approach

As it is discussed above, this study attempts to look the role of saving and credit cooperatives in empowering the socio-economic conditions of the rural poor taking members of Kolla Tembien saving and credit cooperatives in focus. Even if incorporating all elements of empowerment in the assessment of financial institutions on individual’s empowerment is a difficult task this study has emphasized on the socio-economic dimensions of empowerment of the rural poor members of cooperatives through saving and credit cooperatives.

Though the concept of empowerment has been the subject of much intellectual discourse and has different meanings in different social, cultural and political contexts, for the purposes of this study, operationally empowerment is defined as a process of transition from a state of low socio-economic participation to a state of relative improvement and
control over their household welfare. This includes increasing the socio-economic strength of the rural poor members of saving and credit cooperatives in terms of income, saving, training, participation, educational and consumption expenditure, occupation and improvement in members living standard. Accordingly, economic empowerment includes members' economic contribution to household welfare and access to economic resources.

As a consequence of economic empowerment, income, savings, credit, living standard, employment and self-employment increases and thus reducing poverty and unemployment. Social empowerment is related to receiving education and training, participation of member's in different social institutions and cooperative activities, interaction with development agents and officials of cooperatives, access of the rural poor to mass media and the like.

Finally, this study make an ideal attempt to assesses the major problems and challenges of Kolla Tembien Woreda saving and credit cooperatives that hinder their institutional and organizational efficiency.
3.1. Description of the Study Area

*Kolla Tembiien Woreda* is located at the southern part of Central Zone of Tigray and is surrounded by *Woreda Weri-Leke* to the north, *Hawzen* and *Degua Tembiien* to the east, Aberyale to the south, and *Tselemti* and *Neadir Adet* to the west (refer figure 3.1). It has 22 *Tabias* (Synonymous with *kebele*), which comprises 83 *Kushets* (Sub-Tabias) and possess a total population of 142,958 of which 72,722 are females and 70,236 are males. Out of the total population of the *Woreda*, more than 16,000 individuals are members of cooperatives (of which 727 individuals are members of saving and credit cooperatives). Total area of the *Woreda* is 147,000 hectares where 31,021 is arable, 2,252 hectares is bush land, 69,624 hectares is grazing land, and 20,150 hectares is Westland and the remaining 23,953 hectares of land comprises natural forests, new reforestation areas and residences (KTWBARD, 2007).

Topographic condition of the *Woreda* is mountains, plateaus and rugged characteristics. Its elevation ranges between 1,200 - 2,300 meters above sea level. Annual rainfall of the *Woreda* between 550-800 mm and the rainfall type is erratic and uneven (ibid).

The major problems of the study area are destruction of natural forests by chopping of bush lands, cutting of big trees, and over grazing. From year to year, vegetated areas become bare land and this causes easily detachment of top soil that exposes the land to erosion. In addition to this, the total run off created in a certain area increased because there is no interception and low infiltration on less vegetation cover (ibid).

According to the annual report of KTWBARD (2007), the study *Tabias/Kebeles, Workamba* and *Atakilti*, are located at a distance of approximately 19 and 14 km from the main city of *Tembien* (i.e. *Abi-Adi*) respectively. The report also indicated that there are around 7875 people is living in *Atakilti* (of which 4008 are females) and 7018 persons are in *Workamba* (of which 3441 individuals are females). Both *Tabias/kebeles* share the same agro-ecological zone. Topographically, they are characterized by mountains, plateaus and rugged landscapes. Most areas have uncovered, infertile and eroded land.
Fig 3.1 Map of Tigray Region

Fig 3.2 Administrative Map of the Study Woreda

Fig 3.3 Map of the Study Tabias/Kebeles
3.2. Sampling Procedure

The survey Woreda is purposively selected because of the availability of saving and credit cooperatives and low level of development. Besides, in the selected Woreda, no research has been done so far in the area of empowerment of the poor through saving and credit cooperatives.

Kolla Tembien Woreda has more than ten saving and credit cooperatives. However, only four of them, i.e., Mylomine, Kokob, Woini, and Hadinet have more than four years of age. The researcher used purposive sampling technique to select two saving and credit cooperative societies out of the four saving and credit cooperatives, namely: Hadinet and Kokob saving and credit cooperatives. The major reasons to purposively choose these two financial institutions are primarily based on:

- Members of these two saving and credit cooperatives have a relatively longer duration of membership. In this case, the contribution of the cooperatives to the socio-economic empowerment of members in terms of income, expenditure and consumption, and saving can be fairly analyzed.

- The two saving and credit cooperatives have external sources of fund, with Hadinet being financially supported by the World Bank and Kokob by the Relief Society of Tigray (REST).

- Budget limitation, transport networks and accessibility of these two study villages to the main Woreda’s town could be mentioned as additional factors for purposively choosing those two sites.

Taking the above reasons as selection criteria, the sampled respondents have been taken almost proportionally from each category by using simple random sampling technique to ensure equal chances of being chosen. At the beginning, the author has determined the total sample size for the study to be 110 members. After obtaining the data on the total numbers of members of both saving and credit cooperatives from the Woreda Cooperative Promotion Bureau, 55 respondents were selected from 85 members of Hadinet saving and credit cooperative and 55 respondents were also selected from 91 members of Kokob
saving and credit cooperative as sample size of this study. Hence, the survey was carried out on a total of 110 members of which 67 are females and the rest 43 are male members. The following table provides information on population and sample size of the selected saving and credit cooperatives (Table 3.1).

Table 3.1 Sampling Method

<table>
<thead>
<tr>
<th>Name of the Saving and Credit Cooperatives</th>
<th>Male</th>
<th>Female</th>
<th>Sample Size</th>
<th>Total Members</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hadinet</td>
<td>33</td>
<td>22</td>
<td>55</td>
<td>85</td>
</tr>
<tr>
<td>Kokob</td>
<td>10</td>
<td>45</td>
<td>55</td>
<td>91</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>43</strong></td>
<td><strong>67</strong></td>
<td><strong>110</strong></td>
<td><strong>181</strong></td>
</tr>
</tbody>
</table>

3.3. Methods and Source of Data Collection

Both primary and secondary sources were employed to collect the quantitative and qualitative data of this particular study.

Primary Data

To generate the necessary information from the sampled respondents, household survey, Focus Group Discussion (FGD) and key informants interview have been undertaken.

A Household Survey

To gather the required data from members in relation to the objective of the study, household survey was conducted using questionnaire in the two saving and credit cooperatives. This household survey includes open-ended and closed-ended questions. The questionnaires were translated into Tigrigna (local language of the study area) in order to create clear understanding, credibility and confidence in the respondent answers and pre-tested on randomly selected sister cooperatives in the study Woreda. Accordingly proper amendments were made based on the feedback.

To collect the data in the proper manner, enumerators familiar to the culture of respondents were recruited. Then after, two days training was given on how to approach the respondents and how to collect the data using the schedule.
B. Focus Group Discussion (FGD)

This technique was mainly employed to identify the major problems of saving and credit cooperatives face and to get detailed information on the role of saving and credit cooperatives in empowering the socio-economic conditions of the rural poor in the study area. Focus group discussion was conducted to enable participants to undertake open discussions about their situations. This may not be possible if only questionnaire is used. Therefore, the researcher conducted two FGDs with the management committees of the cooperatives. One focus group discussion was carried out in each cooperative. The group included 7 persons in Hadinet and 9 persons in Kokob saving and credit cooperatives. This all is done to get detailed information about their problems and socio-economic issues, and the information gathered from those groups was used to strengthen the findings obtained from household survey.

C. Key Informant Interviews

To get the general information about the saving and credit cooperatives of the Woreda key informant interviews were conducted. The interview was planned to be free flowing with the interviewer to follow up on questions or to pursue new information that may come up during the interview. The interview was held with two persons of both Tabia Cooperative Managers and four persons of Woreda Cooperative Promoters

Secondary Data

Relevant information have also been gathered from documented sources such as policy documents, published books, reports, journals and other related research studies. The documents have been helpful in assessing what academicians or practitioners have said about the subject matter and to serve as a base for determining the feasibility of the research. In addition to this, it provides a broader perspective and clue on the theme.
3.4. Methods of Data Analysis

In order to meet the general and specific objectives of the study, both qualitative and quantitative methods of data analyses were employed. Data obtained from the household survey were stored in SPSS spreadsheet. These data were analyzed by using descriptive statistics and Wilcoxon Signed Rank Test (WSRT) using SPSS version 16. In addition, the qualitative data were analyzed contextually.

The WSRT were used to analyze the role of the saving and credit cooperatives on the members’ socio-economic empowerment based on before and after joining analysis. According McDonald (2009) and, Fidler and Webster (1996), the WSRT is used when the variables are proposed to be measured on the before and after basis. Despite a few limitations like the difficulty of knowing the situation of respondents before the cooperatives, this method has been used by many scholars. This should be used if the distribution of differences between pairs may be non-normally distributed. The procedure of computation of the WSRT is attached in ANNEX 4.
Chapter Four

Findings and Discussions

This chapter provides the empirical results gleaned from household survey, FGDs and key informants. To make the finding more meaningful, information gathered through FGDs and key informant interviews are integrated with the household survey analysis when appropriate. The descriptive analysis made use of tools such as mean, minimum, maximum and percentages. Wilcoxon Signed Rank Test was employed to examine the socio-economic benefits derived by respondents after joining the saving and credit cooperatives. Finally, to identify the main problems of saving and credit cooperatives, the data obtained from FGDs and key informant interviews were discussed contextually.

4.1. Demographic Characteristics of Respondents

As it is revealed in Table 4.1 below, the age structure of sample respondents indicates that the majority of respondents that accounted to 39.1 percent are with in the age range of 36 to 45 years, while 21.8 percent constitute the age group of 26 to 35 years. Only 9.1 percent of the respondents fall in the age group of 15 to 25 years indicating that the membership and participation of this age group in the saving and credit cooperatives is very low.

The sex distribution of respondents shows that 60.9 percent of the respondents were females, while 39.1 percent were male. The lion shares of the respondents were women that testify to the fact that majority of the respondents, are female. Respondents were selected randomly without any bias towards their site and sex.

Regarding marital status, it is the married members (45.5 percent) who dominate the sampled respondents. The number of single beneficiaries accounts to be only 26.4 percent of the total sample taken. The other 19.1 percent are divorced, while widowed members comprise 9.1 percent. Here, it can be said that whatever the marital status of the respondents may be, they all are joined this institution to solve the problem of unemployment and thereby generating income.
Table 4.1 Characteristics of Respondents

<table>
<thead>
<tr>
<th>Variables</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age Group</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15-25</td>
<td>10</td>
<td>9.1</td>
</tr>
<tr>
<td>26-35</td>
<td>24</td>
<td>21.8</td>
</tr>
<tr>
<td>36-45</td>
<td>43</td>
<td>39.1</td>
</tr>
<tr>
<td>46-55</td>
<td>21</td>
<td>19.1</td>
</tr>
<tr>
<td>56-65</td>
<td>9</td>
<td>8.2</td>
</tr>
<tr>
<td>&gt;65</td>
<td>3</td>
<td>2.7</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>110</td>
<td>100</td>
</tr>
</tbody>
</table>

| Name of the Saving and Credit Cooperatives | Sex of Respondents |          |
|==========================================|-------------------|---------|
| Hadinet                                  | Male (30%)        | 33      |
| Kokob                                     | Female (40.9%)    | 45      |
| **Total**                                 | Total (39.1%)     | 43      |

| Marital Status                           |          |
| Single                                    | 29       | 26.4    |
| Widowed                                   | 10       | 9.1     |
| Married                                   | 50       | 45.5    |
| Divorced                                  | 21       | 19.1    |
| **Total**                                 | 110      | 100     |

| Family Size                               |          |
| Small Up to 4                             | 32       | 29.1    |
| Medium (5 to 8)                           | 52       | 47.3    |
| Big (> 8)                                 | 26       | 23.6    |
| **Total**                                 | 110      | 100     |

| Educational Level                         |          |
| Illiterate                                | 62       | 56.4    |
| Able to Read and Write                    | 25       | 22.7    |
| Up to 4                                    | 15       | 13.6    |
| 5 to 8                                    | 6        | 5.5     |
| 9 to 12                                   | 0        | 0       |
| > 12                                      | 2        | 1.8     |
| **Total**                                 | 110      | 100     |

| Duration of Membership                    |          |
| Up to 1 year                              | 3        | 2.7     |
| 2 to 3 years                              | 19       | 17.3    |
| 4 to 5 years                              | 43       | 39.1    |
| > 5 years                                 | 45       | 40.9    |
| **Total**                                 | 110      | 100     |

Source: Field Survey, 2010
For the purpose of the study, household with four members, between five and eight members, and above eight members are termed as small, medium and big family sizes respectively. Large number of dependents could exert pressure on household access for credit and meager for thrift, since this might lead to greater loan diversion. Loan may be diverted because household expenditures could be higher with larger family size unless they are productive. Therefore, with respect to family size, Table 4.1 shows that 47.3 percent of the sampled respondents have medium (5 to 8) family size, while 29.1 and 23.6 percent of the respondents have small (up to 4) and big (>8) family respectively.

The educational status of sampled respondents indicated that 56.4 percent of respondents are illiterate, 22.7 percent can read and write, 13.6 percent of respondents are educated up to grade 4, and the rest 5.5 and 1.8 percent are found to be 5 to 8 and greater than 12 grades respectively. This result reveals that the educational levels of the majority of respondents are illiterate. This calls for the need of basic education for rural members of saving and credit cooperatives in the study area.

Regarding duration of membership, the study shows that only 2.7 percent of respondents have been members of the saving and credit cooperatives for less than a year, while 17.3 percent of them stay from two to three years. 40.9 percent of the respondents are participating in cooperatives for the periods of more than five years, others 39.1 percent of them have a membership duration ranging between four to five years. This indicated that 80 percent of respondents have more than four year’s duration of membership.

Long term membership enables the members to exploit benefits of various programs compared to members who have joined recently. Besides, it is believed that the role of the saving and credit cooperatives in the socio-economic improvements of the rural poor can be fairly observed as most of the members participated in the cooperatives for more than four years.
4.2. The Role of Saving and Credit Cooperatives on Socio-economic Empowerment of Respondents

Saving and credit cooperatives provide financial support to poor societies to strengthen their household income and expand their small business activities. Hence, this study attempt to assess the different roles of saving and credit cooperatives on members’ socio-economic empowerment by analyzing its role on income, occupation, consumption, saving, participation etc as discussed below.

4.2.1 Indicators of Economic Empowerment of Respondents

4.2.1.1 Respondents Source of Credit Before and After SACCOs

Table 4.2 shows that the majority of respondents (39.1 percent) were used microfinance institutions as source of credit before joining the saving and credit cooperatives, while private money lenders and relatives/friends account for 20.9 percent each. 19.1 percent of the sampled respondents had not used any credit source before the saving and credit cooperatives and 17.3 percent of respondents have not taken any loan from the saving and credit cooperatives after membership.

Table 4.2 Percentage Distribution of the Respondents by Credit Sources

<table>
<thead>
<tr>
<th>Credit Sources</th>
<th>Before the Saving and Credit Cooperatives</th>
<th>After the Saving and Credit Cooperatives</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Frequency</td>
<td>Percent</td>
</tr>
<tr>
<td>banks</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>microfinance institutions</td>
<td>43</td>
<td>39.1</td>
</tr>
<tr>
<td>private money lenders</td>
<td>23</td>
<td>20.9</td>
</tr>
<tr>
<td>relatives/friend</td>
<td>23</td>
<td>20.9</td>
</tr>
<tr>
<td>saving and credit cooperatives</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>no credit source</td>
<td>21</td>
<td>19.1</td>
</tr>
<tr>
<td>no loan</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>total</td>
<td>110</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Field Survey, 2010
The interview held with both Tabia saving and credit cooperative managers shows that members were obliged to pay a higher level of interest rate (14 percent) when they were taking loan from microfinance institutions, while the interest they are paying at present decreased to nine percent when they take credit from the cooperatives. Similarly, as illustrated in Table 4.2 above, at present, 82.7 percent of members are receiving credit services from the saving and credit cooperatives and this implies that these financial institutions are playing a significant role in empowering the financial affairs of members to enhance their socio-economic welfare.

4.2.1.2 Occupation of Respondents Before and After the SACCOs

Occupation is an important factor as it provides income to households. The type of occupation a member engages determines the living condition of the household. Different activities such as agriculture, petty trading, fattening and dairy provide additional income to their household. One of the main objectives of saving and credit cooperative is safeguarding the poor from the evil effects of poverty trap and creating job opportunity so that they would increase their income. Hence, the empowerment role of these organizations can be seen with respect to the creation of job opportunity.

Table 4.3 Percentage Distribution of the Respondents by Occupation

<table>
<thead>
<tr>
<th>Occupation of Respondents</th>
<th>Before the Saving and Credit Cooperatives</th>
<th>After the Saving and Credit Cooperatives</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Frequency</td>
<td>Percent</td>
</tr>
<tr>
<td>Farming</td>
<td>53</td>
<td>48.2</td>
</tr>
<tr>
<td>Trade</td>
<td>34</td>
<td>30.9</td>
</tr>
<tr>
<td>Daily laborer in Cooperative</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Fattening and dairy</td>
<td>1</td>
<td>0.9</td>
</tr>
<tr>
<td>Unemployed</td>
<td>22</td>
<td>20</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>110</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

Source: Field Survey, 2010

Table 4.3 shows that before joining the saving and credit cooperatives, majority of the respondents were engaged in farming and trading which comprises 48.2 and 30.9 percent respectively. The amazing fact revealed when the occupational profile of the respondents
were analyzed is that 20 percent of the respondents were having no occupations before the saving and credit cooperatives. After being a member, a quick review of the survey data indicates that 45.5, 38.2 and 9 percent of the sampled respondents are engaged in farming, trading and as daily laborers in cooperatives, while 7.3 percent of the sampled respondents are employed fattening and dairy activities.

4.2.1.3 Income, Consumption Expenditure, Educational Expenditure and Total Saving of the Respondents Before and After Joining the Cooperatives

A. Income of Respondents Before and After Joining the SACCOs

Financial cooperatives play a significant role in providing financial services and facilities to poor and low income societies of the rural people. Participation in such type of cooperatives improves member’s income which might lead to economic empowerment of beneficiaries.

Table 4.4 Description of the Respondents by their Income Before and After the SACCOs

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount in Birr</th>
<th>Before the Saving and Credit Cooperatives</th>
<th>After the Saving and Credit Cooperatives</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Frequency</td>
<td>Percent</td>
<td>Frequency</td>
</tr>
<tr>
<td>Household</td>
<td>0-200</td>
<td>58</td>
<td>52.7</td>
</tr>
<tr>
<td></td>
<td>201-400</td>
<td>36</td>
<td>32.7</td>
</tr>
<tr>
<td>Income (Birr/month)</td>
<td>401-600</td>
<td>12</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>≥601</td>
<td>4</td>
<td>3.6</td>
</tr>
<tr>
<td>Total</td>
<td>110</td>
<td>100</td>
<td>110</td>
</tr>
</tbody>
</table>

Source: Field Survey, 2010

As it is depicted in Table 4.4, respondents were asked about the amount of their monthly household income both before and after joining the cooperatives. The result of the household survey indicated that before the saving and credit cooperatives majority of respondents’ (52.7 percent) monthly household income was between the ranges of 0 to 200 Birr. This has improved significantly after becoming a member as majority of the respondents’ (40.9 percent) reported having a monthly income which ranges from birr 401 to 600. Before membership, 32.7 and 3.6 percent of respondents’ monthly income was ranging from Birr 201 to 400 and greater than Birr ≥601 respectively, while 28.2 and 17.3 percent of respondents gain Birr 201 to 400 and Birr ≥ 601 per month respectively after
joining the cooperatives.

Table 4.5 below portrays that the mean monthly income of respondents before joining the cooperatives was Birr 203.60. However, after involvement respondents mean monthly income increased to Birr 433.31.

Table 4.5 Description of Respondent’s Mean Monthly Income Before and After the SACCOs

<table>
<thead>
<tr>
<th>Monthly Income</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Before the SACCOs</td>
<td>110</td>
<td>203.60</td>
<td>181.590</td>
<td>0</td>
<td>700</td>
</tr>
<tr>
<td>After the SACCOs</td>
<td>110</td>
<td>433.31</td>
<td>204.768</td>
<td>18</td>
<td>1000</td>
</tr>
</tbody>
</table>

Source: Field Survey, 2010

In addition, the above descriptive result needs inferential test whether the improvement of this income is significant. Hence, based on the methodology the Wilcoxon Signed Rank Test (WSRT) was employed and the following hypothesis was formulated and tested. Therefore, the null and alternative hypothesis can be formulated as:

**H₀** = Members mean monthly household income before joining the saving and credit cooperative is equals to after joining the saving and credit cooperatives.

**H₁** = There is a difference in members mean monthly income after and before joining the saving and credit cooperatives.

Table 4.6 Wilcoxon Signed Rank Test Result of Respondents Income Before and After the SACCOs

<table>
<thead>
<tr>
<th>Ranks</th>
<th>N</th>
<th>Mean Rank</th>
<th>Sum of Ranks</th>
<th>Z-value</th>
<th>Asymp. Sig. (2-tailed)</th>
<th>Z-tabulated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Negative Ranks</td>
<td>0(a)</td>
<td>.00</td>
<td>.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Positive Ranks</td>
<td>109(b)</td>
<td>55.00</td>
<td>5995.00</td>
<td>-9.065(a)</td>
<td>0.000</td>
<td>1.96</td>
</tr>
<tr>
<td>Ties</td>
<td>1(c)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>110</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Field Survey, 2010
As elicited in Table 4.6, the test result reveals that the calculated Z-value is less than the Z-tabulated value. The decision rule of this methodology suggests that rejecting the null hypothesis and accepting the alternative hypothesis indicates that participation in the saving and credit cooperatives brings a significant improvement in monthly income of beneficiaries. Thus, this cooperative scheme has a positive and significant role improving income of the members. As indicated in the literature review part of the study, the empowerment role of cooperatives could be clear in its impact on income, since greater income would lead to a better social and economic status of the poor.

**B. Consumption Expenditure of Respondents Before and After Joining the SACCOs**

Regarding the consumption, respondents were asked about the amount of their monthly consumption expenditure both before and after joining the cooperatives.

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount in Birr</th>
<th>Before the Saving and Credit Cooperatives</th>
<th>After the Saving and Credit Cooperatives</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Frequency</td>
<td>Percent</td>
<td>Frequency</td>
</tr>
<tr>
<td>Consumption</td>
<td>≤200</td>
<td>41</td>
<td>19</td>
</tr>
<tr>
<td>Expenditure</td>
<td>201-400</td>
<td>51</td>
<td>33</td>
</tr>
<tr>
<td>(Birr/month)</td>
<td>401-600</td>
<td>15</td>
<td>44</td>
</tr>
<tr>
<td></td>
<td>≥601</td>
<td>3</td>
<td>14</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>110</td>
<td>100</td>
<td>110</td>
</tr>
</tbody>
</table>

*Source: Field Survey, 2010*

Table 4.7 describes that 46.4 percent of respondents were spend Birr 201 to 400 before joining the cooperatives, while 40 percent spend Birr 401 to 600 after they joined the society. Before participation, 37.3 percent of respondents were spent less or equals to Birr 200 for consumption purpose, whereas, after involvement 17.3 percent spend within this category for the same purpose. Only 2.7 percent of the respondents spent Birr ≥ 601 per month before joining the cooperatives though 12.7 percent of respondents spend equal amount of Birr after joining the saving and credit cooperatives. In this case, the entire consumption expenditure of members’ was observed to grow after members’ participation in the saving and credit cooperatives.
According to Table 4.8 below, the descriptive analysis shows that the mean monthly consumption expenditure of respondents before joining the saving and credit cooperatives was Birr 284.86 though after involvement respondents mean monthly consumption expenditure grow to Birr 422.23

Table 4.8 Description of Respondent’s Mean Monthly Consumption Expenditure Before and After joining the SACCOs.

<table>
<thead>
<tr>
<th>Monthly Consumption expenditure</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Before the SACCOs</td>
<td>110</td>
<td>284.86</td>
<td>150.911</td>
<td>50</td>
<td>800</td>
</tr>
<tr>
<td>After the SACCOs</td>
<td>110</td>
<td>422.23</td>
<td>184.207</td>
<td>100</td>
<td>950</td>
</tr>
</tbody>
</table>

Source: Field Survey, 2010

Therefore, as it is observed above, participation of the poor in the saving and credit cooperatives results in increased household income and consumption expenditure. However, it is significant to test the level of improvement in consumption expenditure of respondents using Wilcoxon Signed Rank Test. Therefore, the following null and alternative hypothesis was formulated and tested:

Ho= Members mean monthly consumption expenditure before joining the saving and credit cooperatives is equals to after joining the saving and credit cooperatives...

H1= There is a difference in members mean monthly consumption expenditure after and before the saving and credit cooperatives.

Table 4.9 Wilcoxon Signed Rank Test Result of Consumption Expenditure Before and After the SACCOs

<table>
<thead>
<tr>
<th>Ranks</th>
<th>N</th>
<th>Mean Rank</th>
<th>Sum of Ranks</th>
<th>Z-value</th>
<th>Asymp. Sig. (2-tailed)</th>
<th>Z-tabulated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Negative Ranks</td>
<td>0(a)</td>
<td>.00</td>
<td>.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Positive Ranks</td>
<td>110(b)</td>
<td>55.50</td>
<td>6105.00</td>
<td>-9.106(a)</td>
<td>0.000</td>
<td>1.96</td>
</tr>
<tr>
<td>Ties</td>
<td>0(c)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>110</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Field Survey, 2010
Table 4.11 Description of Respondent’s Mean Monthly Educational Expenditure Before and After Joining the SACCOs.

<table>
<thead>
<tr>
<th>Monthly Educational Expenditure</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Before the SACCOs</td>
<td>110</td>
<td>339.64</td>
<td>209.310</td>
<td>0</td>
<td>950</td>
</tr>
<tr>
<td>After the SACCOs</td>
<td>110</td>
<td>417.50</td>
<td>260.607</td>
<td>0</td>
<td>900</td>
</tr>
</tbody>
</table>

Source: Field Survey, 2010

Well improvement was observed in the mean annual educational expenditure of respondents. But, to test if this improvement is significant before and after situation comparison, using a hypothesis test is needed. Therefore, the following null and alternative hypothesis was formulated and tested:

Ho= Members annual educational expenditure before joining the saving and credit cooperative is equals to after joining the saving and credit cooperatives.

H1= There is a difference in members annual educational expenditure after and before participation in the saving and credit cooperatives.

Table 4.12 Wilcoxon Signed Rank Test Result of Educational Expenditure Before and After the Saving and Credit Cooperatives.

<table>
<thead>
<tr>
<th>Ranks</th>
<th>N</th>
<th>Mean Rank</th>
<th>Sum of Ranks</th>
<th>Z-value</th>
<th>Asymp. Sig. (2-tailed)</th>
<th>Z-tabulated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Negative Ranks</td>
<td>20(a)</td>
<td>69.72</td>
<td>1394.50</td>
<td>-4.848(a)</td>
<td>0.000</td>
<td>1.96</td>
</tr>
<tr>
<td>Positive Ranks</td>
<td>89(b)</td>
<td>51.69</td>
<td>4600.50</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ties</td>
<td>1(c)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>110</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Field Survey, 2010

The test result depicted above leads us to the rejection of the null hypothesis and accepting of the alternative hypothesis representing that the mean annual educational expenditure of respondents after joining the cooperatives is significantly greater than the mean annual educational expenditure before joining the cooperatives. Therefore, the saving and credit cooperatives can be said to have positive and significant role on creating access to education or spending on education.
D. Total Saving of the Respondents Before and After Joining the Cooperatives

Voluntary and compulsory savings are the primary sources of any saving and credit cooperatives capital base and meet the loan demands of their users. Therefore, an increase in income was supposed to encourage respondents to increase the amount of saving they made with their cooperatives. With this regard, Table 4.13 below revealed that 82.7 percent of the respondents did not keep any savings before the saving and credit cooperatives. However, currently, all respondents make a total savings ranging from birr 1 to more than Birr 300. As it is indicated in the review of related literature, a study by Assefa (2007) indicated that even though the total amount of funds that can be assembled by saving and credit cooperatives operating at the local level is usually quite small, access to credit is often seen as necessary for success.

Table 4.13 Percentage Distribution of Respondents by Total Saving

<table>
<thead>
<tr>
<th>Total Saving (Birr/month)</th>
<th>Before the Saving and Credit Cooperatives</th>
<th>After the Saving and Credit Cooperatives</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Frequency</td>
<td>Percent</td>
</tr>
<tr>
<td>---------------------------</td>
<td>-----------</td>
<td>---------</td>
</tr>
<tr>
<td>0</td>
<td>91</td>
<td>82.7</td>
</tr>
<tr>
<td>1-100</td>
<td>13</td>
<td>11.8</td>
</tr>
<tr>
<td>101-200</td>
<td>6</td>
<td>5.5</td>
</tr>
<tr>
<td>201-300</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>≥ 301</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>110</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Field Survey, 2010

In addition, the mean monthly saving of the respondents before joining the saving and credit cooperatives was Birr 15.50. On the other hand, after involvement their mean monthly saving increases to Birr 170.07. (See Table 4.14 below)

Table 4.14 Description of Respondent’s by Total Saving Before and After the SACCOs

<table>
<thead>
<tr>
<th>Total Monthly Saving</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Before</td>
<td>110</td>
<td>15.50</td>
<td>40.365</td>
<td>0</td>
<td>200</td>
</tr>
<tr>
<td>After</td>
<td>110</td>
<td>170.07</td>
<td>95.183</td>
<td>30</td>
<td>400</td>
</tr>
</tbody>
</table>

Source: Field Survey, 2010
In order to know whether the improvement in respondents' monthly saving is significant or not, the Wilcoxon Signed Rank Test was employed and the following null and alternative hypothesis was formulated and tested:

\[ H_0 = \text{Members total monthly saving before joining the saving and credit cooperative is equal to after joining the saving and credit cooperatives.} \]
\[ H_1 = \text{There is a difference in members total monthly saving after and before joining the saving and credit cooperatives.} \]

Table 4.15 Wilcoxon Signed Rank Test Result of Total Monthly Saving Before and After the Saving and Credit Cooperatives

<table>
<thead>
<tr>
<th>Ranks</th>
<th>N</th>
<th>Mean Rank</th>
<th>Sum of Ranks</th>
<th>Z-value</th>
<th>Asymp. Sig. (2-tailed)</th>
<th>Z-tabulated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Negative</td>
<td>8(a)</td>
<td>16.94</td>
<td>135.50</td>
<td></td>
<td>0.000</td>
<td>1.96</td>
</tr>
<tr>
<td>Positive</td>
<td>102(b)</td>
<td>58.52</td>
<td>5969.50</td>
<td>-8.701(a)</td>
<td>0.000</td>
<td>1.96</td>
</tr>
<tr>
<td>Ties</td>
<td>0(c)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>110</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Field Survey, 2010

As it can be seen in Table 4.15, the test result suggests that rejecting the null hypothesis and accepting the alternative hypothesis indicates there is statistically significant difference in total amount of saving after joining the saving and credit cooperatives. Therefore, it can be conclude that involvement of the poor in such type of financial cooperatives has a significant role in building the saving capacity of respondents which can put up the confidence of beneficiaries and can facilitate the process of empowerment of members through cooperatives.

4.2.1.4 Size of Land Holding

A key requirement for any escape from poverty and hunger is access to productive resources. For the rural poor, land and financial resources are of foremost importance, but technology, seeds and fertilizer, livestock, irrigation, marketing opportunities, and off-farm employment are also essential (IFAD, 2007). Besides, Dieninger (et al., 2003) noted that land is a key asset to rural and urban poor that provides an important foundation for
economic and social development. Sound property right in, and equitable access to land can also offer the potential to empower the rural and urban poor to adjust to the challenges posed by recent trends of globalization.

Table 4.16 Percentage Distribution of Respondents by Land Size

<table>
<thead>
<tr>
<th>Size of Land in Hectare</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Land</td>
<td>53</td>
<td>48.2</td>
</tr>
<tr>
<td>Up to 0.5</td>
<td>22</td>
<td>20</td>
</tr>
<tr>
<td>0.51 - 1</td>
<td>35</td>
<td>31.8</td>
</tr>
<tr>
<td>Total</td>
<td>110</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Field Survey, 2010

Looking at the size of plot of land owned, it can be observed from Table 4.16 that the land holding of respondents is generally very small. The majority of respondents (48.2 percent) are landless while 31.8 percent own between 0.51 and 1 hectares of land. The remaining 20 percent of respondents own up to 0.5 hectares of land. Average land holding of the sampled respondents was about 0.34 hectare with the maximum and minimum of 1 and 0.25 hectares of land respectively. Even though 51.8 percent of respondents own land, the data from interviews and focus group discussion indicated that most of respondents own unproductive, fragmented and small lands.

4.2.1.5 Loan Size and Purpose of the Loan Secured from the SACCOs

The survey finding on the loan size provided by the saving and credit cooperatives of the Woreda was ranging from Birr 600 to Birr 5000. This indicates that the maximum limit is Birr 5000 and the minimum limit is goes down up to Birr 600. The average loan size of respondents' was 2367 Birr. However, when members' business awareness are improved and begin new business, they may require additional funds and an increase in consumption of farm inputs like fertilizer, chemicals and improved seeds etc may need loan volume above this limit.

Similarly, beneficiaries were asked about the adequacy of the disbursed loan by the saving and credit cooperatives. With respect to this, 29.1 percent (n= 32) of the members responded that the amount of loan they have obtained from the saving and credit
cooperatives is sufficient to run and organize their businesses properly. On the other hand, 70.9 percent (n=78) of them reported that the opposite. Although 70.9 percent of the sampled respondents stated the insufficiency of the loan, Yunus (1999) illustrated that small amount of loans can have a substantial influence on the lives of the poor.

Correspondingly, the survey result shows that 10 percent (n=11) of respondents used the loan to pay hired labor, while the rest 20 percent (n=22) and 52.7 percent (n=58) used the loan for purchasing of agricultural inputs and trading activities respectively. Although 17.3 percent (n=19) of respondents have not taken loan, the loan taken by members from the saving and credit cooperatives has enabled the rural poor members of the cooperatives to work in different income generating activities.

From the FGD, it was also found out that the majority of respondents who have taken loan from the cooperatives utilized it for business purpose. Some respondents use the loan to prepare and sell ‘Sewa and injera’ (Local beer and Ethiopian food respectively). Others use the credit to buy and sell grains, fruits and vegetables in a small market. Furthermore, some others use the money to purchase agricultural inputs and open small shops in the rural areas. This result generally confirms that saving and credit cooperatives are serving as spring boards to enhance members’ economic empowerment as the majority of respondents are striving to improve their well-being by diversifying their income generating activities.

4.2.2 Indicators of Social Empowerment of Respondents

4.2.2.1 Respondents Perception on their Social Participation

Social Participation of an individual refers to sharing different positions in various formal or informal social organizations such as cooperatives, NGO’s, religious organizations, youth clubs, iddir, equib, farmer associations, educational institutions, government bodies etc (Subburaj, 2003). In this study, the level of social participation of members was considered by respondent’s own perception on their participation in different social organizations. Based on their perception, respondents were grouped in to four categories namely, low level, medium level, high level and don’t know.
Table 4.17 Percentage Distribution of Respondents by Social Participation

<table>
<thead>
<tr>
<th>Levels</th>
<th>Before the Saving and Credit Cooperatives</th>
<th>After the Saving and Credit Cooperatives</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Frequency</td>
<td>Percent</td>
</tr>
<tr>
<td>High</td>
<td>53</td>
<td>48.2</td>
</tr>
<tr>
<td>Medium</td>
<td>28</td>
<td>25.45</td>
</tr>
<tr>
<td>Low</td>
<td>25</td>
<td>22.72</td>
</tr>
<tr>
<td>Don’t know</td>
<td>4</td>
<td>3.63</td>
</tr>
<tr>
<td>Total</td>
<td>110</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Field Survey, 2010

One can witness based on the observed data (Table 4.17) that as much as 48.2 percent of respondents have high level of social participation, while as much as 25.45 and 22.72 percent of respondents have medium and low level of social participation before the cooperatives. However, after joining the saving and credit cooperatives, 72.7 percent of respondents have high level of social participation, and the remaining 27.3 percent categorized under medium level.

During the FGD, respondents were also asked whether the improvement of member’s social participation is due to their involvement in the cooperatives. The feedback of majority of participants of the FGD indicates that they were participating in limited social institutions like religious institutions. However, the participation in different community organizations and development programs is generally improved after their involvement in the saving and credit cooperative programs.

4.2.2.2 Description of Members Participation in the Saving and Credit Cooperatives

Empowerment of members goes well with member’s participation. Members have the right to participate in their organization and there is a consistent need for their empowerment. As members of cooperatives become aware of their claims, rights and responsibilities they can facilitate the process of empowerment. As they are the owners of the cooperatives, they attend meetings, have voting powers, make decisions, patronize their organizations and give constructive suggestions. The reasons behind this are enhancing their income, personal growth, self-reliance, social status, etc. In this case, that participation leads to the
empowerment of the poor and deprived section of the communities through using cooperatives as a vehicle (Mishra, 1999).

Regarding to this, respondents were asked whether they are participating in the core activities of the saving and credit cooperatives. Accordingly, the data from household survey indicates that 88.2 percent of respondents were involved in the major activities of the saving and credit cooperatives, while 11.8 percent of them are not.

Table 4.18 Percentage Distribution of Respondents by their Participation

<table>
<thead>
<tr>
<th>Description</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>97</td>
<td>88.2</td>
</tr>
<tr>
<td>No</td>
<td>13</td>
<td>11.8</td>
</tr>
<tr>
<td>Total</td>
<td>110</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Field Survey, 2010

Besides, in the FGD’s, respondents were also asked how they participate in the saving and credit cooperatives and most of the participants were responded that they are participating in meeting, voting, planning, evaluation, education and training aspects of the cooperatives.

4.2.2.3 Member’s Extent of Contact with DA’s and Cooperative Officials Before and After the Saving and Credit Cooperatives

Contact of members with government officials of various disciplines such as cooperative promoters, agriculturalists, health workers, educational institutions etc play an important role in empowering them and making a difference among beneficiaries. Therefore, respondents were asked to measure their extent of contact with these Development Agents (DA’s) and cooperative officials based on their own perception.
Table 4.19 Percentage Distribution of Respondents by Extent of Contact with DA’s and Cooperative Officials

<table>
<thead>
<tr>
<th>Levels</th>
<th>Before the Saving and Credit Cooperatives</th>
<th>After the Saving and Credit Cooperatives</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Frequency</td>
<td>Percent</td>
</tr>
<tr>
<td>High</td>
<td>19</td>
<td>17.3%</td>
</tr>
<tr>
<td>Medium</td>
<td>23</td>
<td>20.9%</td>
</tr>
<tr>
<td>Low</td>
<td>32</td>
<td>29.1%</td>
</tr>
<tr>
<td>No contact</td>
<td>36</td>
<td>32.7%</td>
</tr>
<tr>
<td>Total</td>
<td>110</td>
<td>100%</td>
</tr>
</tbody>
</table>

Source: Field Survey, 2010

As far as contact with Development Agents (DA’s) and cooperative officials are concerned, Table 4.19 reveals that before the saving and credit cooperatives, majority of respondents (32.7 percent) had not any contact, while 17.3, 20.9 and 29.1 percent of the respondents had high, medium and low level of interaction, respectively. In contrast, currently 93.6 percent of sampled respondents have high level of contact and the remaining 6.4 percent is categorized under medium level.

During the FGDs, respondents were again asked whether this improvement is due to their involvement in the cooperatives. According to their response, they have improved contacts to the different professionals including DA’s and cooperative officials in the area after joining the saving and credit cooperatives to know new technologies as they have the motivation to grow economically and socially.

4.2.2.4 Exposure to Mass Media of Respondents Before and After the SACCOs

Mass media play an important role in influencing the behavior of individuals, society and the nation at large. To an individual the level of exposure to mass media determines the level of awareness, knowledge, understanding, perception and attitude on his or her own self and towards the subject around him or her (Subburaj, 2003). Similarly, media will certainly make the rural poor enhance their awareness on various social issues and economic problems leading to their greater participation in development schemes. Awareness enhancement will also assist the rural poor in securing a new outlook and
sensitivity on their own problems without which empowerment of rural poor can not be achieved (Hiremath and Balasubramanya, 2009). Therefore, based on respondent’s own perception, uses of mass media have been considered to measure respondent’s level of exposure.

Table 4.20 Percentage Distribution of Respondents by Exposure to Mass Media

<table>
<thead>
<tr>
<th>Levels</th>
<th>Before the Saving and Credit Cooperatives</th>
<th>After the Saving and Credit Cooperatives</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Frequency</td>
<td>Percent</td>
</tr>
<tr>
<td>High</td>
<td>14</td>
<td>12.72</td>
</tr>
<tr>
<td>Medium</td>
<td>22</td>
<td>20</td>
</tr>
<tr>
<td>Low</td>
<td>59</td>
<td>53.64</td>
</tr>
<tr>
<td>No exposure</td>
<td>15</td>
<td>13.64</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>110</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

Source: Field Survey, 2010

Accordingly, the survey result shows that before the saving and credit cooperatives, 53.64 and 20 percent of respondents had low and medium level of exposure respectively. Whereas, 48.2 and 39.1 percent of the sampled respondents have medium and high level of exposure to mass media respectively after participation. The data also shows that respondents that were lacking any media exposure were shown a decline from 13.64 percent to only 3.6 percent.

4.2.2.5 Change in Living Standards of Respondents

Respondents were asked whether their living standard is improved after participation. With respect to this, 79.1 percent have reported that their living standard has improved though 20.9 percent of them provide contrary response.

Table 4.21 Percentage Distribution of Respondents by Living Standards

<table>
<thead>
<tr>
<th>Change in living standard</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>87</td>
<td>79.1</td>
</tr>
<tr>
<td>No</td>
<td>23</td>
<td>20.9</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>110</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

Source: Field Survey, 2010
Likewise, the data found out from FGD’s indicated that before the cooperatives, members were found in low level of living standard. To express this situation, a 38 years old woman said:

“I was living miserable life before I join the saving and credit cooperative. I was dependent and I had nothing to do and eat to satisfy my family’s need. But now I have taken a credit from the saving and credit cooperative and opened small shop which is growing from time to time. As a result, currently I have a lot of options to participate in different income generating activities which can fulfill my family’s basic needs and I have observed positive trends in my living conditions” (FGD 1)

Another 58 years old man said:

“I am illiterate and weak. I have six children. Before I joined the saving and credit cooperative, I have passed a difficult time to cover all my household expenses. I don’t remember the time I was a happy person during those years. I was living an empty life and I don’t fulfilled what I aspired. However, after I become a member, I have made good improvements in my life though there are some unsolved problems that I am planning to solve by using the opportunities found in the cooperative”. (FGD 2)

4.2.2.6 Access and Effect of Training on Respondents

Participation of members of saving and credit cooperative in different training programs can be considered as one ingredient of empowerment of the rural poor. In line with this, respondents were asked whether they have received any training after joining the cooperatives. In view of that, 80 percent of the respondents have got a chance of getting training, while the remaining 20 percent of respondent had not trained.

In addition, Out of 80 percent (n=88) of respondents who have received any type of training, 27.5 percent (n=24) of respondents were reported that the training program was helpful to initiate them to participate in different trading activities to increase their income. 49.5 percent (n=44) respondents indicated that the training helped them to understand how to manage their loan, and the remaining 23 percent (n=20) reported that it was helpful in initiating members to engage in trading activities and create proper awareness on the objectives of saving and credit cooperatives.
4.3 Problems and Challenges of Saving and Credit Cooperatives in the Study Area

Although the introduction of new ideas of financial services to the poor people in the rural areas are an important virtue of saving and credit cooperative societies, despite all the above discussed achievements, the expansion and growth of these financial cooperatives in the study areas are knotted by a number of problems that need to be addressed.

Therefore, an ultimate effort was made to identify the major problems and constraints of saving and credit cooperatives faced in the study area. In view of that, two focus group discussions with 16 selected individuals from both sampled cooperatives and 6 key informant interviews were conducted. Participants in the discussion were from management committees including the saving committees, credit committees and education committees of both saving and credit cooperatives. Some information was also obtained from the Woreda cooperative promotion officials. Finally, the discussion came out with a variety of point of view on the problems and constraints of the saving and credit cooperatives in the study area.

According to the focus group participants, like to any other form of business organization, saving and credit cooperatives of the Woreda are facing various problems. Some of the critical problems raised by participants are discussed as follows:

- Participants explained that the saving and credit cooperatives were facing inefficient management which emanated from lack of skilled and educated man power in the area of cooperation. The managerial activities of the saving and credit cooperatives are done by volunteer Boards of Directors (BODs) which are having only traditional knowledge. Besides, management committee are not flexible to modify decisions for the good will of their members and institutions. Thus, plans, rules and programs of the institution are not implementing as per the by-laws and directives of the saving and credit cooperatives.

- Participants were indicated that members’ expectation from their saving and credit cooperatives is very high. For example, they need very low interest rate to be charged while taking loans from the saving and credit cooperatives and very high prices when they sell their products. This unbalanced interest may result in
declining of membership the due to withdrawals, which may finally result in dissolution of the cooperatives.

- Some farmer members indicated that there is absence of information which includes what and when to produce, and where and for whom to sell. This problem made them to get low profits from their products. That means they can not earn satisfactory income from their income generating activities due to lack of market for their product which harms the growth of members and their organizations.

- Participants were also explained that members have poor voluntary saving. They do not make any voluntary saving in their saving and credit cooperatives. As a result the financial capacity of the saving and credit cooperatives is becoming lower and lower.

- As it is explained by participants of the FGDs, the training and education offered by the cooperative promoters of the Woreda and SACCO managers is not ample to expand their knowledge and concepts of cooperatives.

- In addition, participants were mentioned that the presently initiating saving and credit cooperatives are not assisted by thorough studies. If the promotion is not supported by research, the intended objective would not be achieved.

The interview held with cooperative managers of both study Tabias indicated that, though cooperatives are autonomous self-help organizations controlled and organized by their members, saving and credit cooperatives of the Woreda are controlled and supervised by government officials of the Woreda. This violates the fourth principle of cooperatives i.e. autonomy and independence. No matter how excellent a cooperative program is, it is sterile unless it is in a state of independence. Besides, similar to what was explained by FGD participants, interviewees were indicated that the health of savings and credit cooperative was affected due to lack of wide-ranging basic knowledge and extremely dependence on external funds.
In addition, employees of the Woreda cooperative promotion bureau indicated that though cooperatives are voluntary organizations open for all individuals able to use their services and willing to accept the responsibilities of membership by obeying the by-laws of the society and actively participating in planning, implementation and decision making process of the organization, in the study area, members of the saving and credit cooperatives are not welcoming to potential members. They do not provide education and training to attract potential non-members to join the saving and credit cooperatives. This is because of the limited capital base they owned which forced them to view potential members as competitors. This leads to the small size of membership of the saving and credit cooperatives which hinder improvement in monthly saving of members and make difficult to provide sufficient loan to members.

Similarly, the data obtained from employees of the Woreda cooperative promotion bureau indicated that saving and credit cooperatives are facing strong competition from microfinance institutions. The difference in lending and saving principles that both organizations are followed was explained as a source of the problem. Before going to take any loan, the rule of saving and credit cooperatives call members to save some amount of money with in the cooperatives. Although the two saving and credit cooperatives of the Woreda are highly dependent on external fund, members are getting loan based on their compulsory savings. On the other hand, microfinance institutions do not make saving essential for assessing credit by their customers. This attracts more of the rural poor to microfinance institutions than saving and credit cooperatives. Interviewees were explained this issue as a major constraint of saving and credit cooperatives to increase their membership.
Chapter Five  
Conclusion and Recommendation

5.1. Conclusion
In Ethiopia, the poor is facing several socio-economic problems that are complicated. Cooperatives have been regarded as a means of empowering agents of poor men and women in the rural and urban areas that have no access to formal financial organizations. Saving and credit cooperatives at local, regional, and federal levels can play a significant role in saving mobilization, promotion of investment and have a potential role in Ethiopia’s sustainable socio-economic growth. With this respect, the study was undertaken in the empowerment of the rural poor through saving and credit cooperatives in Tigray Region, Kolla Tembien Woreda.

Saving and credit cooperatives plays significant role in the socio-economic empowerment of members’ through the provision of savings, loan, training and education. After joining the saving and credit cooperatives, results of Wilcoxon Signed Rank Test and descriptive statistics signify that members of the saving and credit cooperatives were able to acquire an improved benefits and well-beings more than the benefits and well-beings they possess before their involvements in the saving and credit cooperatives. Most of them were able to increase their average monthly income, monthly saving, consumption and educational expense significantly. In addition, member’s social participation, contact with DAs and cooperative-promoters, member’s exposures to mass media have been significantly improved after joining the saving and credit cooperatives. The above finding indicates that saving and credit cooperative have a positive and significant role in enhancing the socio-economic empowerment of the poor.

Despite the above socio-economic improvements, results of the FGDs and interviews were indicated that in the study area, the saving and credit cooperatives are facing various problems which harm their institutional and financial sustainability. Moreover, the discussion result of this study shows that the main problems of saving and credit cooperatives in the study areas includes: inefficient management due to lack of skilled and educated man power, high dependence on external fund, unbendable competition from microfinance institutions, poor saving habits of members, insufficient training and education, and unscientific actions to establish the newly emerging cooperatives in the Woreda.
5.2. Recommendation

In light of the above major findings of the study, some recommendations are suggested with the intention of enhancing and supporting the socio-economic empowerment of the rural poor in the study area.

The good running of savings and credit cooperative was affected due to lack of skilled and professional manpower that is fully committed to achieve its goals for savings, lending, education and others. The existing management committee lack adequate knowledge about the principles and objectives of saving and credit cooperatives. Therefore, these should be minimized through intensive and extensive cooperative education and training, and in the coming future the cooperatives should employ educated manager as these financial institutions are great instruments to improve the total amount of savings and help to facilitate development in the rural areas.

The saving and credit cooperatives of the Woreda are not capable to accumulate more deposits due to small size of membership. This narrows the delivery of proper and adequate financial service to the members. Therefore, the saving and credit cooperatives should undertake special measure to increase their membership through initiating and educating the people on benefits of saving and credit cooperatives in terms of savings and accessing credits. Furthermore, more attention ought to be given to saving enlistment. Savings are the base of saving and credit cooperatives and in saving and credit cooperatives, lending is not possible without savings. Therefore, rigorous attempts should be made to broaden the membership base and thereby increasing the saving volume of users.

Though external financial support is very important in building and improving the financial capacity of cooperatives, members’ motivation to increase the amount of saving would be declined. Therefore, the saving and credit cooperative societies should understand and recognize the problems that arise due to external support.

Saving and credit cooperatives are democratic organizations controlled by their members who set their own policies. Therefore, since these institutions are self-determined and self monitored institutions, its policies must be set by its members and should not be externally managed. Furthermore, the government should create favorable environment for research activities in the area of cooperatives to back up cooperative industry with reliable and fact based findings.
Reference


Ahimbisibwe Fred (2007). The Effects of Savings and Credit Cooperatives on Members’ Saving Culture. Case Study on Ntungamo District, Uganda.


Bekele (1996). The Role of Credit in the Informal Sector for Poverty Alleviation in Bereket Kebede and Mekonnen Tadesse (eds): The Ethiopian Economy, Poverty and Poverty Alleviation, Proceeding of the Fifth Annual Conference on the Ethiopian Economy. A.A


ESCAP (2000). Emerging Issues and Developments at the Regional Level: Socio-Economic Measures to Alleviate Poverty in Rural and Urban Areas, the Empowerment of the Rural Poor Through Decentralization in Poverty Alleviation Actions. (Item 7 (c) of the Provisional Agenda).

ILO Poverty Alllevation Initiatives. Volume 13, No. 4.


Hiremath and Balasubramanya (2009). Effects of Television Programmes in Empowering Rural Women. Department of Mass Communication and Journalism Karnatak University, India.


Veerakumaran (2007). Ethiopian Cooperative Movement-An Explorative Study

Department of Cooperatives, Mekelle University, Ethiopia.


Web Site Used
http://www.ica.coop
http://www.un.org
http://www.worldbank.org
http www.saccol.org.za/saccos.htm
Dear respondent,

I am investigating the role that saving and credit cooperatives have on their members’ socio-economic empowerment taking Kolla Tembien Woreda saving and credit cooperatives as my case study. This study is used in Partial fulfillment of the requirements for the Degree of Master of Art in Development Studies. Therefore, I wish to request you kindly to spare some time and answer the questions below as honestly as possible by circling or filling in the spaces provided. The answers will be treated confidentially and will not have any consequence on you personally in any ways.

Part one: Questions Related to Background Information

1.1. Name of respondent: __________________________

1.2. Sex:  
1. Male  
2. Female  

1.3. Age:  
1. 15-25 year  
2. 26-35 year  
3. 36-45  
4. 46-55 year  
5. 56-65 year  
6. 66 and above  

1.4. Marital Status of the Respondents:  
1. Single  
2. Widowed  
3. Married  
4. Divorced  

1.5. Family size of respondents:  
1. Small Up to 4  
2. Medium (5 to 8)  
3. Big (above 8)
1.6. Educational Status of Respondents:
   1. Illiterate
   2. Able to Read and Write
   3. Up to 4 years
   4. 5 to 8 years
   5. 9 to 12 years
   6. Above 12 years

1.7. Duration of Membership in Cooperatives:
   1. Up to 1 year
   2. 1 to 3 years
   3. 4 to 5 years
   4. >5 years

1.8. How did you become a member?
   1. Self interest
   2. Members Persuasion
   3. Government enforcement
   4. Others (specify) __________

1.9. Why did you become a member?
   1. Access for credit
   2. Increase bargaining power
   3. Savings
   4. Reduce marketing risks
   5. Other (specify) __________

Part Two: Questions related to economic aspects of members

2.1. After joining the SACCO, what happened to your household's overall average income?
   1. Increased
   2. Decreased
   3. Stayed the same

2.2. If your response to question No.2.1 is “decreased”, why did so? (do not read the multiple choice to respondents)
   1. Because one of the household member has been sick
   2. Because of poor sales of products
   3. Because I was unable to get inputs
   4. Because the agricultural production was poor (bad seasons)
   5. Other (specify) __________________

2.3. How much was your average monthly income in birr?
   Before SACCO __________ Birr
   After SACCO __________ Birr
2.4. If your average monthly income is increased after joining the SACCO what is the major reasons?

1. ______________________ 3. ______________________
2. ______________________ 4. ______________________

2.5. What was your approximate total monthly consumption (example, buying food, goods and services) expenditure?

Before SACCO ____________ Birr
After SACCO ____________ Birr

2.6. How much was your average household educational expense annually?

Before SACCO ____________ Birr
After SACCO ____________ Birr

2.12. Does the SACCO have effect to own good house?

1. Yes  2. No  3. No own house

2.14. What is your size of cultivated land in ‘Tsimidi’?

(Tsimidi- is equivalent to 0.25 hectare)

Before SACCO ____________ Tsimdi
After SACCO ____________ Tsimdi

2.16. What was your major type of activities?

<table>
<thead>
<tr>
<th>Before joining</th>
<th>After joining</th>
</tr>
</thead>
<tbody>
<tr>
<td>1= Farming</td>
<td></td>
</tr>
<tr>
<td>2= Cottage and small scale industries</td>
<td></td>
</tr>
<tr>
<td>3= Cooperative activities</td>
<td></td>
</tr>
<tr>
<td>4= Fattening and dairy</td>
<td></td>
</tr>
<tr>
<td>5= Unemployed</td>
<td></td>
</tr>
<tr>
<td>6= Daily non- Agricultural labour</td>
<td></td>
</tr>
<tr>
<td>7= Others(specify)</td>
<td></td>
</tr>
</tbody>
</table>

2.21. Did you observe any positive change in your living condition after joining the SACCO?

1. Yes  2. No
2.22. If the answer for question No 2.21 is ‘yes’, what are the reasons for positive change?

**Part Three: Questions related to social aspects of members**

3.1. What was your level of social participation (example in e.qub, iddir, mahber, etc) in your community?

<table>
<thead>
<tr>
<th>Levels</th>
<th>Pre-SACCO</th>
<th>Post-SACCO</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 = High</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 = Medium</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 = Low</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 = No change</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3.2. If the level of social participation after the SACCO is low what can be the reasons?
1. ____________  3. ____________
2. ____________  4. ____________

3.3. What is your level of exposure to mass media like Radio and Television?

<table>
<thead>
<tr>
<th>Levels</th>
<th>Before joining the SACCO</th>
<th>After joining the SACCO</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 = High</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 = Medium</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 = Low</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 = No exposure</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3.4. What is your extent of contact with Development Agents (DA’s) and cooperative officials?

<table>
<thead>
<tr>
<th>Levels</th>
<th>Before joining the SACCO</th>
<th>After joining the SACCO</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 = High</td>
<td></td>
<td></td>
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<tr>
<td>2 = Medium</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 = Low</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 = No contact</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
3.5. Do you participate in the major activities of the SACCO?

1. Yes  
2. No

3.6. If your response to question No.3.5 is 'yes', how often?

1. Never miss it  
2. Mostly attend it  
3. Attend sometime

3.7. If your response to question No.3.4 is 'yes', how do you participate?

(Multiple responses are possible)

1. By voting
2. Participate in planning
3. Attending meetings and discussions only
4. Evaluating cooperative leaders and employees
5. Other, specify __________

3.8. If your response to question No.3.5 is No, state the possible reasons?

1. __________  
2. __________  
3. __________  
4. __________

3.9. Whose interest do you think that the cooperative leaders and promoters are fulfilling?

1. Interest of the members
2. Interest of the government
3. Their own interest, irrespective of the members' interest
4. I don't know
5. Other, specify __________

3.13. Do you have school age children?

1. Yes  
2. No

3.14. If you have school age children, do you think that your children access to education has been improving after you join the SACCO?

1. Yes  
2. No

3.15. If your response to question No.3.14 is 'Yes', how and why it has happened?

3.16. Have you get any education about cooperative principles, values and money management after joining the cooperative?

1. Yes  
2. No
Part Four: Questions related to saving aspects of members

4.1. What was your average monthly saving in Birr?

Before ___________ Birr
After ___________ Birr

4.2. Were you save before you joined the SACCO?

1. Yes  2. No

4.3. If the answer for Qn No. ‘4.2’ is ‘yes’, where were you saving?

1. With friends/relatives  5. Microfinance institutions
2. Secret place  6. SACCO’s
3. Banks  7. Others (specify) _______
4. Save with informal groups

4.4. If the answer for Qn No. 4.2 is ‘NO’, why?

4.5. Are you satisfied with the amount of savings in SACCO?

1. Yes  2. No

4.6. If the answer for Qn No. 4.5 is ‘No’, Why?

4.7. Does your SACCO encourage you to save?

1. Yes  2. No

4.8. Have you ever taken any training on saving by the SACCO?

1. Yes  2. No

4.9. If ‘yes’ what changes (if any) did the training course make on improving your saving habits?

Part Five: Questions related to credit/loan aspects of members

5.1. Have you ever taken any credit from your SACCO?

1. Yes  2. No

5.2. If your answer for Qn No. 5.1 is ‘yes’, what was the purpose of the loan?

1. Purchase of food items/consumption
2. Business/Trade
3. For agricultural inputs  5. Others (specify) _______
4. To pay for hired labor
5.3. Have you utilized the loan for the purpose you have borrowed?
   1. Yes                  2. No

5.4. Do you get any profit from your loan?
   1. Yes                  2. No

5.5. Do you repay your loan to the SACCO on the specific time given?
   1. Yes                  2. No

5.6. Did the credit bring significant change in your living standard?
   1. Yes                  2. No

5.7. When you borrow money, what type of security/collateral was required by the SACCO?
   1. Cooperative group responsibility
   2. Guarantee of individuals having permanent asset like land and house
   3. Guarantee of salaried individual
   4. Others (specify) ____________________

5.8. What is the average size of loan you have borrowed from the SACCO after becoming a member? ________________ Birr

5.9. What do you feel that the amount of loan size given by the SACCO?
   1. Sufficient            2. Insufficient

5.10. If your response to No. 5.9 is ‘Insufficient’, how much would be sufficient?
      Birr __________

5.11. Could you tell us the interest rate of the credit? __________ Percent

5.12. What credit source were you used? 

<table>
<thead>
<tr>
<th>Before Joining the SACCO</th>
<th>After Joining the SACCO</th>
</tr>
</thead>
<tbody>
<tr>
<td>1=Banks</td>
<td></td>
</tr>
<tr>
<td>2=Microfinance institutions</td>
<td></td>
</tr>
<tr>
<td>3=Private Money Lenders</td>
<td></td>
</tr>
<tr>
<td>4=Friend / Relatives</td>
<td></td>
</tr>
<tr>
<td>5=SACCO’s</td>
<td></td>
</tr>
<tr>
<td>6=No credit sources</td>
<td></td>
</tr>
<tr>
<td>7=Others(specify)</td>
<td></td>
</tr>
</tbody>
</table>
5.13. Do you think the SACCO is playing a vital role in the credit provision?

1. Yes  
2. No  

5.14. If your opinion on the above question is ‘No’, what is your suggestion?

Part Six: Questions related training aspects of members

7.1. Have you received any training after becoming a member?

1. Yes  
2. No  

7.4. If the answer for Qn ‘9.1’ is ‘yes’, what advantages do you get from the training?

1. ____________________  
3. ____________________
ANNEX 2

Interview Guides for Focus Group Discussions

The following questions were used as a guide to the Focus Group Discussions

1. How do you explain the saving and credit cooperative service in Kolla Tembi Woreda?
2. Have you got loan at any time you want money?
3. What is the socio-economic role of saving and credit cooperatives in Kolla Tembi Woreda?
4. What advantages do you get so far after becoming a member of the cooperatives?
5. Do you believe that the rural poor are getting access to credit services? Are the rural poor beneficiaries of the saving and credit cooperative services?
6. Explain the change you have experienced so far?
   - Have these changes in any way been due to the saving and credit cooperative program?
7. Has your saving and credit cooperative experience made you more capable of handling economic affairs (Planning to save, decide how and where to invest money, etc)
8. Do you participate in the major activities of the cooperatives and communities? If yes how? If no, why?
9. Have you got any training after becoming a member? Advantages and types of the training?
10. What are the major problems and constraints of saving and credit cooperatives?
11. What should be done to solve these problems and improve the benefits of cooperatives for the rural poor?
ANNEX 3

Interview Guides for Key Informants

The following questions were used to guide the interview that was held with key informants such as Management Committee of the Cooperatives, Woreda Cooperative Promoters and Tabia/Kebele Cooperative Managers.

1. What are the main types of services delivered by the cooperatives?
2. How do you evaluate the efficiency of services provided by saving and credit cooperatives in the study Tabias?
3. What are the main objectives of saving and credit cooperatives?
4. How looks like the well being of members of saving and credit cooperatives in terms of;
   - income, education, training, participation before and after joining the cooperatives
5. Do you believe that the rural poor got access to credit services?
6. How do you feel the change that appeared on members of cooperatives after they are joined the cooperatives?
   - changes in terms of socio-economic conditions of members
7. Did you think that the loan drawn so far by members is sufficient to run their project?
8. What are the major problems and constraints of saving and credit cooperatives?
9. What should be done to solve these problems?
ANNEX 4

Computation of Wilcoxon Signed Rank Test

According to Daniel W. (undated: 670-671) and Van Matre (1996:616-621; cited in Belete, 2007: 48; and Yikdem, 2008:19), the computation of the Wilcoxon Signed Rank Test is:

1. Finding the difference between each pair of observed values
2. Ranking the differences from the smallest to the largest without regard to their sign. If the difference became zero (i.e. in the case of tied pairs), the observation was dropped and the sample size was reduced accordingly.
3. Giving each rank a positive or negative sign according to the sign of the difference.
4. Finally, compute the sum of the positive ranks symbolized by $T^+$ or the sum of the negative ranks symbolized by $T^-$. Therefore, the following table gives the appropriate test for various alternative hypotheses.

<table>
<thead>
<tr>
<th>Alternative hypothesis</th>
<th>Test statistic</th>
</tr>
</thead>
<tbody>
<tr>
<td>$H_1: Y_a &lt; Y_b$</td>
<td>$T^+$</td>
</tr>
<tr>
<td>$H_1: Y_a &gt; Y_b$</td>
<td>$T^-$</td>
</tr>
<tr>
<td>$H_1: Y_a \neq Y_b$</td>
<td>Smaller of $T^+$ or $T^-$</td>
</tr>
</tbody>
</table>

Where:

$Y_a$ = After joining the saving and credit cooperatives program
$Y_b$ = Before joining the saving and credit cooperatives program
$T^+$ = Sum of the positive ranks
$T^-$ = Sum of the negative ranks

The null hypothesis is rejected if the test statistic is equal to or less than the critical value given in W-table (for $n \leq 25$). However, for $n>25$, the distribution of both $T^+$ and $T^-$ can be considered normal with mean ($\mu_T$) and standard deviation ($\delta_T$).

The test statistics with mean ($\mu_T$) = $n(n+1)/4$
Standard deviation ($\delta_T$) = $\sqrt{(n+1)(2n+1)/24}$.
Therefore, Test statistics ($Z$) = ($T^- - \mu_T$)/$\delta_T$. Based on this assumption, a number of null hypothesis and alternative hypothesis was formulated and tested.
Declaration

I, the undersigned, declare that the thesis is my original work, has not been presented for a degree in any other university and that all sources of material used for the thesis have been duly acknowledged.

Declared by:  

Confirmed by:

Candidate  

Advisor