

**Performance of Primary Agricultural Co-
operatives and Member's Satisfaction in
North-Eastern Ethiopia: Case Study of
Wadla Woreda**

M.A Thesis

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Performance of Primary Agricultural Co- operatives and
Member's Satisfaction in North-Eastern Ethiopia:
Case Study of Wadla Woreda

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By

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DECLARATION

I hereby declare that the Dissertation entitled ***PERFORMANCE OF PRIMARY AGRICULTURAL CO- OPERATIVES AND MEMBER'S SATISFACTION IN NORTH-EASTERN ETHIOPIA: CASE STUDY OF WADLA WOREDA*** submitted by me for the partial fulfillment of the M.A. in Rural Development to Indira Gandhi National Open University, (IGNOU) New Delhi is my own original work and has not been submitted earlier either to IGNOU or to any other institution for the fulfillment of the requirement for any course of study. I also declare that no chapter of this manuscript in whole or in part is lifted and incorporated in this report from any earlier work done by me or others.

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CERTIFICATE

This is to certify that Mr. BINIAM ALI ESHETE student of M.A. (RD) from Indira Gandhi National Open University, New Delhi was working under my supervision and guidance for his Project Work for the Course MRDP-001. His Project Work entitled ***PERFORMANCE OF PRIMARY AGRICULTURAL CO-OPERATIVES AND MEMBER'S SATISFACTION IN NORTH-EASTERN ETHIOPIA: CASE STUDY OF WADLA WOREDA*** which he is submitting, is his genuine and original work.

Place:

Signature.....

Date:

Name:

Address of the Supervisor:

.....

.....

.....

DEDICATION

I dedicate this thesis manuscript to my family Melaku Yimam and Yenanesh H/Mariam for encouraging me with affection and love, and for their dedicated partnership in the success of my carrier.

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ACPA	Amhara Cooperative Promotion Agency
AGRI	Agriculture
ANRSGCAO	Amhara National Regional State Government Communication Affairs Office
BoDs	Board of Directors
Coop	Cooperative
CSA	Central Statistical Agency
ETB	Ethiopian Birr
FCA	Federal Co-operative Agency
FCC	Federal Co-operative Commission
ICA	International Co-operative Alliance
MoRD	Ministry of Rural Development
PAC's	Primary Agricultural Cooperatives
PAs	Peasant Association
WWCPO	Wadla Woreda Cooperative Promotion Office

WWGCAO	Wadla Woreda Government Communication Affairs Office
NWZCPO	North Wollo Zone Cooperative promotion Office

ACRONYMS AND ABBREVIATIONS

Performance of Primary Agricultural Co-operatives and Members' Satisfaction in North-Eastern Ethiopia: Case Study of Wadla Woreda

ABSTRACT

People form cooperatives to do something better than they could do individually or through a non-cooperative form of business. Forming a cooperative will not automatically solve business problems faced by individual households. This is because cooperatives are subject to the same economic forces, legal restrictions and international relations that other business face. Cooperative members' expectations about the types and quality of services that should be offered and their criteria for performance of these services have a major impact on the level of satisfaction or dissatisfaction felt. Members' satisfaction on the benefits obtained by establishing cooperatives should be evaluated by the level of the deviation of service expectation from perceived service performance. Thus, cooperatives performance should be continuously checked against the level of members' satisfaction.

This study therefore, aims at assessing the performance of primary agricultural cooperatives and thereby to identify factors that impede members' satisfaction. To evaluate the performance of primary agricultural cooperatives in the study area, financial ratios was computed based on annual audit reports of the cooperatives. Here, liquidity ratio, debt ratio, profitability ratio and efficiency ratio were calculated as performance indicators. As a result, almost all of the primary agricultural cooperatives in the study area were performing inefficiently. Probit

regression model was also employed to identify factors influencing the members' satisfaction taking the overall cooperatives performance, the adequacy and context of services rendered by the cooperatives and the major services as function of socio-economic and institutional explanatory variables. The model analysis revealed that, age, family size, position in the cooperative, patronage refund and distance of the cooperative from the farmer's residence were found to be statistically significant.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Development is one of the main goals that all communities try to achieve in order to improve the living standards for individuals in those communities. Agricultural cooperatives have played an important role in rural development through development of agriculture. The agricultural cooperatives are considered to be the most important organizations that pay attention and try to support the rural development in general and the agricultural development in special through the activities and services achieved for the sake of farmers (Mohamed, 2004).

Agricultural cooperatives play an important role as a unique form of private business organization in countries all over the world. As indicated by their substantial asset ownership, sales and market share, their most extensive and successful use during the 20th century has been in Europe and North America (Chaddad and Cook, 2002).

The International Cooperative Alliance (ICA, 2005) defines a cooperative 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”.

Agricultural cooperatives have also take steps to implement new strategies to enter the 21st century. Cooperatives are user-driven businesses that have contributed greatly to the development of one of the world’s most productive and scientific-based agricultural systems. Cooperatives as distinct forms of business rely upon members to work together towards collective goals (Prakash, 2000).

Agriculture is the backbone of the economy of most developing countries. Typically, it is the largest source of employment; often two-thirds or more of the population is dependent for its livelihood on farming. The labor-intensive character of the sector reduces its contribution to the gross domestic product, but its contribution nevertheless ranges between 20 and 60 percent in most developing countries. Agricultural exports are the principal sources of foreign exchange earnings in these countries (Warren C. and Strokes M., 1985).

Ethiopia is an agrarian country and agriculture accounts for 54 percent of the gross domestic product (GDP). The sector employs about 80 percent of the population and accounts for about 60 percent of the country’s export trade (CSA, 2009). Intervention to reduce uncertainty and other marketing problems and to bring the peasant households into profit maximizing category may be realized through

establishment of rural institutions such as cooperatives. The concept of human cooperation is not new. Cooperative is a worldwide movement. It prevails both in developed and developing nations and in all branches of the economic activity. Cooperatives are viewed as change agents. The change that is supposed to be brought about by the cooperatives is not simple (Krisiinaswami and Kulandaiswamy, 2000).

Agricultural cooperative is an association of people who join together to engage in the production of agricultural products. Farmers seeking to organize cooperatives are usually seeking the benefits of economies of scale. Many farmers with common interests may organize through cooperatives and strengthen their market power. An agricultural cooperative, also known as a farmers' coop is a cooperative where farmers pool their resources in certain areas of activity (Staath, 1965).

Agricultural cooperatives have been used for implementing agricultural development policies directed specifically towards smallholders of the country, as smallholders' agriculture is an important component of the rural sector and its contribution has a significant place in the national economy of the country. These cooperatives are introduced as the major rural institutions to increase efficiency of the marketing system and to promote agricultural development in the rural sector of the country's economy. Agricultural cooperatives enable farmers to own and democratically control their business. Improved performance of agricultural cooperatives is assumed to have a role in fostering agricultural production through the promotion of efficiency and better resource allocation (FCA, 2010).

In Ethiopia the development of primary cooperatives has shown a good progress. In 2010 there were 35,527 primary cooperatives across the country operating in different sectors of the national economy. These cooperatives had a total of 5,763,623 members and a capital of ETB 4,148,120,493.00. Out of the total primary cooperatives 7,168 are agricultural (Multipurpose) cooperatives (FCA, 2010).

The latest cooperative proclamation 147/98 is more comprehensive and is fully consistent with the universal cooperative principles and the ILO recommendation 193. Accordingly, the cooperative movement of the country has a three tiered system (primary, secondary [Union] and Federation). More over any society may engage in either production or service rendering activities or in both. The field of activities to be engaged by any society shall determined the by-laws of the society (FCA, 2010).

(1). Primary Cooperatives

The number of primary cooperatives increased from 20,437 in 2006 to 26,672 in 2009 and to 35,527 on January 2010, while the total number of individual members of the primary cooperatives increased from 3,642,603 in 2006 to currently reach to 5,763,623 with about 16.4% female members. As of January 2010, the primary cooperatives have a total capital of ETB 4,148,120,493. Concerning regional distribution of cooperative there is imbalance among regions. There is more concentration in the four regions (Oromia, Amhara, Southern Nation and Nationalities Peoples (SNNP) & Tigray) as compared to pastoralist and semi-pastoralists regions in Table 1-1 below (FCA, 2010).

Table 1 - 1: Status of primary cooperative societies in Ethiopia

S.No	Cooperative societies	No	Members			Capital (In ETB)
			Male	Female	Total	
1.	Multipurpose Agri.	7,168	2,972,007	1,109,672	4,781,342	753,556,364
2.	Forest Dev't & Tourism	120	8,064	1,556	9,295	1,929,859
3.	Fruit &vegetable	117	3,805	913	4,720	1,631,238
<i>Table 1-1 continued...</i>						
4.	Gum and inset	33	1,934	227	2,161	8,942,365
5.	Irrigation	1,116	69,034	12,780	81,638	34,366,734
6.	Dairy	335	13,017	7,761	20,778	183,751,106
7.	Fishery	55	3,240	353	3,493	4,404,284
8.	Honey	91	10,873	1,026	11,899	5,203,870
9.	Saving & credit	6,775	236,232	201,607	560,884	391,297,382
10.	Consumer	1,050	165,025	248,492	3,900,633	883,933,199
11.	Handicraft	376	5,877	2,772	7,722	4,401,541
12.	Mining	1,245	46,474	3,667	48,795	59,209,054
13.	Electric	265	18,959	1,964	20,959	3,614,036
14.	Workers	3,928	101,588	16,767	118,355	2,018,384
15.	Housing	8,177	88,834	34,035	180,274	92,287,020
16.	Abattoir	14	296	10	306	1,336,412
17.	Coffee	43	2,707	335	3,042	5,609,971
18.	Livestock	840	25,426	9,371	34,746	9,216,316
19.	Chate	1	104	---	104	9,660
20.	Others	8,901	196,515	81,721	278,230	139,877,203
Total		35,527	4,676,659	1,086,964	5,763,623	4,148,120,493

Source: Federal Cooperative Agency, status of cooperatives in Ethiopia; October, 2010

In addition, a good proportion of the Cooperatives are highly promoted in the Oromiya, Addis Ababa, Southern Nation and Nationalities Peoples (SNNP), Amhara and Tigray regions that are mainly agricultural and industrial. Regions whose main engagements are livestock, herding and hoe culture such as Somalie, Dire Dawa,

Harari, Afar, Benshangul Gumuz and Gambela regional states have a smaller number of cooperatives as shown in Figure 1-1 and Table 1-2 below (FCA, 2010).

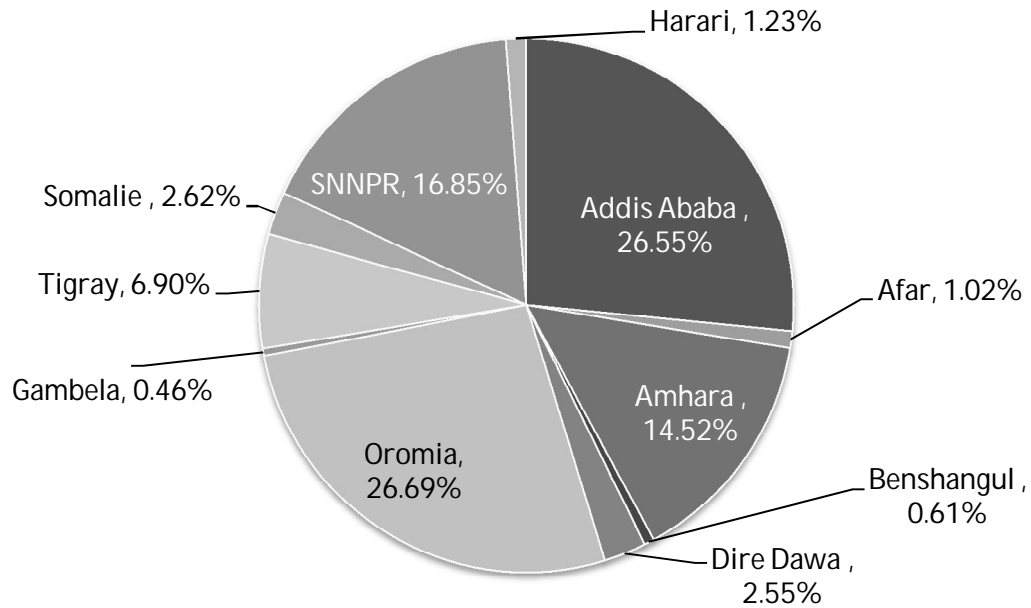
Table 1- 2: Primary cooperatives of the country by region, number of members and capital

Region	Number	Members			Capital (In ETB)
		Male	Female	Total	
Amhara	5,160	1,802,040	355,320	2,157,360	1,489,805,747
SNNPR	5,987	956,792	164,242	1,121,034	193,820,679
Oromiya	9,482	1,366,312	241,185	1,607,497	579,252,230
Tigray	2,452	340,059	105,398	445,457	301,816,527
Benishangul	215	11,733	6,867	18,600	6,082,229
Dire Dawa	906	21,531	11,418	32,949	6,841,560
Harari	436	9,634	4,128	13,762	18,786,,346
Gambela	164	2,657	3,092	5,749	4,297,032
Somalie	932	13,240	8,606	21,846	47,642,306
Afar	362	10,232	5,037	15,269	13,960,498
Addis Ababa	9,431	142,429	181,671	324,100	1,485,815,339
Total	35,527	4,676,659	1,086,964	5,763,623	4,148,120,493

Source: Federal Cooperative Agency, status of cooperatives in Ethiopia; October, 2010

Figure 1-1: The spatial distribution of cooperatives in Ethiopia

Spatial Distribution of Cooperatives in Ethiopia



(2). Cooperative Unions

The establishment of the cooperative unions is a recent phenomenon in the history of cooperatives represented by unions increased to 5,928, which makes primary cooperatives represented by Unions 16% (FCA, 2010). Currently, they have a total capital of ETB 681,182,148. One cooperative Bank namely Oromia cooperative Bank was registered in 2004 and made operational in March 2005. On June 2008, it had a paid up capital of ETB 132.9 million and 73.51% of which is owned by 1,303 primary cooperatives (FCA, 2010).

Table 1 - 3: Status of cooperative unions in Ethiopia

S.No	Coop Union Type	Number	Member	Capital
1.	Grain Marketing	122	3,392	400,253,132

2.	Dairy Product	6	73	3,634,752
3.	Honey	2	15	340,047
4.	Saving and Credit	49	1,377	34,745,563
5.	Food Preparation	1	22	19,500
6.	Coffee	10	467	130,070,734
7.	Forestry	2	13	371,615
8.	Animal	3	24	856,366
9.	Mining	6	376	4,505,692
10.	Vegetable and Fruit	6	146	73,999,347
11.	Consumer	1	7	3,000,000
12.	Construction	1	21	105,000
13.	Others	3	23	3,143,449
Total		212	5,928	681,182,148

Source: Federal Cooperative Agency, status of cooperatives in Ethiopia; October, 2010

Table 1- 4: Secondary coops of the country by region, number of members and capital

Region	Number	Coop Members	Capital (In ETB)
Amhara	43	1,241	116,070,784
Oromiya	87	3,097	380,343,592
Debub	35	721	94,545,874
Tigray	36	457	76,559,004
Addis Ababa	3	187	7,008,626
Benishangul	5	59	3,511,267
Dire Dawa	2	159	143,000
Harari	1	7	3,000,000
Total	212	5,928	681,182,148

Source: Federal Cooperative Agency, status of cooperatives in Ethiopia; October, 2010

(3). Cooperative Federations

There are three regional cooperative Federations in the country. No national leagues or federations have been established so far.

Cooperatives have extended across the entire country and there are 5-7 million members nationwide as of January, 2010, it is estimated that about 39% of the total population is directly benefited from the activities and/or services of the cooperatives (FCA, 2010).

Table 1 - 5: Cooperative development for the past five years (2006 -2010)

Particular	2006	2007	2008	2009	2010
<i>Primary Cooperatives</i>					
Number	20,437	22,275	24,935	26,672	35,527
Member (Total)	3,642,603	4,067,995	5,426,271	5,899,761	5,763,623
Male	2,836,424	3,257,654	4,206,004	4,928,355	4,676,659
Female	401,512	501,261	718,114	971,406	1,086,964
Capital (In ETB)	* ND	* ND	* ND	*ND	4,148,120,493
<i>Secondary Cooperatives</i>					
Number	122	145	162	174	212
Member	2,532	2,955	3,650	3,849	5,928
Capital (In ETB)	115,263,216	161,239,152	156,017,631	208,909,493	681,182,148

Source: Federal Cooperative Agency, status of cooperatives in Ethiopia; October, 2010

* ND – No Available Data

The Amhara National Regional State has 5,160 primary cooperatives which operate in various sectors. These cooperatives have 2,157,360 members and a capital of ETB 1,489,805,747 (ACPA, 2010). Most of the cooperatives are involved in the agriculture sector. Multi-purpose agricultural cooperatives are the largest in number among the agricultural cooperatives and they are engaged in more than one field of activity. They market farmer's product, supply input and extend credit to the farmers (ACPA, 2010).

North Wollo Zone is situated in the North Eastern part of the country. It is one of the eleven administrative zones of Amhara National Regional State (ANRS). Wadla Woreda, the setting selected for this study is found in the western part of North Wollo Zone. The distance from Addis Ababa to Kone (administrative town of the Woreda) is 633 km. In this Woreda, there are 13 primary multi-purpose agricultural cooperatives with 18,541 members and a capital of ETB 5,630,868.06 (WWCPO, 2010). This study, thus, tries to explore the multi-purpose agricultural cooperatives of Wadla Woreda, focusing on their financial performance and the degree of satisfaction of their members.

1.2 Statement of the Problem

Research results and available statistical data reveal that Ethiopia is among the poorest countries in the world. Agriculture is the main sector of the national economy. The methods and techniques of agricultural production are traditional, making the level of its productivity exceedingly low.

Economic development of the country is the outcome of several factors of which improving the performance of economic organization is of importance. Agricultural cooperatives are the means to an economic development. They are indispensable for self-reliance, higher productivity level, promotion of industrial development raising the communities' economic and social consciousness and for launching an attack on common enemy - poverty.

Some authors have presented investigations on the performance of agricultural cooperatives. Getenesh (1998) has studied farmers' producers' cooperative and has found out that size, in terms of members and area, does not significantly contribute to the performance differences among cooperatives. Asmare (1989) has also observed that factors of production employed in the farmer producers' cooperatives were inefficiently used. Inefficiency includes under utilization of labor, fertilizer and capital expenses and partly over utilization of land. The performance of agricultural cooperatives have drawn much attention and resulted in different findings. Hind (1994) has studied the performance of cooperatives and non-cooperatives in the agricultural business and indicated that on the basis of profitability and liquidity, there was no significant difference between the two groups. Fulton and king (1993) have found out that the performance of grain marketing cooperatives is influenced by a complex interaction of size, number of locations, grain handling facilities and information exchange. Mauget and Declerck (1996) have showed that specialized cooperatives of the European Union did not perform better than multi-purpose agricultural cooperatives.

Agricultural cooperatives are promoted by Ethiopian government as a means to increase efficiency of marketing of farm produces and supply of farm inputs and hence agricultural development in the rural sector of the country's economy. Knowledge about their performance thus is of major importance for better understanding of this policy. According to Anderson and Vincze (2000), customer expectations about the types and quality of services that should be offered and their criteria for performance of these services have a major impact on the level of satisfaction or dissatisfaction felt with the total purchase and sale experience; as can be represented by the formula:

Customer Satisfaction = Service expectations – perceived service performance

So, cooperatives performance should be continuously checked against the level of members' satisfaction. It will then contribute to the understanding of the factors that hinder or enhance improvement and/or modernization of agricultural cooperatives. This would enable the cooperatives to check whether they are on the right track and measures to be taken to correct any undesirable course of development. To create good performing primary cooperatives, it is essential to assess the performance of the already existing ones and draw practical lessons on the critical operational problems and constraints. To accomplish such an important task, empirical investigations have paramount importance in areas of cooperatives performance and level of member's satisfaction (Anderson and Vincze, 2000).

Performance evaluation must combine various types of analysis that would provide the basis to analyze the functioning of the system, explain efficiencies and assess the potential for and means of improving economic efficiency or other objectives. For achieving economic efficiency, a cooperative must plan, organize, motivate and control its operation (Knapp, 2000).

This study therefore, aims at assessing the performance of primary agricultural cooperatives focusing on their financial condition and identifying their problems and opportunities as well as to evaluate the level of members' satisfaction and analyzes the determinants of their satisfaction.

1.3 Basic Research Questions

Attempt had made in this study to find answers for the following basic research questions:

- 1) To what extent have the primary agricultural cooperatives achieved their objectives in terms of their financial performance?
- 2) What are the main factors that influence the performance of these agricultural cooperatives?
- 3) To what extent are members satisfied with the service that these cooperatives deliver?
- 4) What is the general attitude of members towards their cooperatives?

1.4 Objectives of the Study

1.4.1 General Objective

The general objective of this study is to assess the financial performance of primary multi-purpose agricultural cooperatives and the extent to which their members are satisfied with the services they obtain from the cooperatives in the study area.

1.4.2 Specific Objectives

The specific objectives of this study are:

- 1) To examine financial performance of primary agricultural cooperatives and identify the factors influencing their performance,
- 2) To identify the degree of satisfaction of members with the services provided by their cooperatives, and
- 3) To examine members' attitudes towards these agricultural cooperatives.

1.5 Scope and Delimitation of the Study

Among the several areas in the country where cooperative movement is high, the study area is the front-liner in the set up and organization of agricultural cooperatives. Primary agricultural cooperatives in this woreda are relatively well organized, particularly those which are about to form secondary cooperatives (Union) in one woreda. The Union is the first and the only one in the country operating at woreda level. This is the reason why PAC's operating in Wadla Woreda are selected for this study.

The first objective of this study focuses on the financial statements of the cooperatives. However, some cooperatives in this woreda were not audited on a

yearly basis due to shortage of auditors and budget. Cooperatives that were properly audited for the year 2009 and 2010 are, therefore selected to be involved in this study. Taking the required budget and time in to account, a total of 214 members of three multi-purpose agricultural cooperatives shall be involved in this study. This study will focus on three major areas of concern namely, assessment of their financial performance, identification of factors influencing their performance and the extent of members' satisfaction with the services provided by primary agricultural cooperatives in Wadla Woreda.

1.6 Significance of the Study

Pieces of empirical information to be generated by this study would be of paramount importance. It would be useful for the management bodies of the primary multi-purpose agricultural cooperatives under consideration as well as other cooperatives operating under similar conditions in improving their performance through appropriate and relevant measures.

When the issue of economic growth and development of the country is raised, one has to take into account the performance of the agricultural cooperatives. Reducing the challenges they are facing and utilizing their potentials can help to accelerate the agriculture sector and economic development of the country as a whole. Multi-purpose agricultural cooperatives are an ideal means for the improvement of the farmers.

The information would also provide a good lesson for new cooperatives to be established and avoids problems at the very beginning. Furthermore, the same information could be used by the Federal Cooperative Agency and other institutions interested in the establishment, development and well performing agricultural cooperatives in Ethiopia by making them efficient and effective in serving the interests of members and enable them contribute towards national development goals of the country.

1.7 Organization of the Study

This thesis consists of five major chapters. Chapter one presents the background, statement of the problem, objective of the study, significance of the study and scope and delimitation of the study. Chapter two discusses the theoretical and empirical literature related to the research. This is followed by the discussion of the methodology used in the research in chapter three. Chapter four presents the results and discussion part of the study. Finally, summery, conclusion and recommendation of the study are presented in chapter five.

1.8 Operational Definitions of Key Terms

AGRICULTURAL COOPERATIVES

An agricultural cooperative is an association of people who join together to engage in the production of agricultural products. The creation of agricultural cooperatives is related to the ability of farmers to pool production and/or resources. In many situations within agriculture, it is simply too expensive for farmers to manufacture

products or undertake a service. Cooperatives provide a method for farmers to join together in an 'association', through which a group of farmers can acquire a better outcome, typically financial, than by going alone (Staath, 1965).

COOPERATIVES

A co-operative is 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. Co-operatives are enterprises that put people at the centre of their business and not capital. Co-operatives are business enterprises and thus can be defined in terms of three basic interests: ownership, control, and beneficiary. Only in the co-operative enterprise are all three interests vested directly in the hands of the user (ICA, 1995).

CUSTOMER SATISFACTION

Customer satisfaction, a business term, is a measure of how products and services supplied by a company meet or surpass customer expectation. It is seen as a key performance indicator within business. The act of satisfying or the state of being satisfied, gratification of desire, contentment in possession and enjoyment, repose of mind resulting from compliance with its desires or demands.

It is customer level of approval, when comparing a product's perceived performance with his or her expectations. While satisfaction is sometimes equated with

performance, it implies compensation or substitution whereas performance denotes doing what was actually promised (Business dictionary.com, 2010).

FINANCIAL PERFORMANCE

A subjective measure of how well a firm can use assets from its primary mode of business and generate revenues. This term is also used as a general measure of a firm's overall financial health over a given period of time and can be used to compare similar firms across the same industry or to compare industries or sectors in aggregation. There are many different ways to measure financial performance, measuring the results of a firm's policies and operations in monetary terms. These results are reflected in the firm's return on investment, return on assets, value added, etc. It is the process of identifying the financial strength and weakness of the firm by properly establishing relationships between the items of income statement and balance sheet (Business dictionary.com, 2010).

WOREDA

An area, a territorial division (as for administrative purposes) or section with a distinguishing character of a country or town which has fixed borders and the basic administrative that are used for official purposes, of which has a particular feature that makes it different from surrounding area. Generally, it is equivalent meaning to district, a sub-unit of a zone.

CHAPTER TWO

LITERATURE REVIEW

This section discusses the concept and major benefit of cooperation, the definition, principle and classification of cooperatives, history of agricultural cooperatives, historical development of cooperatives in Ethiopia and elements for development of cooperatives in Ethiopia. To Review previous theoretical and empirical studies of cooperatives in local and international and some general concepts and practices are also presented.

2.1. Concept of Cooperation

Cooperation has been the very basis of human civilization. The inter-dependence and the mutual help among human beings have been the basis of social life. It is the lesson of universal social history that man cannot live by himself and for himself alone. Since the beginning of human society, individuals have found advantage in working together and helping one another in all over the world (Krishna swami, 1992).

In Ethiopia too, it is common for people to be inter-dependent in mutual help and self help activities in their day-to-day socio-economic conditions. The traditional cooperatives like Edir, Equb, Debo and Senbete are traditional form of associations, which should be basis to modern form of cooperatives in Ethiopia (Jemal, 2008).

Cooperation is an original popular interaction. The Agricultural cooperatives play a large and vital role in the light of the continuous economic and market mechanism in the current and next period (Sedky, 1992; Al-Ganzory, 1998). Rashad (1998) referred that, the cooperation is an economic, social and democratic system that aims at boosting the community through organizing individual efforts to the benefit of the groups .The Agricultural cooperative sector provides and meets a vital part of the increasing individual service, consumptive and productive needs and in addition it participates in increasing exports.

Because of the important role of cooperation in the economic and social development in developing countries, the UN General Assembly issued a decree in December 1978 that includes the following issues (Report 1984,; Rashad, 1998):

- ▲ The General Assembly should consider that establishing and developing cooperatives is one of the most important tool of the economic, social and cultural development of all society members,
- ▲ The General Assembly should realize the importance of training and education programs for different levels with the aim of developing, diversion and increasing the cooperative activities.
- ▲ The General Assembly asserts the role of the cooperatives in helping and improving the poor classes of society (socially and economically) especially in the developing countries.
- ▲ The General Assembly indicates that the cooperatives are vital methods to increase woman opportunity for work as activists who participate in the process of development.
- ▲ The General Assembly asserts the social importance of cooperation as for the public participation in planning and decision-making.

Therefore, the issue of developing the agricultural cooperation is the most prominent goal of the activities in the current stage in world regarding its importance in the society's economic, social and cultural development.

2.2 The Definition of Cooperative

The cooperative model has been adapted to numerous and varied businesses in 1942. Ivan Milanoff, (Kimberly A. Zeuli and Robert Cropp, 2004) a cooperative scholar, remarked that diversity of cooperatives is Kaleidoscopic and their variability is likely infinite. As a consequence of this diversity, no universally accepted definition of a cooperative exists. Two definitions, however, are commonly used.

- I. According to the International Cooperative Alliance (ICA) 1995; *"a cooperative is 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."* Cooperative leaders around the world recognize the ICA, a non – governmental organization as a leading authority on cooperative definition and values. The ICA definition recognizes the essential elements of cooperatives; membership is voluntarily, coercion (force) is the antithesis (contrast) of co-operation. Persons compelled to act contrary to their wishes are not truly cooperating. True cooperation with others arises from a belief in mutual help; it can't be dictated in authentic cooperatives, persons join voluntarily and have the freedom to quit the cooperative at any time.
- II. Another widely accepted cooperative definition is the one adopted by the United States Department of Agriculture (USDA) in 1987. *"A cooperative is a user-owned, user-controlled business that distributes benefits on the basis of use."* This definition captures what are generally considered the three

primary cooperative principles such as user ownership, user control and proportional distribution of benefits.

The “user owner” principle implies that the people who use the cooperative members help finance the cooperative and therefore, own the cooperative. Members are responsible for providing at least some of the cooperatives capital. The equity capital contribution of each member should be in equal proportion to that member’s use (patronage) of the cooperative. This shared financing creates joint ownership, which is part of the ICA cooperative definition.

The “user- control” concept means that members of cooperatives govern the business directly by voting on significant and long-term business decisions and indirectly through their representatives on the board of directors. Cooperative statutes and bylaws usually dictate that only active cooperative members (those who use the cooperative) can become voting directors, although non-members sometimes serve on boards in a nonvoting, advisory capacity. Advisory directors are becoming more common in large agricultural cooperatives in the United States where complex financial and business operations require the expertise of financial and industry experts. Only cooperative members can vote to elect their board of directors and on other cooperative actions. Voting rights are generally tied to membership status; usually one–member, one-vote and not to the level of investment in or patronage of the cooperative.

“Distribution of benefits on the basis of use,” under this principle members should share the benefits, costs, and risks of doing business in equal proportion to their patronage. The proportional basis is fair, easily explained and entirely feasible from an operational standpoint. To do otherwise distorts the individual contributions of members and diminishes their incentives to join and patronize the cooperative.

Cooperative benefits may include better prices for goods and services, improved services, and dependable sources of inputs and markets for outputs. Most cooperatives also realize annual net profits, all or part of which are returned to members in aptly called patronage refunds.

2.3 Major Benefits of the Cooperation

The theory of cooperative organization provides several reasons why farmers join the cooperatives. According to Schroeder (1992) cooperatives provide quality supplies and services to the farmers at the reasonable cost. By purchasing supplies as a group, the farmers offset the market power advantage of other private firms providing those supplies. The farmer can gain access to volume discounts and negotiate from a position of greater strength for better delivery terms, credit terms and other arrangements. Suppliers will also be more willing to discuss customizing products and services to meet farmers' specifications if the cooperative provides them sufficient volume to justify the extra time and expense.

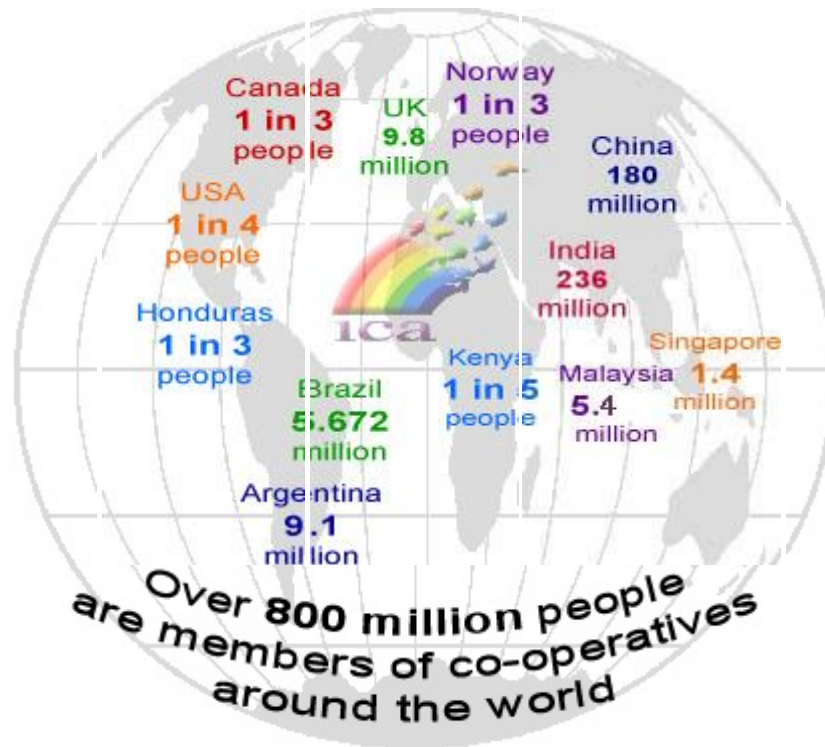
Increased farmers bargain power in the market places is the other advantage of the cooperative (Douglas and McConnen, 1999). Marketing on a cooperative basis

permits farmers to combine their strength and gain more income. The farmers can lower distribution costs, conduct joint product promotion and develop the ability to deliver their products in the amounts and types that will attract better offers from purchasers.

The United Nations estimated in 1994 that the livelihood of nearly 3 billion people or half of the world's population was made secure by co-operative enterprise. These enterprises continue to play significant economic and social roles in their communities.

Through their varied activities, co-operatives are in many countries significant social and economic actors in national economies, thus making not only personal development a reality, but contributing to the well-being of entire populations at the national level. Over 800 million people are members of a co-operative and Co-operatives provide 100 million jobs worldwide, 20% more than multinational enterprises (ILO, 2005).

Figure 1 -2: Members of cooperatives around the World



Source: ILO, 2005. Cooperatives and employment opportunity

2.4 Review of Basic Issues Concerning Cooperatives

2.4.1 Principles of Cooperatives

There are certain basic principles of cooperatives that are recognized by ICA. These principles go back to the Rochdale pioneers and their original attempt started in 1844 (Chukwu, 1990). The principles define cooperative organizations, give them strength and provide the cause and rationale for their public support. They also make it possible for cooperatives to serve their members more efficiently. According to Chukwu (1990) and Taimni (2000), the principles are summarized below.

The first principle is *open membership*. It encourages free entry into and exit from membership of the cooperative. This principle disapproves unjustifiable restrictions

or discrimination against membership by persons who need and can benefit from the services of the cooperative. According to this principle members who wish to terminate their membership must be free to terminate their membership. However, in our country this basic principle was violated in Derg regime. Farmers were forced to be a member without their interest especially in producers' cooperatives.

Democratic management and control is the second basic principle of cooperative. It emphasizes that members must be independent, participative and supreme in decision making. In the process of decision-making open, democratic and objective procedures (voting) should be adopted. In general, this principle emphasizes members should be directly or indirectly control and supervise the affairs of their cooperative. Farmers' participation in decision-making in the affairs of their cooperatives was minimum in the last two regimes. Boards of directors and managers appointed by the governments were supreme in decision making process in the cooperatives.

The third principle is *patronage refund*. It is the most distinguishing feature of cooperatives. It means that the proceeds of a cooperative, usually called savings, are returned to members in proportion to their use of the cooperative (the amount they bought or sold to the cooperative). Most agricultural cooperatives in Ethiopia use this method (patronage refund) in the appropriation of surplus to their members.

Limited return (interest) on equity capital is the fourth principle and it limits the level of the returns on the share capital paid by the members to rates which, if to be paid at all, are considered reasonable, as high as the current market rate. In

Ethiopia, this kind of surplus appropriation takes place in saving and credit cooperatives.

The fifth principle is *continuous education of the members*. It emphasizes that cooperative should give continuous education to their members in order to equip them with skills; knowledge and confidence that make them use, participate and control the cooperative more effectively. The type and extent of education offered might depend on the specific roles each member is expected to play in the cooperative. This is what it lacks in agricultural cooperatives in our country. Farmers don't get continuous education from their cooperatives.

The last principle of cooperative is *cooperation among cooperatives* which intensifies the basic cooperative idea of people working together in any given cooperative society to the relationship between cooperatives of the same and/ or different sectors, on the same and/ or on different organizational level and with in one country and/or internationally. In our country, primary agricultural cooperatives started cooperation among themselves (forming secondary cooperatives) (FCC, 2005).

Any business organization can be defined in terms of three basic interests: ownership, control and beneficiary. Only in the cooperative are all three interests vested directly in the hands of the user i.e. the cooperative owned by the people who use it, it is controlled by the people who use it and the benefits generated by the

cooperative accrue to its users on the basis of their use. These interests are commonly referred to as the contemporary cooperative principles (Folsom, 2002).

In general, the above basic principles define cooperative organizations, give them strength, and provide the cause and rationale for their public support, in terms of taxation, anti-trust considerations, public education and promotion.

2.4.2 Classification/ Types of Cooperatives

Many types of cooperatives have been established worldwide to serve the interests of members, including consumer, producer, worker and service cooperatives. According to the ILO (2005), there are 48,000 cooperatives serving 120 million people in the US, whereas globally some 750,000 cooperatives serve 730 million members. The various cooperative types provide members with diverse products and services, including financial services, equipment and farm supplies, marketing of agricultural products, consumer goods, utilities (e.g., electricity, telephone), housing and other services (e.g., insurance).

Chukwu (1990) presented different criteria of classifying cooperatives that have been adopted by different authors and some of the criteria for classification are summarized as follows.

One of the classifying criteria is the area of operation of the cooperative. Urban cooperatives are those operating in the urban areas. There are housing, credit and saving etc. cooperatives operating in the urban area of our country. Rural

cooperatives are those operating in the rural areas. Most of the cooperatives in our country fall in this category. There are grains, livestock, dairy, coffee marketing cooperatives in different rural areas of the country.

Cooperatives can also be classified based on their organizational level. The smallest individuals set up in the cooperative organizational level are primary cooperatives. They usually cover a limited area of operation. They have individual person as member. Their working capital is obtained from paid up shares of each member of the cooperatives. The other organizationally higher cooperatives work in the interest of these cooperatives. Cooperatives in the second layer of the organizational set up are secondary cooperatives (Union). They usually formed by the number of primary cooperatives. Their working capital is obtained from paid up shares of the constituent primary cooperatives. Their area of operation covers the total area of the given constituent primary cooperatives. The third layers in the organizational set up are the tertiary cooperatives (Federation). They usually formed by the secondary cooperatives and their working capital is obtained from paid up shares of the constituent secondary cooperatives. So far these kinds of cooperatives are not formed in our country.

The other classification criterion of cooperatives is the sector in which the cooperative engaged. Cooperatives that engaged in the agriculture sector are classified as agricultural cooperatives. There are many agricultural cooperatives operating in the different sub sector of the economy. Industrial cooperatives (small

scale industry) engaged industry sector. They are emerging in different areas of the country.

The number of operation in which the cooperative engaged is another classification criterion of cooperatives. There are single purpose cooperatives which have only one field of activity (one purpose e.g. marketing). There are also multi-purpose cooperatives which have more than one field of activity (two or more purpose e.g. credit and marketing).

2.5 History of Agricultural Cooperatives

The modern cooperative originated in Europe and spread to other industrializing countries during the late 19th century as a self-help method to counter extreme conditions of poverty. However, one development that probably had the greatest singular impact on determining agricultural cooperatives unique operating principles was the formation in 1844 of the Rochdale Society of Equitable Pioneers (Ltd). This was a consumer cooperative established in Rochdale, England, by a group of workers representing various trades who formulated a set of basic operating rules based on a two-year study of cooperatives, including some that were not successful. The cooperative's objectives were to address members' needs for better housing, employment, food, education and other social requirements (Hoyt, 1989).

The development of cooperatives over time has been shaped by many factors and influences. Hoyt, (1989) group these into three main types (all interrelated): (1)

economic conditions (caused by war, depression, technology, government economic policy, etc.); (2) farmer organizations (including quality of their leadership, their motivation and enthusiasm to promote cooperatives, power to influence public policy, etc.); and (3) public policy (as determined by government interest, legislative initiative and judicial interpretation).

Since about 1988 two phenomena have been occurring in the organization of agricultural cooperatives in the US: (1) the restructuring and consolidation of conventional cooperatives and (2) the emergence of new generation cooperatives (NGCs). NGCs retain many of the characteristics of conventional cooperatives, but they focus on value-added activities. Member capital contributions are linked to product delivery (marketing) rights which attain value and can be transferred and membership is closed or restricted. These developments suggest that cooperative strategies are becoming more offensive in nature (Cook, 1995).

Cropp (2002) contends that cooperatives in the US have matured to become a significant force in agriculture and play an increasing role in influencing national agricultural policies.

In developing countries attempts to organize farmers into cooperatives have often failed, although cooperatives have the potential to supply farm inputs and market farm products that are both important for agricultural development (Hoyt, 1989). Mohamed (2004) suggests that in Africa farmer cooperatives have often failed because of problems in holding management accountable to the members (i.e.,

moral hazard), leading to inappropriate political activities or financial irregularities in management.

ACDI/VOCA (2005) lists a number of successful cooperative ventures that they helped to establish in developing countries. Government policies regarding cooperatives are critical because they can constrain or enhance independent cooperative development (Hoyt, 1989).

2.6 Agricultural Cooperatives and Rural Development in the World

The cooperative movement is significant both in terms of membership and impact. The United Nations estimated in 1994 that the livelihoods of nearly 3 billion people or half of the world's population were made secure by cooperative enterprises. Nearly 800 million individuals are members of cooperatives. They provide an estimated 100 million jobs. They are economically significant in a large number of countries providing foodstuffs, financial services as well as the provision of services to consumers (ILO, 2005). Cooperatives have created over 13.8 million jobs in India, with 92 per cent of the jobs created through self-employment in the workers' cooperatives. In Japan, the consumer cooperative movement provided 58,281 full-time and 95,374 part-time jobs in 1997 (ILO, 2005).

However, as of the ICA's survey report in 2005, cooperatives, like other enterprises have seen their operations significantly affected by external challenges in the political and economic environment. Despite these, the cooperative movement is promising to a growing potential for cooperative development and for cooperative

renewal, in light of the limitations of the free market in regard to social responsibility and equity, the advantages of decentralization of power, the importance of stakeholder and community involvement in economic and social life and the growing role of the civil society.

In 2002, International Federation of Agricultural Producers/International Cooperative Agricultural Organization estimated that there were about 569,000 agricultural cooperatives worldwide. Agricultural cooperatives, which are typically organized as supply and/or marketing cooperatives contribute to the development of rural areas. Cooperatives enable farmers to pool limited resources to enhance earnings capacity through lower input and credit costs and better marketing of products. For instance, agricultural cooperatives are important in areas where the private sector, owing to market failure is weak or unable to meet the needs of farmers for agricultural inputs or credit. They also improve the market reach and bargaining power of farmers in marketing agricultural products. Thus, agricultural cooperatives enable farmers to improve their earning and productive capacities.

Around the world modern cooperatives have developed for over 200 years. Cooperative institutions exist all over the world providing essential services which would otherwise be unattainable. In many third world countries, cooperatives such as credit unions and agricultural organizations have been very successful in helping people to provide for themselves where private and other corporate capitals do not see high profitability (ICA, 2005). In 90 countries of the world, over 700 million individuals are members of cooperative institutions. Globally, cooperatives have

been able to elevate its position as a powerful economic model. In some countries they are a sizeable force within the national economy (ILO, 2005).

2.7 Historical Profile of Agricultural Coop Movement in Asia-Pacific Countries

Nearly 65-75% of the population in Asia-Pacific countries depends on agriculture. Farm income has been the main source of livelihood. Farm practices and means are traditional. Application of methods and technology for farm management, crop protection, diversification of cropping patterns, use of farm inputs, mechanization of farming, farm guidance, farm production planning have not yet been used extensively (Hermida, 2008).

Hermida, (2008) stated that, Pressures on agricultural lands due to ever-increasing population, urbanization and development of other non-farm infrastructures have been heavy. Organization and management of farmers' groups or associations has been weak. In the rural areas, agricultural cooperatives have been playing significant roles by way of disbursement of farm credit, farm supplies, marketing and agro-processing. Although there are a large number of such cooperatives, their main functions largely remain confined to the distribution of credit, fertilizers and procurement of farm products for national food stocks. Marketing, agro-processing, warehousing activities are still weak. Their services to the members are inadequate. Many of the agricultural cooperatives largely remain blissfully content with implementing some of the government-sponsored programmes. Income by way of commissions and service charges received by the cooperatives often form a major portion of their working capital. It is often assumed that world food shortage can be

eliminated by increasing food and agricultural production through the application of modern technology.

It is also argued that supplying modern inputs such as large-scale irrigation, chemical fertilizers, farm machinery and pesticides can improve the productive capacity of the land. New agricultural technology supported by other factors like, finance resources, creditworthiness, government policies and political influence makes a lot of difference (Hermida, 2008).

2.7.1 Cooperative Movement in India

India has basically an agrarian economy with 72% of its total population residing in rural areas. The rural people need a lot of services in daily life which are met by village co-operative societies. The seeds of cooperation in India were sown in 1904 when the first cooperative societies Act was passed. Since then, the cooperative movement has made significant progress. Cooperatives have extended across the entire country and there are currently an estimated 230 million members nationwide (Samantaray, 2004).

Agricultural Cooperatives in India are very actively and intimately involved in several agriculture related activities. The most important activities are the disbursement of production credit, distribution of fertilizers and other inputs viz seeds, pesticides and agricultural implements. Agricultural Cooperatives are also involved in procurement of farm produce, processing and marketing of oilseeds,

Cotton, sugar, milk and milk products, distribution of essential commodities, clothes, kerosene oil and merchandise etc. (Samantaray, 2004).

The cooperative credit system of India has the largest network in the world and cooperatives have advanced more credit in the Indian agricultural sector than commercial banks. The village cooperative societies provide strategic inputs for the agricultural sector, consumer societies meet their consumption requirements at concessional rates; marketing societies help the farmer to get remunerative prices and co-operative processing units help in value additions to the raw products etc. In addition, co-operative societies are helping in building up of storage go-downs including cold storages, rural roads and in providing facilities like irrigation, electricity, transport and health. Various development activities in agriculture, small industry marketing and processing, distribution and supplies are now carried on through co-operatives (Samantaray, 2004).

According to National Council for Applied Economic Research (2002), the co-operative societies in India are playing multi-functional roles both in rural and urban areas. The central government enacted the Multi State Cooperative Societies Act, 2002 which provided for democratic and autonomous working of the Cooperatives, which came into force with effect from August 19, 2002. Various development activities in agriculture, small industry marketing and processing, distribution and supplies are now carried on through co-operatives. The co-operatives in India have made an all-round progress and their role in and contribution to agricultural progress has particularly been significant (Singh, 2006).

2.7.2 Japanese Agricultural Cooperative Movement

The phenomenal rise of Japanese post-war economy can safely be attributed to the hard and systematic work done by these agricultural cooperatives [called JA Movement] in consolidating people, land resources, producing the needed food and providing the needed services to the community. The JAs are a good example of an integrated framework in the service of the farmers. They deliver multipurpose services and operate as multi-function economic institutions directly responding to the felt-needs of the members. They serve the members at the same time being under the control of the members. Their services range from the 'Cradle to the Grave' [This slogan has presently been pushed into the background mainly due to the economic capabilities and capacities already achieved by the agricultural cooperatives. The fact, however, remains alive because the organizational structure and the system still firmly exists and has been integrated in the services provided]. The Japanese agricultural cooperatives stand committed to "3-H Agriculture – Healthy, High Quality and High Technology" (Dziesinski, 2006).

According to Prakash, (2000), the Japanese agricultural cooperative movement had successfully introduced a number of innovations which are of great relevance to the movements in the region. Some of the interesting features of the agricultural cooperatives have been; sustained and progressive amalgamation of cooperatives to make them more economically viable and service oriented, farm guidance and better-living services to achieve a high degree of communication with the members and to enrich their economic and social life, protection of interests of farmer

members through mutual insurance, health care, carefully planned and well-executed marketing and supply functions through specially created and cooperative owned holding companies, production of quality consumer goods and services, employment of capable and professional managers, acquisition of operational facilities and linking credit with marketing, guidance and education for improving production technology and above all, the cooperative being a member centered institution rather than the cooperative being a 'cooperative centered' institution. Based on the above factors, some general requisites for an effective operation of an agricultural cooperative could be derived. These include: promoting members' participation - economic and organizational, increasing membership by encouraging non-members, women and young people to join agricultural cooperatives and promoting the utilization of cooperative services by members.

2.7.3 Farmer's Cooperative in China's Agriculture

The income of farmers in China has been growing very fast so far. It has changed the livelihoods of a lot of poor farmers. The poverty rate in rural China has been substantively decreasing in the past three decades. Since 1978, China has opened its closed door and trod on a path toward economic development. Among industries, the agricultural sector predominated during the period of the reform and openness. (Xiaohua, 2009).

Accompanied by the opening of markets of production materials and farm production, as well as the development of town and village industries, farmers' cooperatives were called forth to perform the coordinating role between

production and marketing and between individual farmers and administrative governments. The farmers' cooperatives function as coordinating units in that, they can be able to work as complete economic entity, they coordinate the agricultural production and marketing between petty scale farmers and government and they perform part of the functions of middle management (Xiaohua , 2009).

2.8 The Current Status of Agricultural Co-operatives in Africa

According to Chambo, (2009), agricultural marketing co-operatives have been the most popular traditional mode of co-operative development that has linked developing countries with the rest of the world through export commodity trading. It must also be recognized that the incidence of agricultural co-operatives in Africa is not accidental. Most developing countries including those in Africa depend on agricultural production for their livelihoods. The statistics indicate that 84 per cent of the population in African countries depends on agriculture as source of food, income and employment.

Traditionally, agricultural marketing co-operatives in Africa have had the practice of combining agricultural input supply and output marketing. Such a comprehensive outlook of marketing cooperatives was critical in meeting small farmer's production requirements. But at the advent of liberalization policies and competition, agricultural co-operatives were forced to drop out input supply from the service package and productivity in some co-operatives was negatively affected (Chambo, 2009).

Agricultural co-operatives create the ability for the supply of required agricultural inputs, so that production of commodities is done timely to enhance productivity. They also provide an assured market for commodities produced by isolated small farmers in the rural areas (Holloway et al., 1999). The existence of African co-operatives also has had an impact in the generality of rural development defined in terms of availability and access to amenities that improve the basic conditions of life for the rural people. These include employment creation, rural markets development, enhancement of rural incomes and the improvement of access to social services (Smith et al., 2006).

As far as market development is concerned, it has been evident that agricultural co-operatives have been responsible for introducing the exchange economy in remote rural areas in Africa. By doing so, co-operatives have been responsible for developing modern markets in rural areas, where the co-operatives provide a ready market for farmers' crops but also absorb transaction costs (Holloway et al., 2007), which would otherwise hinder small farmers from market and production integration.

Agricultural co-operatives maintain higher levels of income, making small farmers able to construct decent houses, send their children to school and provide health insurance to sustain rural livelihoods (Chambo, 2009). They also, have the advantage of accessing co-operative education and business development capacity building. Co-operative education enables them to participate in democratic debates

and exercising democratic principles and leadership training. This gives them the ability to become enlightened citizens able to debate more effectively different political issues of concern to the community. But through co-operative education and practice, they also gain the skills of running business. That is why; rural development would greatly be enhanced, if people became members of agricultural co-operatives in general. But food demand is growing very fast (Chambo, 2007).

According to Volamen (2009), most developing countries face permanent food shortage due to technological, climatic hazards and continued pockets of civil strife. But all these do indications that food crops can transformed into business and tradable commodities where agricultural co-operatives could play a significant role.

2.9 Historical Development of Agricultural Cooperatives in Ethiopia

In Ethiopia, though the formation of similar cultural and traditional associations (example 'Edir', 'Ekub', 'Wonfel", etc) was dated many years ago, it was after 1960 that those modern cooperatives came to birth (MoRD, 2002).

2.9.1. Imperial Regime (1960- 1975)

The Feudal regime proposed cooperatives as instruments for the mobilization of rural resources in Ethiopia for the first time. Decree 44/1960 and proclamation 241/1966 provided the legal ground for the development of cooperatives in Ethiopia in that period (Alemayehu, 1984).

The decree was necessitated by the creation of proper framework for the establishment of cooperatives enterprises which contribute measurably towards

the acceleration of development of agriculture sector. The cooperatives that were anticipated to be organized in accordance with the provision of the decree were in general to have, as their principal purpose and objective, the promotion of the economic interest of the country and their members. The decree also had various provisions on rights, duties, privileges and responsibilities of members. Membership in general was to entitle everyman to a proportionate share in the net profit of the cooperative to attend the general meeting to elect administrative bodies and to vote on all questions. Societies that were organized under this proclamation were to have as their principal purpose and objective the promotion of better living, better business and methods of production (Alemayehu, 1984).

According to Alemayehu (1984) five types of cooperatives were established through proclamation 241/66. Multi-purpose, thrift and credit, consumers', artisans' and farm workers' cooperative societies were established and 700 peoples enrolled as a member of these societies and contributed about birr 25,000 towards purchase of share.

When we overview the regime, it was in this period that modern cooperative came into birth. Though, there was little or no awareness in the people, the regime laid down the legal ground for the development of the cooperatives taking into account their significance to mobilize the resources the country had (Alemayehu, 1984).

2.9.2. Derg Regime (1975-1991)

The legal ground for the establishment and development of agricultural cooperatives was first provided by the proclamation 71/1975 (Wegenie, 1989). The Derg regime established an extensive network of socialist agricultural cooperatives throughout Ethiopia to organize the peasants, control agricultural prices, levy taxes and extend government control to the local level. Farmers came to view the cooperative with mandatory membership, quotas for grain to be delivered to the government and boards of directors and managers appointed by the ruling party as a synonym for government oppression (ACDI/VOCA, 2002). The development of cooperatives was anticipated to proceed in four stages;

- 1) Service cooperatives (credit and marketing)
- 2) First stage producers' cooperatives
- 3) Advanced producers' cooperatives and
- 4) Commune

Later on in 1978 the regime necessitated the establishment of different cooperative societies for combating exploitation of workers and peasants by enabling them secure services to safeguard the economic, political and social rights of peasants by securing goods and services and ensuring the participation of the broad mass (Wegenie, 1989). The objectives of the cooperative societies at that time were the following;

- ▲ To develop self-reliance and promote the interest of the members
- ▲ To put the means of production under the control of the cooperative
- ▲ To increase production
- ▲ To expand industries

- ▲ To conduct political agitation, and
- ▲ To eliminate reactionary culture and customs.

With the above objectives producers', thrift and credit, service and housing cooperative societies were established (Wegenie, 1989).

When we overview the regime, there was the understanding of the significance of the cooperatives for the development of the country but there were problems in implementing them. As indicated by Tesfaye (1995) and Subramani (2005) the regime violated some of the internationally recognized basic principles and values of cooperatives and it made cooperatives a platform for conducting political agitation rather ignoring their political neutrality. It also violated the very basic principles of cooperatives (open and voluntary membership). In some places farmers were forced to be the member of the cooperative through external pressure especially in the farmer's producers' cooperatives. Cooperatives were administered by the government cadres and untrained manpower. There were corruptive practices in the cooperatives. In general, the regime misused cooperatives for its political ends violating the underlying principles of cooperative.

2.9.3. Post 1991 Period

Subramani (2005) indicated that emphasis was not given in the transition period. Some of the above problems of the Derg regime were repeated during this period. Cooperatives were administered by untrained manpower. There were corruptive

practices due to poor record keeping system. There were also other unhealthy practices in the area of the cooperatives. The bad track record of the cooperatives couldn't get rid of the mind of the people during these years.

It was after the proclamation 147/1998 (Federal Negarit Gazeta, 1998) that people centered cooperatives came into existence. This proclamation paved a conducive environment for the development of cooperatives. To speed up the cooperative movement in the country, the government established the Federal Cooperative Commission by the proclamation 274/2002 (Federal Negarit Gazeta, 2002).

The government has also given more emphasis to agricultural cooperatives as they are a means to implement agricultural development policies directed specifically towards smallholders. The number of primary cooperatives increased from 7,740 in 2003 to 14,423 in 2005 (FCC, 2005). This increment can be evidence to the attention given to the development of cooperatives. Efforts are also being made to keep the basic principles and ideas of cooperation while organizing the cooperatives.

2.10 Elements for the Development of Cooperatives in Ethiopia

Wegenie (1989) and Abebe (2000) indicated that rural institution such as agricultural cooperatives should form the basis of future development endeavors in the country as they are best instrument for the mobilization of rural resources. However, Abebe (2000) emphasized that they should take into account local perceptions and realities, as well as built on the spirit of self and mutual help.

Subramani (2005) pointed out certain elements, which deserve attention in an integrated development of cooperatives in Ethiopia. The first element that he proposed was the choice of sectors wherein cooperatives operate. Nowadays the agricultural sector of the country needs much attention as it is the backbone of the country and the majority of the population engaged in it. This is also true from the point of view of the policy (agricultural development led industrialization) the country adopted.

Defining the rights and responsibilities of the cooperative at a macro level is the second element in the development of cooperatives in Ethiopia. It has a key place as it constitutes a prime factor in determining the overall role to be played by the cooperative movement in the national planning and development programs. The existing government of Ethiopia has already legislated the cooperative society act by the proclamation No. 147/1998 (Federal Negarit Gazeta, 1998) and rules to define the rights and responsibilities of the cooperative.

The third element that is proposed in the development of cooperatives is the choice of the organizational pattern. In Ethiopian case the development of primary cooperatives should deserve prior attention. After organizing and strengthening primary cooperatives, efforts should be made to link these vertically and horizontally. These linkages help to improve their competency and operational efficiency.

Education, capital, management skills and training facilities are the fourth element to be given attention in the development of cooperatives. These inputs are important to get effective output from the cooperatives. The government of Ethiopia has given emphasis for these inputs. He finally concluded that if the four elements of cooperative development properly handled, no doubt they would serve as four pillars to firmly hold the entire structure of the national cooperative movement for the better accomplishment of the desired national expectations.

2.11 Studies on Cooperatives in Ethiopia

Co-operatives are providing the mechanism to organize and mobilize people for self-help action in providing the services required by farmer members and rural community. Researchers and practitioners have attempted to conduct studies on cooperative movement of Ethiopia. Some of the empirical studies conducted in the country are summarized in the following:

2.11.1 Study on Scope of Services

As self-administered rural institutions, cooperatives have the capacity to reflect and to respond the needs of their members; and at the same time, to help fostering attitudes of self-reliance and self-confidence within a framework of mutual aspirations and mutual action (Kebebew, 1999).

In his study of cooperative movement in Ethiopia, at early days Kebebew (1999) emphasized that the state commitment for collective agriculture to flourish. This commitment manifested by the material and technical investment accompanied by

educational programs designed to raise the social and political consciousness of the peasants. State investment in agriculture designed to modernize the methods of agricultural production is likely to attract those peasants who are dubious about the success of collective production.

A study conducted by Alemayehu (1984) in Kembata and Hadiya on service cooperatives revealed that most of the service cooperatives safeguarded the peasants against price exploitation by private traders. However, he noted that cooperatives' attempt to serve their members have been hampered by the cooperative poor spatial organization which necessitated the re-organization of some of the cooperatives based on physical geographic factors and on the size of the PAC's membership.

Fassil (1990) in his study showed that in spite of the several tasks bestowed upon peasant service cooperatives, they were mainly engaged in the supply of consumer goods to members followed by grain purchase and selling activities. Even in the activities they engaged, they have lower share compared to those of state and other bodies. The problems of the cooperatives were manifested in the sphere of marketing and management, which includes the problems in the supply of both consumer goods and agricultural inputs, participation in purchase and sale of products especially grain, shortage of skilled manpower and financial management.

2.11.2 Study on Performance of Cooperatives

Daniel (2006) also used ratios analysis to evaluate performances of cooperatives taking the two years financial data (2001 and 2002) in the study districts. The liquidity analysis showed that the cooperatives under investigation were below the satisfactory rate (a current ratio of less than 2.00) for two consecutive years. All of the cooperatives under investigation in the two districts use financial leverage (financed more of their total asset with creditors fund i.e. on average 89.35 per cent of the assets of the cooperatives was financed with creditors fund in the two years). The profitability ratio of the cooperatives under investigation in the two districts showed that the profitability of the cooperatives was weak. All the cooperatives earn return on their asset below the interest rate of the financial institution extend credit. The debt ratio shows the financial risk i.e. as debt becomes an increasing percentage of the cooperatives financing source, the cooperatives face inability to meet debt obligations.

Getenesh (1998) used some performance measures such as liquidity ratio, net capital ratio, debt ratio etc. in her comparison of farmers' producer cooperatives in the highlands of Hararge. The result showed that size in terms of members and area didn't contribute significantly to explain the performance differences in most cases, in contrast to wide spread assumption of this to be so.

Wegenie (1989) evaluated the performance of cooperatives both at micro and macro level and the problems of development of cooperatives. Macro level study indicated that the performance of cooperatives was poor when compared to the individual and state farms in terms of yield. The performance evaluation of the

cooperatives at the micro level was specifically directed at looking their allocate efficiency using the linear programming model. Comparison of the actual with the optimal pattern indicated sub optimality in their cropping pattern. In all cases his result suggested a reallocation of land away from the two basic products of the region i.e. wheat and barley to other crops. Land, in his optimal solution was found to be the limiting factor in all the cooperatives and he suggested that for an appropriate land holding and land allocation policy for each of the cooperatives which take resource availability of the cooperative into account. His study also indicated input-output pricing system, declining income of members, forced membership and absence of democracy in decision-making process as problems of the development of cooperatives.

2.11.3 Study on Farmers' Attitude on the Performance of Cooperatives

The cooperative is usually one alternative form of business organization that can offer good service to the farmers. If the other business organizations are regarded as dishonest, inefficient or exploitive, farmers will be predisposed to use the cooperatives. On the other hand if the other business organizations are offering good/ service efficiently, honestly and at fair price, the farmers more likely to be less interested in the cooperative (Chukwu, 1990).

Cooperatives cannot be free of risks as they undertake speculative business activities (chukwu, 1990), for example, in our country agricultural cooperatives purchase teff, coffee and other farm produces from the farmers in the harvesting season speculating that the price rises in the latter seasons. These risks are usually

high for the average cooperative farmers who in most cases belong to the lower economic class of the society. Furthermore, decision making in the agricultural cooperative is known to be traditionally relatively low, whereas speculative business activities require flexible and speedy action. If there is repeated loss in the cooperative, farmers will be disappointed with performance and be less interested in the cooperative.

Dessalegn (1994) revealed that cooperative auditors from MoRD investigated more than 24 million Birr were misappropriated by the management committee and employees of PAC's. That was almost certainly just the tip of the iceberg, given that audits were carried out on fewer than 25 per cent of cooperatives. The members lacked tangible benefits and there was no role to play for members hence sense of ownership gradually degraded.

2.11.4 Study on Membership and Members' Participation

Tesfaye (1995) revealed that producer cooperatives failed in the past not because of failure inherent in the collective management but because of forced membership without the interest of the farmers and formation of the cooperatives in hurry without any sufficient preparation and feasibility study. The problem of intervention of the Derg regime in the affairs of cooperatives i.e. using them for its political ends and the largeness and complexity of the organizations for the managerial capacity of the farmers were also a reason for the failures of the cooperatives.

Haileselasie (2003), in his study about cooperatives in Saesi-Tsaeda-Imba, investigated that 78.7 percent of the members became member in cooperatives through mobilization and persuasion by the civil societies such as Farmers, Youth and Women's Associations. As a result, the members' were not aware of the duties and rights they have in the cooperative societies. According to Haileselasie's finding, for example, out of the total respondents members' participation in the annual meeting was 12.2 per cent and 68.8 per cent of the total respondents had bought only one share. The result of the study revealed that the overall participation of members in the study area was weak.

Gebru (2006) found out in his study that the participation of women accounts 20-25 per cent in various cooperative types in Tigray region, and he concluded that though women are under represented in membership and leadership, the condition is improving from year to year in the region. Gebru (2006), in his conclusion stated that cooperatives are assisting farmers in far and remote areas of the region to distribute agricultural input and credit. He also concluded that despite international price increases over time for the agricultural input particularly fertilizer, cooperatives are distributing at faire and reasonable price.

2.11.5 Empirical Studies on Econometric Models

Several researchers attempted to apply the Tobit econometric model to study participation of local people in various development activities including

cooperatives and adoption of new and/or improved technologies. Getahun (2004) used Tobit model in assessing factors affecting adoption of wheat technology. His analysis showed that fertilizer use, income and credit influenced the probability of adoption and intensity of improved wheat varieties.

Klein et al. (1997) used Tobit model to analyze the amount of business conducted with different type of cooperatives. The research result revealed that relatively larger sized farms did a great proportion of grain marketing and chemical purchases through the cooperatives and bought more of their fuel from the cooperatives. Older farmers patronized all types of cooperatives more than younger farmers except for farm chemical. At the highest level of off-farm income, grain farmers used the cooperative more intensively. The perception of competitive price led to a higher rate of patronage.

Gizachew (2005) in his study recognized that market participation and sales volume decisions are found to be important elements in the study of dairy marketing patterns. He used participation in dairy sale as dichotomous dependent variable and examined using the maximum likelihood estimation procedure of logit model. As a result, participation decision of the smallholder was affected by education of household head, experience in dairy production and return time from the district capital and financial income from different sources. The sales volume decision of dairy was analyzed using Tobit model. Education of the household head, extension visit and return time from the district capital, financial income from different

sources, credit, grain production and crossbred dairy cows were important determinants affecting volume of dairy sales.

Misra et al. (1993) used the ordered probit model to analyze the factors influencing farmers' degree of satisfaction with the overall performance of milk marketing cooperatives. Their result showed that dairy farmers perceive cooperatives' ability to hold down operating and marketing costs, to provide higher prices and competent field services and the assurance of a market for their milk as important attributes of dairy marketing cooperatives.

Hind (1994) studied the Performance of 31 agricultural cooperatives and 82 non-cooperatives in agribusinesses in United Kingdom. He determined first, the mean, standard deviations and t-test of differences in means for the two businesses of the selected performance indicators such as sales turnover, return on asset, sales/working capital, debt ratio, etc. Then, he used the linear multiple regression analysis to determine if there were significant relationships between the performance indicators and business form using dummy variables for the business form. The findings of his research revealed that cooperatives do not perform differently to non-cooperatives, despite being required to balance member's needs with the attainment of their goals.

A logit regression analysis was used by Tretcher (1996) to analyze the factors associated with diversification on agricultural cooperatives in Wisconsin. He found that the impact of diversification upon measures of cooperative performance

(profitability, patronage refund and equity redemption) was relatively minor i.e. diversification on agricultural cooperatives was not statistically associated with profitability, increases in patronage dividends or increases in equity revolvment. The result also showed that diversification on agricultural cooperatives was an important factor in determining membership size i.e. diversified cooperatives enjoyed larger membership.

Harris and Fulton (1996) found that agricultural cooperatives performed at least as well as their proprietary business competitors in terms of their liquidity, asset management efficiency, debt coverage and profitability. However, for many farmers, financial performance was secondary to the “competitive yardstick” role of cooperative or the role that they play in improving the rural economy.

It could be inferred from the above studies that the potential of co-operation is immense to Ethiopian condition and appear well suited to the economic, social and institutional needs of development in the rural Ethiopian economy and the study tries to address information gap on the performance of primary agricultural cooperatives and members' satisfaction in Wadela woreda located in the Amhara Regional State of north eastern Ethiopia.

CHAPTER THREE

RESEARCH DESIGN AND METHODOLOGY

The information discussed in this session includes the features of the study area where the research was conducted and the methodologies adopted in the sampling and data analysis. The information collected includes both primary data from sample households and secondary data (financial data) of the cooperatives from the cooperatives office.

3.1 Description of the Study Area

3.1.1 An Overview of the Amhara National Regional State

Amhara is one of the nine ethnic divisions of Ethiopia, containing the homeland of the Amhara people. Previously known as, Region 3. Ethiopia's largest inland body of water, Lake Tana, which is the source of the Nile river is located in Amhara, as well as the Semien Mountains National Park, which includes the highest point in Ethiopia, Ras Dashan (ARGCO, 2009).

The State of Amhara is located in the north western and north central part of Ethiopia. The State shares common borders with the state of Tigray in the north, Afar in the east, Oromiya in the south, Benishangul Gumuz in the south west and the Republic of Sudan in the west. The capital city of the State of Amhara is Bahir Dar. The State of Amhara consists of 10 administrative zones, one special zone, 105 woredas, and 78 urban centers. Amharic is the working language of the state (ARGCAO, 2009).

The State of Amhara is topographically divided into two main parts, namely the highlands and lowlands. The highlands are above 1500 meters above sea level and

comprise the largest part of the northern and eastern parts of the region (ARGCO, 2009).

The CSA of Ethiopia estimated in 2005 that about 85% of the people are engaged in agriculture. The State is one of the major Teff (staple food) producing areas in the country. Barely, wheat, oil seeds, sorghum, maize, wheat, oats, beans and peas are major crops produced in large quantities. Cash crops such as cotton, sesame, sunflower and sugarcane grow in the vast and virgin tract of the region's lowlands. The water resources from Lake Tana and all the rivers found in the region provide immense potential for irrigation development.

Figure 3–1: “Map” of Amhara National Regional State



3.1.2 An Overview

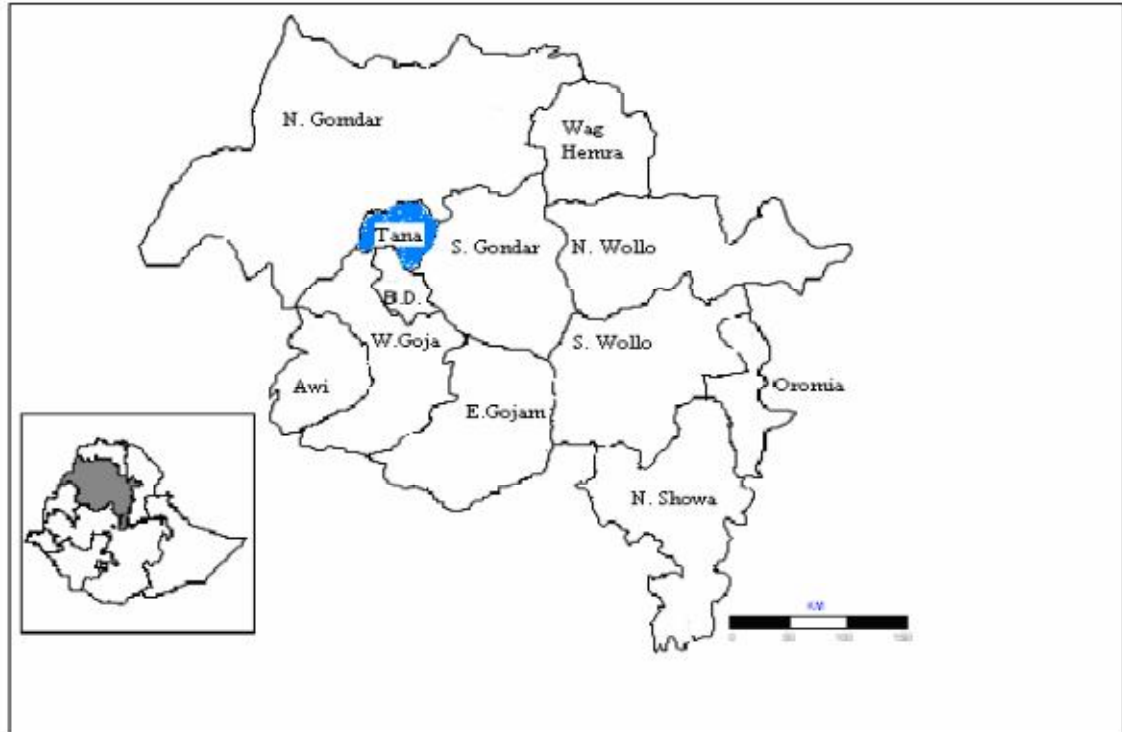
of the North Wollo Zone

North Wollo is a Zone in the Ethiopian Amhara Region. North Wollo acquired its name from the former province of Wollo. North Wollo is bordered on the south by South Wollo, on the west by South Gondar, on the north by Wag Hemra and on the northeast and east by the Afar Region; part of its southern border is defined by the Mille River. The highest point in this Zone is Mount Abuna Yosef. A town in North Wollo is Woldia (ARGCAO, 2009).

Based on the 2007 Census conducted by the Central Statistical Agency of Ethiopia, this Zone has a total population of 1,500,303 an increase of 19.04% over the 1994 census, of whom 752,895 are men and 747,408 women; with an area of 12,172.50 square kilometers. North Wollo has a population density of 123.25. While 155,273 or 10.35% are urban inhabitants, a further 2 percents are pastoralists. A total of 355,974 households were counted in this Zone, which results in an average of 4.21 persons to a household and 343,504 housing unit.

The 1994 national census reported that the largest ethnic group in North Wollo was the Amhara (99.61%); all other ethnic groups made up 0.39% of the population. Amharic was spoken as a first language by 99.62%; the remaining 0.38% spoke all other primary languages reported. 83.36% practiced Ethiopian Orthodox Christianity and 10% of the population said they were Muslim.

Figure 3–2: “Map” of North Wollo Zone



3.1.3 An Overview of Wadla Woreda

3.1.3.1 Location and Physical Features

Wadla is one of the 105 woredas in the Amhara Region of Ethiopia; it is named for the former woreda which lay roughly in the same area. Part of the Northern Wollo Zone, Wadla is bordered on the south and east by Dawunt and Delanta, on the west by the Checheho River which separates it from the South Gondar Zone and on the north by Meket. The major town in Wadla is Kone (WWGCAO, 2009).

The altitude of this woreda ranges from 700 to 3200 meters above sea level. It lies in the watershed of the Bashilo rivers include the Zhit'a. Wadla, as well as the other seven rural woredas of this Zone, has been grouped amongst the 48 woredas identified as the most drought prone and food insecure in the Amhara Region. It is

far from the regional capital city of Baher Dar by 255 kilometers to the East and from the Federal capital city of Addis Ababa by 633 kilometers to the North (WWGCO, 2009).

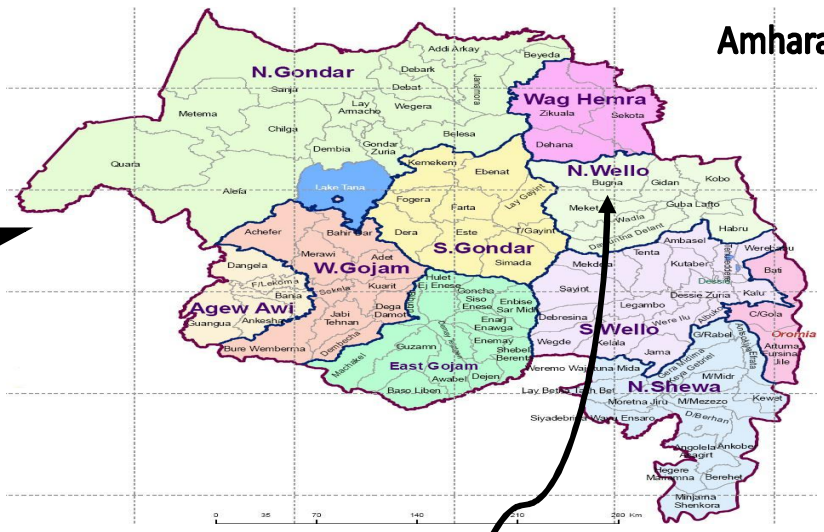
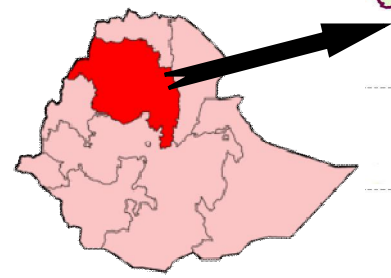
Based on figures published by the Central Statistical Agency in 2005, this woreda has an estimated total population of 144,171 of whom 71,134 are men and 73,037 are women; 2,580 or 1.79% of its population are urban dwellers, which is less than the Zone average of 8.9%. With an estimated area of 944.05 square kilometers, Wadla has an estimated population density of 152.7 people per square kilometer, which is greater than the Zone average of 105.59. The largest ethnic group reported in Wadla was the Amhara (99.94%). Amharic was spoken as a first language by 99.95%. 96.21% of the population practiced Ethiopian Orthodox Christianity and 3.78% of the population said they were Muslim.

The economy of the Wadla, like the economy of the federal state and the Amhara Regional state, is dominated by agriculture. Most of the region is suitable for producing cereals and pulses, but cash crop production also exists (WWGCO, 2009).

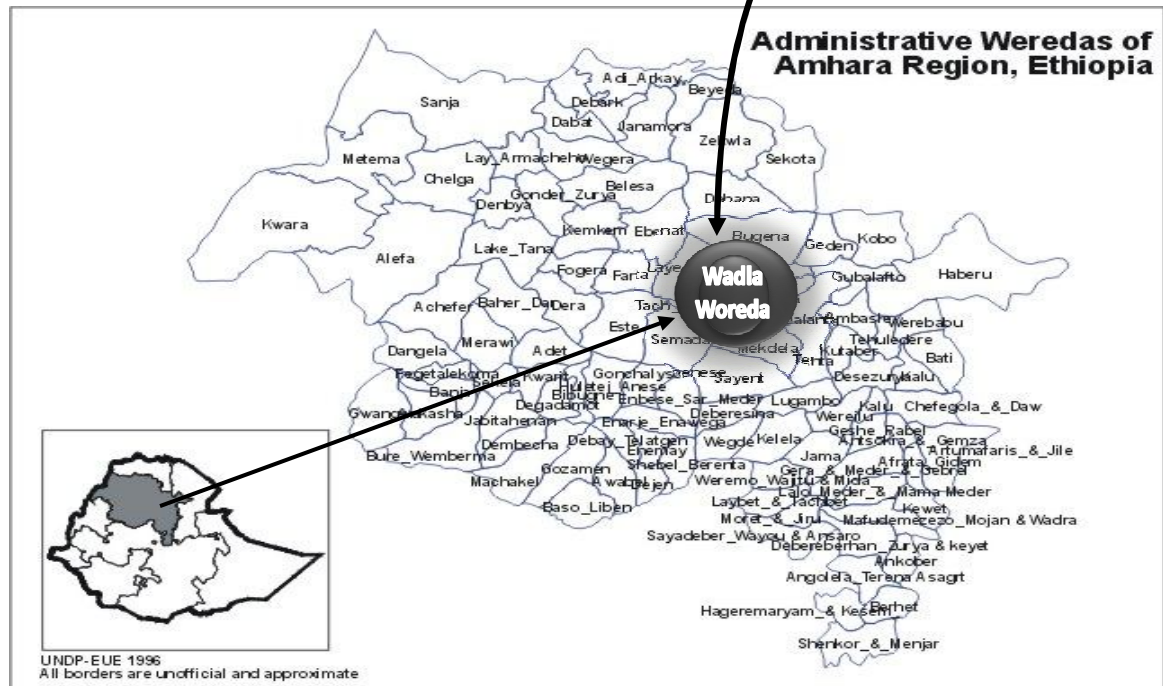
Figure 3–3: “Map” of Wadla Woreda / Map of the Study Area

Ethiopia

Amhara Region



Administrative Weredas of Amhara Region, Ethiopia



UNDP-EUE 1996
All borders are unofficial and approximate

3.1.3.2 Agricultural Cooperatives

In Wadla woreda there are 13 multi-purpose agricultural cooperatives (WWCPO, 2010). And they have 18,541 farmer members (17,114 males and 1,427 females) in 2010. The total capital of the cooperatives was ETB 5,630,868.06. The cooperatives provide primarily fertilizer and other farm inputs. One of the fascinating attributes of agricultural cooperatives is extending fertilizer in credit. Some of the cooperatives render grain mill services.

3.1.3.3 Cooperative Organization and Promotion Office

The current government of Ethiopia is establishing, promoting and organizing cooperatives in the rural community, as they are a means to development. In Wadla woreda there are cooperative organization and promotion office that are responsible for providing the necessary technical supports required by the cooperatives. As these offices are newly organized, the support they are giving is not satisfactory. The offices also face shortage of qualified personnel in the area of cooperative to meet their objectives.

3.1.3.4 Marketing Services

Availability of efficient marketing system raises farmers' income. It has considerable importance in improving the productivity of agriculture by providing incentives to farmers. It also enables the farmers to produce a particular crop or livestock species, which may provide the best advantage. It is possible to say that if increased production is the door for development, marketing should be the key to open the door.

There are a total of 13 primary agricultural cooperatives in the area where this study conducted. They are organized under one Union (Fana Union). The Union is participating in the fertilizer market and distribution. The union purchase fertilizer from suppliers at wholesale price and retail to the primary cooperatives after adding minimum retail margins. Finally the cooperatives distribute the fertilizer to the farmers after adding minimum retail margins. The cooperatives distribute the fertilizer in credit to their members with some prepayment. Besides benefiting the farmers, the cooperatives also enabled to reach remote areas. There were no other private enterprises competing with the cooperatives in supplying farm inputs especially fertilizer to the farmers in the study area.

3.2 Research Method

A descriptive study explores and describes the way things are. It is also concerned with the assessment of attitude, opinions, performance, demographics, practice and procedure (Gay & Airasian, 2000). For these reasons, to answer the basic research questions, this study adopts a descriptive survey method.

3.3 Data Sources

Both secondary and primary data on a wide variety of variables were used to meet the objectives of the study. The study requires a large variety of information that enable to know the performance of agricultural cooperatives with particular reference to primary agricultural cooperatives and/or the services offered by the cooperatives to their members and the satisfaction of the same.

Primary data that is necessary for the assessment of member's satisfaction was gathered from members and relevant employees of selected primary agricultural cooperatives.

Secondary data related to the financial performance of the cooperatives will be collected from documents of the cooperatives mainly from their financial statements, audit reports and relevant archives.

3.4 Population, Sample Size & Sampling Techniques

There are 123 primary agricultural cooperatives in all woredas of North Wollo Zone. Wadla is one of the woredas comprising 13 primary agricultural cooperatives. These 13 cooperatives involve 18,541 (7.7% female) members and mobilize a total of ETB 5,630,868.06 capital. With the aim of securing better price in agricultural and multipurpose marketing, these primary agricultural cooperatives have formed secondary multipurpose cooperatives called Union (NWCPO, 2010).

PAC's operating in Wadla Woreda was selected using purposive sampling techniques. There are thirteen primary agricultural cooperatives in wadla woreda. Of these thirteen PAC's, financial audit for the fiscal years of 2009 and 2010 was conducted only for eleven cooperatives. Therefore, three cooperatives namely, Kone, Gashena and Abdikome PAC's are randomly selected cooperatives with documents of 2009 and 2010 financial audit. This sample size accounts for 27.27 % of the total audited cooperatives and for descriptive research of such a type, more than 10% sample size is acceptable (Gay & Airasian, 2000).

The total size of members of the three cooperatives is 2139 of which 214 (10%) was selected by using random sampling technique.

3.5 Instruments & Procedures of Data Collection

Both primary and secondary data were used in the analysis of this study. To accomplish the first objective of the study, the financial performance of the three agricultural cooperatives i.e. the financial statements of the cooperatives for the periods 2009 and 2010 were taken from the sampled cooperative offices. The primary data was collected from sample respondents through a structured questionnaire, which was designed to generate data on some social and economic variables about the farmer, the situation of farmers membership, the farmers participation in cooperative affairs, the farmers perception on the role of cooperatives, the attitude of the farmer towards the cooperatives and other variables that were supposed to be important for the study.

Three data collectors or enumerators who speak the local language (Amharic) were recruited from the study woreda and were trained on methods of data collection and interviewing techniques.

Moreover, the researcher explained the contents of the questionnaire to the enumerators. Field trips were made before the actual survey to observe the overall features of the selected cooperatives and to select farmers to be interviewed using lists taken from respective cooperatives. The questionnaire was pre-tested and its contents were refined on the basis of the results obtained during the pre-test. With

regard to the collection of primary data, it was done in two different ways: trained enumerators held interview with sample farmers and officials such as managers of the cooperatives using the structured questionnaire and the researcher made personal observations and informal discussions with farmers, cooperative officials and employees in the cooperatives on issues related to the cooperatives and their performance. Continuous supervision was also made to reduce error during data collection and to correct possible errors right on the spot.

Information such as the number and type of the cooperatives in the country and Amhara region, the number of members and the capital amount etc. were obtained from various sources such as reports of Federal Cooperative Agency, Amhara Cooperative Promotion Agency. Similar data concerning the woreda was also obtained from Wadla Woreda Cooperative Promotion office. Other published and unpublished information which were found to be relevant for the study were also collected from woreda offices, Central Statistics Authority, other governmental and non-governmental organizations.

3.6 Methods of Data Analysis

Both descriptive and inferential statistics was employed for the purpose of analyzing quantitative data. In most research undertakings, both kinds of statistics are used to gain complete understanding of the research results (Gravetter & Wallnau, 2000).

This study was basically used three broad categories of data analysis, namely ratios, descriptive and econometric.

3.6.1 Descriptive Statistics

Descriptive statistics are important to provide a clear picture of the characteristics of sample units. By applying descriptive statistics one can compare and contrast different categories of sample units (farm households) with respect to the desired characteristics. Descriptive statistics permit the researcher to meaningfully describe many pieces of data with a few indices (Gay & Airasian, 2000).

In this study, descriptive statistics such as mean and percentage were used along the econometric model to analyze the collected secondary and primary data. Whenever and wherever necessary, data would be tabulated or presented in graphs. Moreover qualitative data shall be entertained with econometric analysis with narration of responses obtained from participated of the interview.

3.6.2 Performance Criterion and Measures

The first objective is addressed by analyzing different performance measures. Measurement of performance involves knowing how far actual performance is consistent with planned performance or with standards already established. Measurement of actual performance does not mean merely knowing what has happened. It should also include why that has happened, deviations between actual and planned (standard) should be identified so that corrective actions could be initiated (Mamoria, *et al.*, 2003). Marketers today are showing a growing interest in developing better marketing metrics for measuring marketing performance (Kotler, 2003). Kotler, (2003) lists four types of marketing control needed by companies

including cooperatives: annual-plan control, profitability control, efficiency control and strategic control.

A firm establishes performance criteria consistent with its mission and objectives. Typically, business managers are concerned with overall performance in five key areas as they apply to design and implementation of the marketing mix: Profitability, Activity, Productivity, liquidity, and leverage (Anderson and Vincze, 2000).

Although attempt would be made to use all types of performance control techniques, the performance of the primary agricultural cooperatives in Wadla worda was analyzed with special reference to financial analysis due to budget, time, and information constraints. In the process, from the audit reports of the cooperatives, the balance sheet and profit and loss statements (Income Statement) were used to calculate key performance criteria.

From the audit reports of cooperatives, balance sheets and income statements were used to analyze financial ratios. The most well-known financial statement is the balance sheet. It gives a view of the assets and liabilities of the cooperative at the end of each accounting period. The income statement summarizes the revenues and expenses of the cooperative during each accounting period and shows the result of the operation of the cooperative during the period.

3.6.2.1 Ratio Analysis

To meet the first objective of the study, different financial ratios were used. Ratios can be used as one tool in identifying areas of strengths or weakness in cooperatives. Financial ratios enable to make comparison of cooperative's financial conditions over time or in relation to other cooperatives. Ratios standardize various elements of financial data for differences in the size of a series of financial data when making comparisons over time or among cooperatives (Kay, 1986). Ratios were calculated from the audit reports of primary agricultural Cooperatives.

3.6.2.1.1 Liquidity Ratio

A cooperative intends to remain viable business entity must have enough cash on hand to pay its debts as they come due. In other words, the cooperatives must remain liquid. One way to determine whether this is the case to examine the relationship between a cooperative's current assets and current liabilities. Liquidity ratios are quick measure of cooperative's ability to provide sufficient cash to conduct business over the next few months. According to Nevue (1985); Bringham and Houston (1998) and William et al.(2003) one of the most commonly used liquidity ratio is the current ratio that is computed by dividing current asset by current liabilities. A rule of thumb sometimes applied to the current ratio is that it should be around 2 (Gittinger, 1982).

$$\text{Current Ratio} = \frac{\text{Current Assets}}{\text{Current Liabilities}} \dots\dots\dots \text{Eq (1)}$$

3.6.2.1.2 Financial Leverage Management Ratio

Whenever, a cooperative finance a portion of asset with any type of financing such as debts, the cooperative is said to be using financial leverage. According to Bringham and Houston (1998) and William et al. (2003) financial leverage management ratio measures the degree to which a firm is employing financial leverage. In these authors, of the several types of financial leverage ratios, debt ratio is commonly used. It measures the portion of a firm's total asset that is financed with creditor's fund. It is computed by dividing total debt by total asset.

$$\text{Debt Ratio} = \frac{\text{Total Debt}}{\text{Total Asset}} \dots\dots\dots \text{Eq (2)}$$

There is no good rule of thumb for the debt-equity ratio. It depends on the enterprise ownership type and national objective. In agricultural projects, enterprises are likely to need a strong equity base (Gittinger, 1982).

3.6.2.1.3 Profitability Ratio

Profitability is the net effect of a number of policies and decisions. Profitability ratios measure how effectively a firm's management was generating profits on sales, total assets, most importantly stockholders' investment (Nevue, 1985; Bringham and Houston, 1998; William et al., 2003). These authors also suggested that the most commonly used profitability ratio is return on total asset, which is computed by dividing net income by total asset.

$$\text{Return on Total Asset} = \frac{\text{Net Income}}{\text{Total Asset}} \dots\dots\dots \text{Eq (3)}$$

3.6.2.1.4 Efficiency Ratios

The efficiency ratio enables to form judgment about the efficiency of the cooperatives. It provides measurements of asset use and expense control.

a) Inventory Turnover

One of the commonly used efficiency measurements is inventory turnover. It measures the number of times that an enterprise turns over its stock each year and indicates the amount of inventory required to support a given level of sales (Gittinger, 1982).

The ratio can be computed in the form given here, the cost of goods sold is divided by the inventory.

$$\text{Inventory Turnover} = \frac{\text{Cost of Goods Sold}}{\text{Inventory}} \dots\dots\dots \text{Eq (4)}$$

Low turnover ratios mean that a cooperative with large stocks on hand find it difficult to sell its product and this may be an indicator that the management is not able to control its inventory effectively. A high turnover ratio may mean that the cooperative is able to recover its inventory investment rapidly and that there is a good demand for its products.

b) Days Inventory

The other important efficiency ratio used to measure the efficiency of cooperative was days inventory. It is obtained by dividing the 365 days by the inventory turnover.

$$\text{Days Inventory} = \frac{365 \text{ days}}{\text{Inventory Turnover}} \dots\dots\dots \text{Eq (5)}$$

This ratio identifies the average length of time in days it takes the inventory to turn over. As with inventory turnover (above), fewer days mean that inventory is being sold more quickly (Gittinger, 1982).

3.6.3 Specification of Econometric Models

3.6.3.1 Probit Regression Model

In the bivariate logit or Probit models the modeling process used yes or no response binary variables. But often the response variable or regressand, can have more than two outcomes and very often these outcomes are ordinal in nature; that is, they cannot be expressed on an interval scale. To study such phenomena, one can extend the bivariate logit and probit models to take into account multiple ranked categories (Gujarati, 2003). Gujarati (2003) recommends using multistage normal and logistic probability distributions to allow for the various ranked categories.

The attention of this research objective is the relationship of the overall satisfaction level of members of primary agricultural cooperatives with various types of socio-economic variables. Some of the variables include educational level of the household, age of the household, sex, family size of the household, distance of the cooperatives from the farmer's house, position in the cooperative and member of years of membership in their cooperatives. As the dependant variable i.e., satisfaction and cooperative services are a discrete qualitative, the right modeling

specification would be a multi-nominal regression model. This model is more appropriate when the dependent variable has more than two outcomes and the outcomes can be ranked orderly (Gujarati, 2003).

According to Anderson and Vincze (2000), customer expectations about the types of services that should be offered and their criteria for performance of these services have a major impact on the level of satisfaction or dissatisfaction felt with the total purchase and sale experience.

This can be represented as:

Customer Satisfaction = (Service expectations – perceived service performance)

The attention of this specific objective in this study is to analyze the relationship of the overall satisfaction level of members with various kinds of agreement and rating of the overall performance of their agricultural cooperatives.

The satisfaction of members' with their primary cooperatives could, thus, be specified as:

$$Y_i^* = \beta'X_i + U_i \quad i= 1, 2 \dots 214$$

Where:

Y_i - Dependent (response) variable,

β - Vector of coefficients to be estimated,

X_i - Vector of socioeconomic variables, and

U_i - Random error

Since the response variable Y_i^* is not observed, the degree of satisfaction S_i that a member is achieving is computed as an index. On the basis of the computed value, it is possible to know to which category each member will belong. If satisfaction categories are specified as, very satisfied (S_1), moderately satisfied and satisfied (S_2), will be considered as satisfied where as dissatisfied (S_3) and very dissatisfied will be considered as dissatisfied.

Where:

$$S_i = S_{1i}, \text{ if } -\infty < Y_i^* \leq \mu_1$$

$$S_i = S_{2i}, \text{ if } 0 < Y_i^* \leq \mu_2$$

$$S_i = S_{3i}, \text{ if } \mu_2 < Y_i^* \leq +\infty$$

Where: μ_s are the unknown threshold for the underlying response variable. In order to assess factors influencing members' satisfaction of primary agricultural cooperatives, a probit regression model was used. Such a model may take the following form:

$$S_i = \alpha + \gamma Z_i + v_i$$

Where:

S_i - Degree of member's satisfaction

α - Constant term

γ - Vector of coefficients to be estimated

Z_i - Vector of independent variables

V_i - Error term

3.6.3.2 Hypothesis and Definition of Variables

In the process of determining factors influencing the degree of satisfaction of primary agricultural co-operative members in relation to the service rendered by the co-operatives, the core task is to analyze which factors influence their satisfaction in using the co-operatives was discussed here under.

3.6.3.2.1 Dependent Variable

In this study, the dependent variable is the degree of primary agricultural co-operatives members' satisfaction on the overall performance of cooperatives and services rendered by the cooperatives discussed here under.

Credit (CREDIT): It is dummy variable, which takes a value 1 if the farmer obtained credit on demand from the cooperative and 0 otherwise. The credit helps the farmers to buy farm inputs. Therefore, it is expected that this variable would have positive influence on the satisfaction of primary agricultural cooperatives.

Patronage Refund (PATREF): It is used as dummy explanatory variable, which takes a value 1 if the member received a dividend at least once, 0 otherwise. It refers to the amount of money the member receives from the surplus the co-operative distribute in proportion to the members' participation (Black and Knutson, 1985). It is assumed that the member will be satisfied to participate in his cooperative if there is patronage dividend. Thus, this variable expected to influence member satisfaction positively.

Training of Members (TRAINING): this variable is a dummy variable for this study taking a value 1 if the cooperative trained the members and 0 otherwise. Creation of awareness and skill development can have a positive impact to increase the participation of members in their cooperatives. So training of members will have a positive influence for satisfaction.

3.6.3.2.2 The Independent Variables

Members' satisfaction in using agricultural cooperatives was hypothesized to be influenced by a combined effect of various factors such as household characteristics, socioeconomic characteristics and other institutional characteristics where the farmers operate. In this study, a total of nine variables were hypothesized to explain the dependent variable. The selected explanatory variables are briefly explained and presented below.

Age of the Household (AGEHH): This variable is a continuous explanatory variable and refers to age of head of the household. The experience that the farmer accumulates about the advantage or disadvantage of the co-operative has an impact on his satisfaction. Therefore, the variable expected to influence positively.

Distance of the Cooperative from the Farmers House (DCFH): It is a continuous variable measured in meters. It refers to the distance of the cooperative from the farmer house. The proximity of the cooperative for the farmers house are reduces the cost of time and labor spent that the farmers' rendering the service from their cooperatives. The other advantage is that as the farmer is close (near) to the cooperative, they will have more knowledge about the cooperative and its benefits

(Bishop and McConnen, 1999). Therefore, in this study the distance of the cooperative from the farmer house is expected to influence the member's satisfaction through the cooperatives negatively.

Educational Level of the Household (EDULELHH): It is a continuous variable and refers to the number of years of formal schooling the household head attended. The higher the education level, the better would be the knowledge of the farmer towards the co-operative and acquire news and education about the associated benefits of the co-operative (Kraenzle, 1989). Under normal condition, those farmers with higher education are in a better position to satisfy on the services rendered by the co-operatives. So this variable is expected to influence positively.

Family Size (FSIZE): This variable is a continuous explanatory variable and refers to the number of family of the household. It is assumed that household with larger family size can have more labor for his farming activities and/or higher expenditure for consumption and other expenses. Therefore, the variable expected to have a positive correlation with satisfaction of members.

Total Number of Members (TOTNMEM): It is continuous variable representing the total number of members in the cooperative to which the respondent is a member. As the number of members in the cooperative increases, it may become difficult to meet the expectations of every member. On the other hand, the size of the members could increase the sales volume of the cooperative that have a positive influence on the profitability of the cooperative thereby dividend payment for each member.

Number of Years of Membership (MEMBERSHIP): This variable is a continuous variable and it refers to number of years since the farmer has been the member of the cooperative. Farmers having longer years of membership are in a better position to know the benefits of the cooperative than farmers with shorter years of membership (Cain et al., 1989). In this study, this variable is hypothesized to influence the members' satisfaction positively.

Position in the Cooperatives (POSITION): It is a dummy variable taking a value 1 if the farmer has a position (in the management or board of director) in the cooperative and 0 if s/he is ordinary member. Having a position in the cooperative increases the attachment of the farmer to the cooperative than the ordinary member and help to realize the benefits of the cooperative.

Sex (SEX): It is dummy variable that takes a value 1 if male and 0 female. The farmers satisfaction may vary based on differences in sex. Thus, their positions in the cooperative as management or board of directors are better than the ordinary member. Therefore, having a position in the cooperative is expected to influence the members' satisfaction positively.

Total Assets of the cooperatives (TOTASSET): It is continuous variable that represents the amount of total asset each cooperative owned in which the farm household is a member. As the cooperative's total assets become large, the purchasing power of the cooperative increases that satisfies its members. So, this variable is expected to influence members' satisfaction positively.

CHAPTER FOUR

RESULTS AND DISCUSSION

This chapter presents the results obtained from ratio, descriptive and econometric analysis. The ratios were calculated based on cooperative's balance sheet and profit and loss statement from their respective audit reports. Profitability, Liquidity, Debt and Efficiency ratios were used in the analysis to examine the performance of the cooperative organized in the Wadla woreda. In the descriptive statistics mean and percentage were employed. Econometric model were employed to identify the factors that influence the members' satisfaction on the overall performance of cooperative and services rendered based on socio-economic and institutional variables.

4.1 Descriptive Analysis

Descriptive analysis is used to elaborate and helps to understand the socio-economic, the cooperatives and farmers' attitude towards them and other institutional characteristics of the sampled household and/or members of the primary agricultural cooperatives organized in the study area.

4.1.1 Household Characteristics of the Farmers

4.1.1.1 Age of the Farmers

The age of the sampled household head ranges from 15 years to greater than 46 years old. It is shown that:

- ** 14.95% of farmers are 15 – 25 years old
- ** 42.06% of them are 26-35 years old
- ** 35.98% of them are 36-45 years old and
- ** 7.01 % of them are above 46 years old.

These results indicate that the majority of farmers are less than 36 years old and more than 25 years old .The average age of the sampled farmers was about 33.6 years. About 42.06% of the respondents were found in the most actively working age category (26-35 years) and it shows that some of them have more experience in agricultural work than others (Table 4-1).

Table 4-1: Characteristics of the sample farmers by age

Age category	Total sample (n=214)	
	n	%
15 – 25 Years	32	14.95
26 – 35 Years	90	42.06
36 – 45 Years	77	35.98
46 Years and above	15	7.01
Mean	33.61	

Source: Survey result, 2011

4.1.1.2 Sex, Marital Status and Family Size of the Farmers

Out of the total sample farmers studied 92.99% of the sampled households were male headed and 7.01% were female headed (Table 4-2). This indicates that nearly the entire cooperative member households were male headed.

Most of the sample farmers 67.76% are married while 15.89%, 13.55% and 2.8% are single, divorced and widowed respectively (Table 4-2).

With regard to size of farmers' family, the variable was measured by the number of individuals who live with farmers in one house. Through classifying farmers according to family size, it is shown that:

- * 28.5 % of farmers have families of small size with 1– 4 persons,
- ** 56.54 % of them have families of medium size with 5 –9 persons,
- ** 10.75 % of them have families of large size with 10 –12 persons and
- ** 4.21% of them have families of very large size with more than 12 persons.

These results refer that, the average family size of the sample farmers was 6.3 persons and the majority of the sample farmers have families of medium size with 5-9 persons. It means that the majority of farmers face burdens of social life, which motivate them to activate within agricultural cooperatives (Table 4-2).

Table 4-2: Characteristics of the sample farmers by sex, marital status and size of family

Characteristics	Total Sample (n=214)	
	n	%
Sex		
Male	199	92.99
Female	15	7.01
Marital status		
Married	145	67.76
Single	34	15.89
Divorced	29	13.55
Widowed	6	2.80
Size of farmer's family		
Small (1-4 members)	61	28.50
Medium (5-9 members)	121	56.54
Large (10-12 members)	23	10.75
Very large (above 12 members)	9	4.21
Mean		6.3

Source: Survey result, 2011

4.1.1.3 Farmers Educational Status

Farmers' education level was measured by the number of education years of a farmer. As it is observed on (Table 4-3), out of the sampled farmers, 40.65% were illiterate or had not received any type of education. The rest of the sampled households had attended religious based could only read and write (24.3%), primary education (21.03%), secondary education (10.75%) and above secondary education (3.27%).

These results indicate that, more than 1/3 of farmers are illiterate. This may affect negatively their extent of benefit from the activities of the agricultural cooperatives

as well as their ability to use modern agricultural innovations. In addition, the majority of farmers have a weak level of education.

Table 4-3: Characteristics of farmers by educational status

Characteristics	Total Sample (n=214)	
	n	%
Educational status		
Illiterate	87	40.65
Basic education (Religion based)	52	24.30
Primary education (1-6 grade)	45	21.03
Secondary education (7-8 grade)	23	10.75
Above secondary education (9-12 grade)	7	3.27

Source: Survey result, 2011

4.1.1.4 Farmers Agricultural Experience, Years of Area Living and Distance b/n the Residence & Cooperatives Location

Agricultural experience level of farmers was estimated as the number of farmers' working years in the field of agriculture. Table (4-4) results referred to:

- * 52.80 % of farmers have a weak level of agricultural experience,
- * 42.99% of them have a medium level of agricultural experience, while
- * 4.21 % of them have a high level of agricultural experience.

Results indicate that, the sampled farmer's agricultural experience in agricultural field was an average of 20.52 years with maximum and minimum years of farming

experience of 60 and 1 years respectively, and the majority of farmers have weak level of agricultural experience that may affect negatively their agricultural production and its quality.

With regard to distance between farmers' residence and agricultural cooperatives' location, results indicate that;

- * 21.03% of farmers live at distances from 1 to 500 meters from the location of the agricultural cooperatives,
- ** 20.56% of them live at medium distances from the location of the agricultural cooperatives,
- * 14.02% of them live at far distances from the location of the agricultural cooperatives, and
- ** 44.39% of them live at very far distances from the location of the agricultural cooperatives.

These results refer that, the majority of farmers live very far from the agricultural cooperatives and therefore, decreasing their ability to identify the agricultural cooperatives activities that in turn affects negatively their benefits from agricultural cooperatives activities (Table 4-4).

Table 4-4: Characteristic of the sample farmers by years of area living, agricultural experience and distance of cooperatives location

Characteristics	Total Sample (n=214)	
	n	%
Farmers living in the area		
1-20 years	95	44.39
21 -40 years	102	47.66
41 – 60 years	17	7.95
Mean	22.99	
Farmers agricultural experience in agri. field		
Low level (1 –20 years)	113	52.80
Medium level (21 – 40 years)	92	42.99
High level (41 – 60 years)	9	4.21
Mean	20.52	
Distance b/n farmer’s residence and agri. coop location		
Short distance (1 – 500 m)	45	21.03
Medium distance (501 – 1000 m)	44	20.56
Far distance (1001 – 1500 m)	30	14.02
Very far distance (Above 1500 m)	95	44.39
Mean	1,048m	

Source: Survey result, 2011

4.1.2 Farmers Membership Status in Their Cooperatives

Farmers’ membership duration in agricultural cooperatives was measured by the number of their membership years in the agricultural cooperatives. Results indicate that:

- * 30.84% of farmers have a membership duration of 1–10 years,
- ** 38.79% of them have a membership duration of 11–20 years and
- ** 30.37 % of them have membership duration of 21-40 years.

The result shows that, the average years of membership of the sample farmers in the cooperative was 16.97 years with maximum and minimum years of membership of 40 years and 1 year respectively, and more of the sampled farmers are the ability to identify activities and services provided by the agri. cooperatives (Table 4-5).

As shown below in Table (4-5), the sample farmers responded their reasons of membership in their cooperatives. In this regard, 37.38% became members due to own interest and free choice, 28.97% to benefit from services rendered by the cooperative and the other 14.95%, 11.6% and 7.01% members had joined the cooperatives through administrative guidance, by neighbors influence and by promoter's awareness creation respectively.

Difficulties were encountered when the principle of the "voluntary and open membership", had been violated. Co-operative principles require that membership should not be assumed to comply to political commitment or other obligations. Co-operatives are organized and tightly controlled by government as instruments of state economic policy and are rarely conducive to the development of democratically controlled, member-owned co-operatives (Coward, 2004). Because they are created to serve the objectives of politicians and planners, on which their objective may or may not coincide with members who have little effective control of the cooperatives.

Among the sampled farmers 4.21% of whom were in a position in the management (board of directors) and 95.79% of them were ordinary members of the

cooperatives. This result shows that, attachment of farmers to the cooperative had decreased and more members did not know the activities of the cooperatives and were not participating in management activities (Table 4-5).

Table 4-5: Characteristic of the sample farmers by years of membership and membership status

Characteristics	Total Sample (n=214)	
	n	%
Membership Duration		
1 -10 Years	66	30.84
11 -20 Years	83	38.79
21 – 40 Years	65	30.37
40 – 60 Years	--	--
Mean	16.97	
Reason of membership		
Own interest and free choice	80	37.38
Awareness by promoters	15	7.01
Forced by the administration	32	14.95
Looking for service rendered by the coop	62	28.97
Influenced by neighbors	25	11.6
The last two years Position in the cooperatives		
Chairman	--	--
Board of directors	9	4.21
Ordinary members	205	95.79

Source: Survey result, 2011

4.1.3 Member's Participation in Cooperative Affairs

4.1.3.1 Farmers Attendance in the General Assembly Meeting

There were low level of participation of members in meetings of the General Assembly at an attendance rate of less than half of the members. Most recent field

studies state that the absence of the majority of members from meetings of the General Assembly was due to their negative feeling of the usefulness of these meetings (Rashid, 1992).

4.1.3.2 Participation of Farmers in Decision Making Process

The survey result on participation shows that 81.78%, 78.97%, 89.25% and 91.59% of the sampled farmer's hadn't participated in the election of directors, by-law approving, annual budget and planning activities and approving annual audit reports respectively. This result indicates that the participation of members in their cooperative decision making activities was low. This shows that after nominating the cooperatives managing committee, the majorities of cooperative members in the study area were running away and were not controlling the physical and financial performances of the cooperatives. Such tendency opens the door for mismanagement of resources and lead to corruption. Negligence of members on major cooperative decisions could have a negative impact on future development of cooperatives as a whole.

Table 4-6: Farmers participation in decision making process of cooperatives

Respondents view on participation (n=214)	Not at all		Rarely		Often		Frequently	
	n	%	n	%	n	%	n	%
Approving the By-Law	175	81.78	22	10.27	8	3.74	9	4.21
Electing BoDs	169	78.97	28	13.08	9	4.21	8	3.74
Approving Annual Plan and Budget	191	89.25	6	2.80	9	4.21	8	3.74
Approving Audit Report	196	91.59	9	4.21	6	2.80	3	1.40

Source: Survey result, 2011

4.1.4 Member's Perception on the Role of Cooperatives

4.1.4.1 Performance of Cooperatives

With regard to members' view on achievement of cooperatives in price stabilization, market information dissemination, credit provision, solving marketing problems and rendering demand oriented services, the study result indicates that members' perception were negative on cooperatives towards achieving their objectives (Table 4-8).

Table 4-7: Characteristic of the sample farmers by the performance of their cooperatives

Members Perception (n=214)	Strongly Agree		Not Sure		Disagree	
	n	%	n	%	n	%
Price stabilization	186	86.92	18	8.41	10	4.67
Disseminating market information	20	9.35	39	18.22	155	72.43
Credit provision	42	19.63	21	9.81	151	70.56
Solving members' marketing problem	25	11.68	58	27.10	131	61.22
Demand oriented service provision	34	15.89	23	10.75	157	73.36
Achieving objectives	57	26.64	66	30.84	91	42.52

Source: Survey result, 2011

4.1.4.2 Member's Living Standard

The result had indicated that 58.88% had not witnessed any change at all after joining the cooperatives. This indicates that, the members were not committed to the cooperatives and had shown increasing dissatisfaction of the services rendered by the cooperatives (Table 4-9).

Table 4-8: Characteristic of the sample farmers by change of living standard

Characteristics	Total sample (n=214)	
	n	%
Change of members living standard after joining the cooperatives		
Improved	88	41.12
No change at all	126	58.88

Source: Survey result, 2011

4.1.4.3 Satisfaction Level in the Cooperatives Service

Cooperatives are expected to render various services like payment of patronage refund, price information, provision of credit, transportation services, training, better price than other traders, storage services, management/ expert advice and demand oriented. It was revealed that the majority of members were dissatisfied with the services rendered (4-10).

Table 4-9: Level of satisfaction for services rendered by cooperatives

Characteristics (n=214)	Degrees of dissatisfied				Degrees of satisfaction					
	Very dissatisfied		Dissatisfied		Unsure		Satisfied		Very Satisfied	
	n	%	n	%	n	%	n	%	n	%
Price Differences	140	65.42	3	29.44	2	0.93	9	4.21	--	--
Demand oriented	160	74.77	23	10.75	5	2.34	18	8.4	8	3.74
Management/ expert advise	88	41.12	44	20.56	31	14.49	19	8.88	32	14.95
payment of patronage refund	110	51.40	81	37.85	11	5.14	10	4.67	2	0.93
Costs to use the services	5	2.34	120	56.07	3	1.40	72	33.64	14	6.54
Quality of services	59	27.57	73	34.11	4	1.87	47	21.96	31	14.49
Training of the cooperative	25	11.68	169	78.97	12	5.61	6	2.80	2	0.93

Source: Survey result, 2011

4.1.4.4 Members Satisfaction Level in the Coop Board of Management and Employees

The management of cooperative is composed of three separate and distinct groups: members, directors and managerial staff. It requires the active participation of these staff to make the cooperative well coordinated.

Members formulate policies by adopting the articles of incorporations and bylaws and through action taken at annual and other meetings. However, they delegate to the board of directors the responsibility of translating these policies into action. It is the duty of directors to safeguard the interest of members. The directors hire and supervise the manager and other qualified personnel to carry out the activities of the cooperative. They interpret the policies of the members and take the necessary steps to put them into effect. The directors prescribe how the cooperative has to operate in order to carry out the expected wish of the members most effectively. If these procedures are adopted, members' satisfaction will be maximized otherwise it leads to dissatisfaction.

In this regard members views were analyzed and categorized into five groups, namely, satisfied, very satisfied, unsatisfied, very unsatisfied and not sure. Out of 214 sampled farmer members 88.32% were dissatisfied on activities of the Board of directors, and a total of 53.27% had expressed dissatisfaction on employees of cooperatives (Table 4-11). The member's view of satisfaction or dissatisfaction was assessed based on both participation in the formulation and implementation of their cooperative policies and regulations as well as their cooperatives performance in the efficiency of service delivery system.

Table 4-10: Characteristic of the sample farmers by the satisfaction or dissatisfaction of the board of directors and employees (n=214)

Characteristics	Degrees of dissatisfied				Degrees of satisfaction					
	Very dissatisfied		Dissatisfied		Unsure		Satisfied		Very Satisfied	
	n	%	n	%	n	%	n	%	n	%
BoD's	81	37.85	108	50.47	2	0.93	20	9.35	3	1.40
Employee's	30	14.02	84	39.25	12	5.61	79	36.92	9	4.20

Source: Survey Result, 2011

4.1.5 Other Issues of the Cooperatives Long Term Success

Among the sample farmers 86.92% positively perceived that cooperatives can solve the problems of the farmers and most 92.99% farmers believe that farmers can be able to felt problems by working together. The reason given for reluctance to work together were mostly to enable them to misuse of the cooperative for individual benefit, and lack of commitment by members and lack of responsibility for common work (Table 4-13).

Table 4-11: Sample farmers perception long-term success of the cooperatives

Characteristics	Total sample (n=214)	
	n	%
Cooperatives solve the problems of the farmers		
Yes	186	86.92
No	28	13.08
Farmers can overcome their commonly felt problems by working together		
Yes	199	92.99
No	15	7.01
Reasons of farmers for not working together		
Lack of responsibility for common work	2	13.3
Misuse of the cooperative by some individuals	10	66.67
Lack of commitment by the members	3	20
Political influence/ intervention	--	--

Source: Survey result, 2011

4.1.6 Perceived Constraints of Cooperatives

According to farmers the perceived constraints of cooperatives were categorized into internal, external and infrastructural (Table 4-14; 4-15, 4-16).

Among the internal constraints the followings are the outstanding ones:

- ☞ Limited capacity of BoD's & Management
- ☞ Poor participation of members in decision making process
- ☞ Lack of transparency and accountability
- ☞ Less knowledge on duties and responsibility (Table 4-14).

Table 4-12: Farmers perceived constraints of cooperatives - Internal problems

Constraints	Total sample (n=214)					
	Important		Not sure		Less Important	
	n	%	n	%	n	%
Limited Capacity of BoDs & Management	151	70.56	23	10.75	40	18.69
Inadequate initial capital	76	35.51	34	15.89	104	48.60
Poor participation of members in decision making	123	57.48	32	14.95	59	27.57
Lack of transparency and accountability	147	68.69	38	17.76	29	13.55
Failure to notify annual meetings	58	27.10	66	30.84	90	42.06
Knowledge about duties & responsibilities	164	76.64	15	7.00	35	16.36
Equal opportunity in passing decision	52	24.30	14	6.54	148	69.16
Limitation to exercise their right	48	22.43	28	13.08	138	64.49

Source: Survey result, 2011

Among the external constraints, the most glaring ones were: High influence of vested interest, price increase of agricultural inputs, and low price for farm products (Table 4-15).

Table 4-13: Sample farmers perceived constraints of cooperatives - External problems

Characteristics	Total sample (n=214)					
	Important		Not sure		Less Important	
	n	%	n	%	n	%
High- influence of vested interest	119	55.61	40	18.69	55	25.70
Price increase for agricultural inputs	180	84.11	9	4.21	25	11.68
Existence of other competitors	29	13.55	72	33.64	113	52.81
Low price of produces	132	61.68	29	13.55	53	24.77

Source: Survey result, 2011

With regard to infrastructural constraints, unavailability of trained manpower, lack of information on market oriented production, and unavailability of transportation and storage (Table 4-16).

Table 4-14: Sample farmers perceived constraints of coop - Infrastructural Problems

Characteristics	Total sample (n=214)					
	Important		Not sure		Less Important	
	n	%	n	%	n	%
Availability of trained man power	131	61.21	40	18.69	43	20.10
Information on market oriented production	73	80.84	11	5.14	30	14.02
Storage and transportation facility	209	97.66	3	1.40	2	0.94

Source: Survey result, 2011

4.1.7 Characteristics of Sample Mangers'

4.1.7.1 Age of Cooperative's Manager

In classifying the managers of the agricultural cooperatives in terms of their ages, all belong to the age group between 21 and 35 years and the average age of the managers were 28 years old (Table 4-17).

Table 4-15: Characteristics of the Sample Managers by Age

Age category	Total sample (n=3)	
	n	%
< 20	--	--
21-35	3	100
36-50	--	--
Mean	28	

Source: Survey Result, 2011

4.1.7.2 Manager's Status of Education, Training and Experience

The education level of the agricultural cooperatives managers were relatively low for the responsibility shouldered. Among the three sample managers, one of them had completed primary level of education (the 10 years of formal education), and the other two managers had completed high school level of education (Table 4-18).

By classifying the managers of the agricultural cooperatives according to their level of experience, measured by number of years working in the agricultural cooperatives, all three managers of the cooperatives had worked for agricultural cooperatives for more than 5 years. Two of the managers of the cooperative had acquired some level of training on cooperatives, while the third one did not have specialized training in cooperatives.

Table 4-16: Classification of sample manager's by educational status, training and experience level

Characteristics	Total sample (n=3)	
	n	%
Educational status		
Illiterate	--	--
Low level (1-10 years)	1	33.33
Medium level (11-15 years)	2	66.67
High level (more than 15 years)	--	--
Training level		
Neglected level (no training)	1	33.33
Very low level (1-2 course)	--	--
Low level (3-5)	1	33.33
Medium level (6-8 courses)	1	33.33
High level (9-11 courses)	--	--
Experience level		
Low level (less than 1 years)	--	--
Medium level (1-5 years)	--	--
High level (more than 5 years)	3	100

Source: Survey Result, 2011

4.1.7.3 Managers Perception on Relations within the Agricultural Cooperatives

There is no doubt that the potential of the relations among the main elements on which the agricultural cooperatives organizational structure is formed (General Assembly members - board members – official employees) on one hand and among the local leaders in villages on the other, plays an important and effective role in the ability and effectiveness of the agricultural cooperatives in achieving their goals and performing functions.

Based on information obtained from the three managers used in this study, two of them think that there is an excellent relation on most characteristics on relation. However, one of them consistently held different view (Table 4-19).

Table 4-17: Characteristics of the sample manager's by evaluation of cooperatives relationship

Type of Relations	Total sample (n=3)							
	Excellent		Good		Mediate		Weak	
	n	%	n	%	n	%	n	%
Relation among board members	1	33.33	2	66.67	--	--	--	--
Relation between board members and farmers	--	--	3	100	--	--	--	--
Relation between board members and employees	2	66.67	1	33.33	--	--	--	--
Relation among the employees	2	66.67	1	33.33	--	--	--	--
Relation between employees and farmers	2	66.67	1	33.33	--	--	--	--
Relation among farmers	--	--	3	100	--	--	--	--
Relation between village leaders and agricultural coop.	--	--	1	33.33	1	33.33	--	--

Source: Survey Result, 2011

4.1.7.4 Sample Managers View on Organizations Infrastructural Status

a) The Size of the Agricultural Cooperatives Building

The size of a cooperative building is considered one of the most important elements influencing the degree of performance and achievement of activities. Two-thirds of the agricultural cooperatives had buildings that are less than 250m², while 1/3 of them had building that ranges from 250 and 500m². Thus about 2/3 of a floor space of less than 250 m².

Table 4-18: Space occupied by agricultural cooperatives buildings

Characteristics	Total Sample (n=3)	
	n	%
The building area of agricultural cooperatives		
<250 m ²	2	66.67
250 - 500 m ²	1	33.33
>500 m ²	--	--

Source: Survey Result, 2011

b) Suitability of Agricultural Cooperatives Buildings

The suitability and location of a cooperative building for the purpose intended is considered to influence their activities.

The three managers interviewed had differing views, in that two of them consider the building site and area occupied are not suitable while one of them had a positive view on all factor.

4.1.8 Elements of Organizational Structure of Agricultural Cooperatives

4.1.8.1 Year of Establishment of the Agricultural Cooperatives

One of the cooperatives in the study area was established during the Imperial regime (1960-1975). The other two were established during the Derg regime between 1975-1991 (ACDI/VOCA, 2002).

The Derg regime established an extensive network of socialist agricultural cooperatives throughout Ethiopia to organize the peasants, control agricultural prices, levy taxes and extend government control to the local level. Farmers came to view the cooperatives with mandatory membership, quotas for grain to be delivered to the government and boards of directors and managers appointed by the ruling party as a synonym for government oppression (ACDI/VOCA, 2002).

4.1.8.2 Benefits of the Cooperatives

The size of the population in the villages that had agricultural cooperatives was 1,166 persons.

- * About 1/3 of the agricultural cooperatives were located in villages that had 2501 – 3500 persons, and

- * Two-thirds were located in villages that had less than 2500 persons.

Results refer that the vast majority of the agricultural cooperatives under study were located in villages that have a relatively small portion of population. In addition, few agricultural cooperatives are located in villages having a sizable portion of the population.

Table 4-19: Size of population benefiting from the cooperatives

Characteristics	Villages (n=3)	
	n	%
Benefiting number of villages		
1-2	3	100
Populations in the village		
Less than 2500	2	66.67
2501 – 3500	1	33.33
3501 - 4500	--	--
Mean	1,166	

Source: Survey result, 2011

4.1.8.3 Members of the Cooperatives

General assembly is considered to be the supreme authority of the agricultural cooperatives. The increasing of members' number in the cooperatives will lead to increasing the capital of the cooperatives. So, the membership number increasing is considered as an important part of the development of agricultural cooperative working capital (Mohammed, 2004).

Table 4-20: Size of membership in cooperatives

Members	Cooperatives
	n
500 -1000	1
1001-1500	2
1501-2000	--
Mean	666

Source: Survey result, 2011

4. 1.8.4 Members of Board of Directors

Every cooperative must have a management committee who is accountable to the general assembly and whose members and manner of election is incorporated in the

by-laws of the cooperatives. The term of office of the management committee is three years and shall not be elected for more than two consecutive terms (Article 4 – Proclamation 147/98). The agricultural cooperative board of directors have seven members. For choosing the board members, 1/3 are elected and 2/3 are selected on the basis of past records.

4.1.9 Managers view of Problems and Obstacles (Barriers) that the Agricultural Cooperatives Face

The most important problems as outlined by the managers were:

- * Lack of budget and working capital,
- * Lack of farmers trust in the agricultural cooperatives as a result of the low quality of services provided in addition to increasing the prices of the agricultural production requirements in the agricultural cooperatives.
- * Lack of coordination and cooperation b/n the agricultural cooperatives and other developmental organizations in villages
- * Lack of efficiency for most cooperatives board members
- * Lack of employees training level, and
- * The multiplicity of the administrative authorities that supervise the cooperatives.

4.1.10 Farmers View on Problems and Obstacles of Agricultural Cooperatives

Cooperative members under were asked about the problems that cooperatives face and those that affect the efficiency of cooperatives in meeting their basic agricultural needs. Their response is listed on Table 4-27.

The problems faced by the agricultural cooperatives are mostly similar with what the managers' stated. Both side unanimously mentioned that the most important problems are lack of coordination and cooperation between the agricultural cooperatives and other developmental organizations in villages, unavailability of training program for farmers and inefficient board members.

Table 4-21: Farmers view on the Problems cooperatives face

S.No	Problems and Obstacles	Total sample (n=214)	
		n	%
1.	The lack of the agricultural production requirements in time and suitable prices	196	91.59
2.	The lack of agricultural machines	188	87.85
3.	The lack of loans and credits necessary for farmers	152	71.03
4.	The agricultural cooperatives role is only confined to collect crops from farmers and selling them again for commission	113	52.80
5.	The lack of marketing information either on the local or international market	147	68.69
6.	High rate of interest on loans	166	77.57
7.	The lack of necessary financing for marketing the agri. crops	191	89.25
10.	Lack of agricultural machines in suitable prices	128	59.81
11.	Cooperatives don't buy production requirement for farmers on long term	173	80.84
12.	Lack of training courses for farmers on cooperatives	203	94.86
13.	Lack of coordination and cooperation between the agricultural cooperatives & other developmental organizations in villages	209	97.66
14.	Lack of efficiency for most cooperatives board members	184	85.98

Source: Survey result, 2011

4.1.11 Managers and Farmers' view on improvement of the Agricultural Cooperative's Performance

4.1.11.1 Managers' Suggestion

List of suggestions for improvement of performance of the agricultural cooperatives was shown on Table (4-28).

Table 4-22: Managers suggestions for developing and improving the performance of the agricultural cooperatives

S.No	Suggestions	Total sample (n=3)	
		n	%
1.	Establishing a cooperative bank for providing necessary loans for the agricultural cooperatives in a suitable interest price and consequently overcoming the problem of budget deficit	3	100
2.	Allowing the agricultural cooperatives to contract directly with the agricultural firms and factories that produce production requirements for providing them to farmers in suitable price , quantity and time	2	66.6
3.	Providing finance necessary for organizing training courses for board members of the agricultural cooperatives	3	100
4.	Organizing training for board members, farmers and employees	3	100
5.	Increasing the participation of the agricultural coop in implementing social activities for farmers and service activities in villages	2	66.6
6.	Increasing the financial support for the agricultural cooperatives	1	33.3
7.	Developing agricultural coop buildings and providing main utilities	3	100
8.	Providing marketing information on local and international Markets	2	66.6
9.	Providing modern means for transporting and mobilizing agricultural crops for markets	2	66.6
10.	Increasing awards for employees in the agricultural cooperatives	3	100
11.	Coordination and cooperation between the agricultural cooperatives and other organizations in villages.	3	100

Source: Survey result, 2011

4.1.11.2 Farmers' Suggestion

Farmers suggestions on developing and improving the performance of the cooperatives was shown on Table 4-29.

Table 4-23: Farmers Suggestions on developing and improving the performance of the agri.
coop

S.No	Suggestions	Total sample (n=214)	
		n	%
1.	Providing the agricultural production requirements (seeds – pesticides – fertilizers) in suitable price, quantity and time.	196	91.59
2.	Organizing training courses for farmers	203	94.86
3.	Providing modern agricultural machines in suitable prices	128	59.81
4.	Providing and establishing warehouses necessary for a cooperative to store production requirements	167	78.03
5.	The cooperatives participate in public activities in villages	209	97.66
6.	Distributing agricultural magazines and brochures on the important marketing information and the cooperatives situation	165	77.10

Source: Survey result, 2011

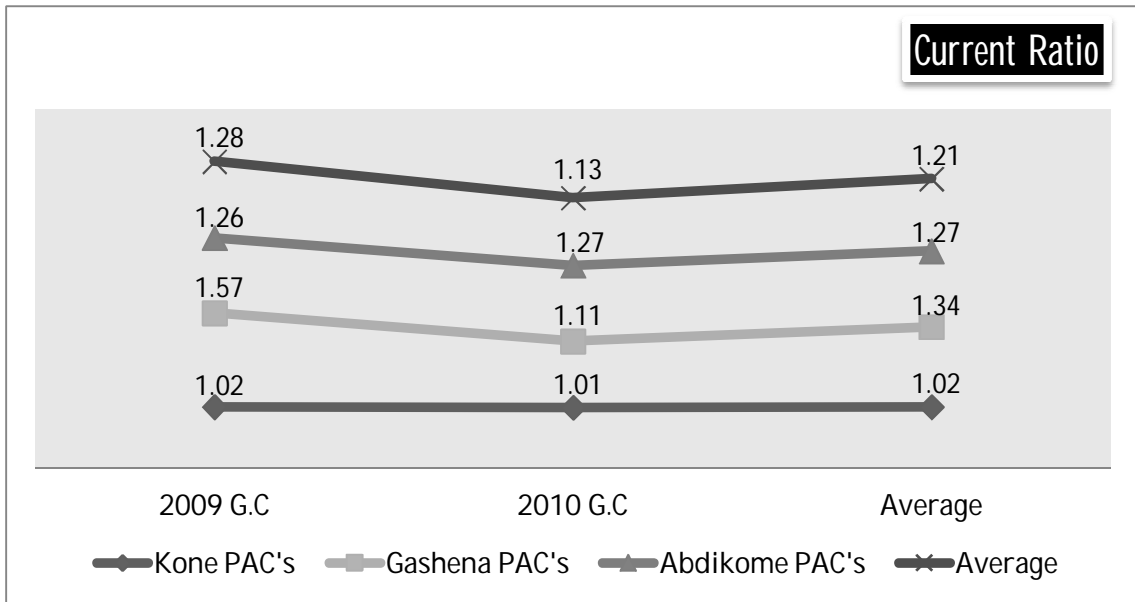
4.2 Ratio Analysis

4.2.1 Liquidity Analysis

The satisfactory rate of current ratio that is accepted by most lenders as condition for granting or continuing commercial loan is 2.00. According to (Anderson and Vincze, 2000) the benchmark ratio is 2:1. A ratio of less than 1.0 indicates that liabilities exceed current assets. With this yardstick when the reference years (2009

and 2010) are observed, all three cooperatives in this study had performed below the desirable standard/ benchmark (Figure 4-1).

Figure 4-1: Characteristics of the sample cooperatives by current ratios of the cooperatives



Source: Cooperatives Audit Report

In 2009 the average current ratio for the 3 primary agricultural cooperatives was 1.28 (Figure 4-1). The highest ratio was 1.57 scored by Gashena and the lowest was 1.02 that was scored by Kone. During this year the performance of the primary agricultural cooperatives in the study area was poor/ shortage to provide cash to their members.

In 2010 the average current ratio for all primary agricultural cooperatives under investigation was 1.13 (Figure 4-1). The highest ratio was 1.27 scored by Abdikome and the lowest was 1.01, which was scored by Kone. This shows that, in the

respective year, all of the studied area cooperatives were incapable to satisfy their members' cash demand.

As it was observed the performance of the cooperatives, liquidity ratio decreased in 2010 as compared to the 2009. This implies that as their ability to satisfy their members was decreased with respect to provision of credit in cash and settlement of current debt of the cooperative.

When we observe the performance of the cooperatives, with respect to their liquidity ratio on average decreased in 2010 as compared to the 2009. This implies that their current liabilities are rising faster than their current assets. Though the cooperatives got credit from financial institutions in most cases the government being their collateral but the ability to get cash (credit) on their own to meet their short-term demand for money is endangered. Lenders may not be willing to extend short-term loan to these cooperatives i.e. lenders require current ratio to remain at or above 2.00 as a condition for granting loan.

4.2.2 Financial Leverage Management Analysis

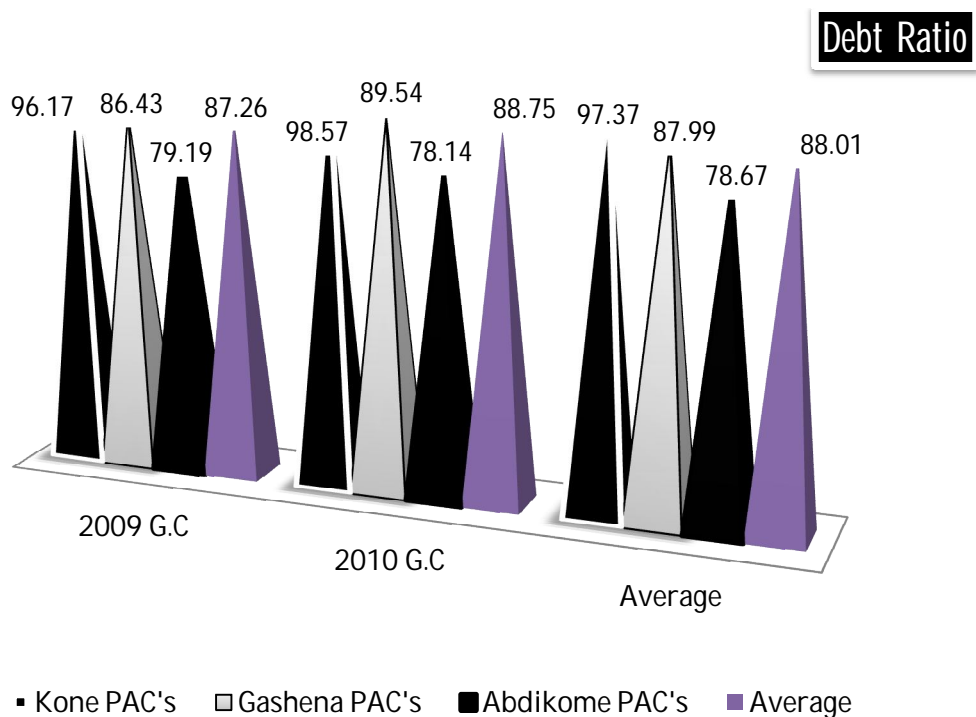
All of the cooperatives in the district used financial leverage (finances a portion of assets with debts). The cooperatives under investigation in the district financed more of their total assets with creditors' fund.

In 2009 the average debt-asset ratio was 87.26% (Figure 4-2), which implies that 87.26% of the total asset of the cooperatives was financed with creditors' fund.

In 2010 the average debt-asset ratio increased to 88.75%. Only one cooperative (Abdikome) has shown slight decrease in debt-asset ratio in 2010 as compared to the previous year (2009).

When we observe the two years data of how the cooperatives were financed, creditors have supplied on average more than 88% of the cooperatives finance. The smaller the proportion (in most cases <50%) of the total asset financed by the creditors, the smaller the risk that the firm unable to pay its debt (William et al., 2003). Having higher proportion of asset financed by the creditors fund may lead the cooperatives to the risk of bankruptcy if the management seek to increase the debt any further by borrowing additional funds.

Figure 4-2: Characteristics of the sample cooperatives by leverage ratios of the coop



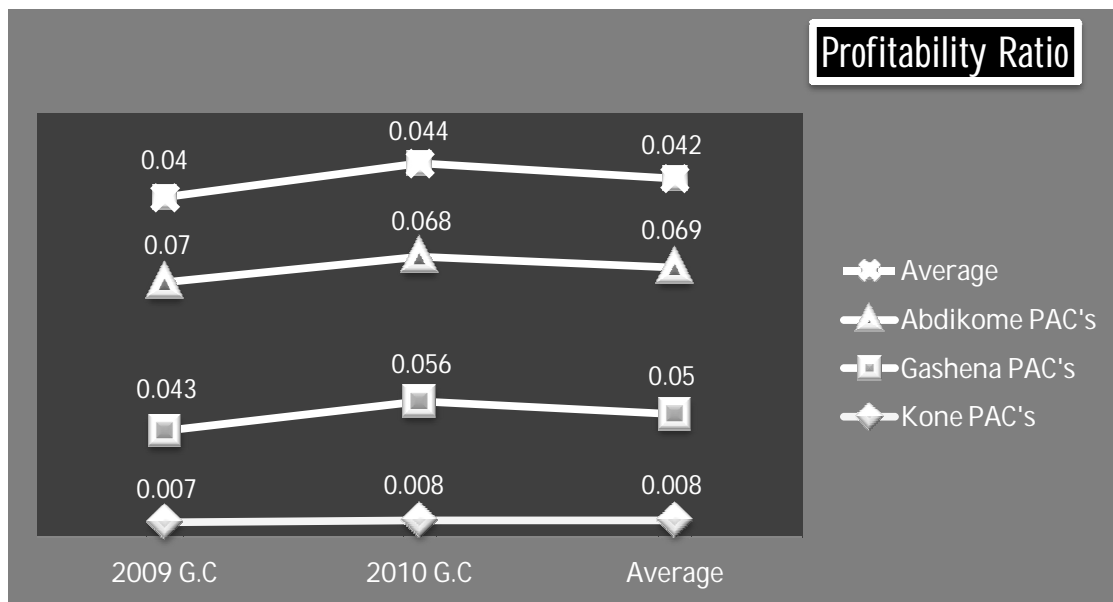
Source: Cooperatives Audit Report

4.2.3 Profitability Analysis

The profitability ratios demonstrate how well the firm is making investment and financing decisions. According to William et al. (2003) firms need to earn return on their asset that enables them to pay the interest of the money they borrowed i.e. they need to have return on their asset which is equal or better than the interest rate of the money they had borrowed.

One can observe from Figure 4-3, the profitability ratios of the cooperatives under investigation were so much low. When we look at the earning of the cooperatives under investigation in 2009, the highest was 0.07%, which was scored by Abdikome and the lowest was 0.007%, which was scored by Kone. In 2010 the highest ratio was 0.068%, which was scored by Abdikome and the lowest was 0.008%, which was scored by Kone.

Figure 4-3: Characteristics of the sample cooperatives by profitability ratios of the coop



Source: Cooperatives Audit Report

In 2009 the average profitability of the cooperatives under investigation was 0.04% and in 2010 the average ratio was increased to 0.044% by 0.004%. The average profitability ratio for the two years was 0.042%.

Even though there was improvement in profitability ratio in 2010, the cooperatives had less effective operation as the profitability ratio show combined effects of liquidity, asset management and financial management. Even they couldn't achieve the profitability ratio which is equal or better than the interest rate (9%) with which they borrowed money from the financial institutions. The plausible reasons for the lower ratio in profitability lies on how effectively the cooperative management is generating profit on sales, total assets, money they borrowed and most importantly members' investment (share capital).

4.2.4 Efficiency Analysis

Efficiency analysis is the other evaluator of the organizations financial performance. The efficiency ratio enables to form judgment about the efficiency of the cooperatives. It provides measurements of asset use and expense control. Efficiency evaluates how well the company manages its assets.

4.2.4.1 Inventory Turnover

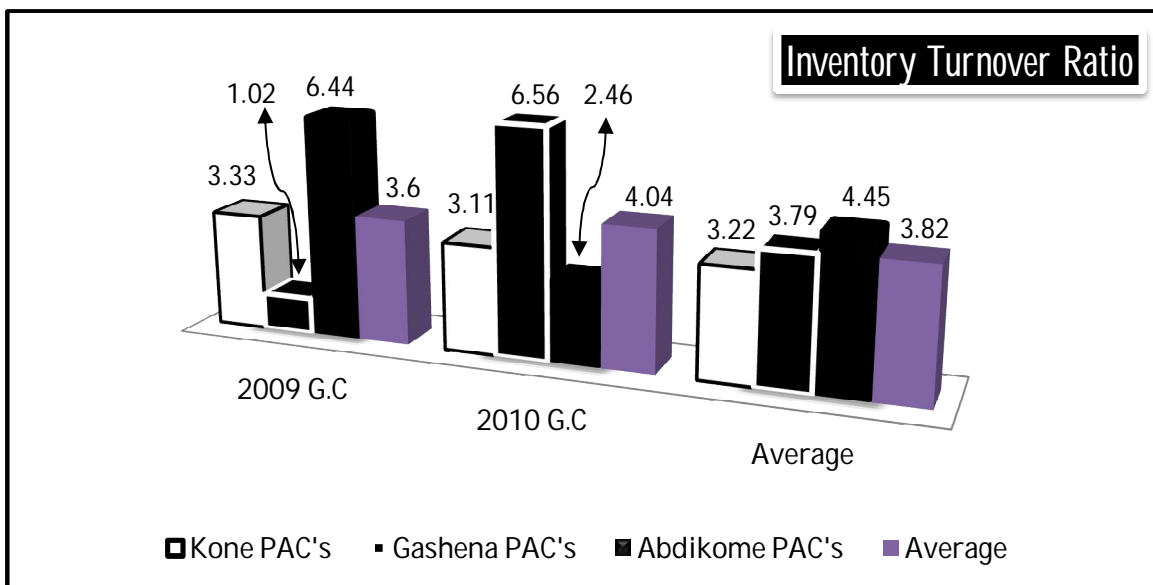
Inventory turnover ratio shows that how many times in one accounting period the company turns over (sells) its inventory and is valuable for spotting under-stocking, overstocking, obsolescence and the need for merchandising improvement. Faster

turnovers are generally viewed as a positive trend; they increase cash flow and reduce warehousing and other related costs.

The efficiency of each studied cooperative has been computed by their inventory turnover (cost of goods sold/inventory) and days inventory (365 days/inventory turnover) based on their audit report in the year 2009 and 2010 fiscal years.

The average inventory turnover in 2009 was 3.6, which shows that the average length of time a cooperative keeps its inventory on hand. The high inventory turnover was recorded by Abdikome (6.44) followed by Kone (3.33). On the other hand, the smallest inventory turnover was observed in Gashena (1.02) (Figure 4-4).

Figure 4-4: Characteristics of the sample cooperatives by inventory turnover ratio of the coop



Source: Cooperatives Audit Report

4.2.4.2 Days Inventory

This ratio identifies the average length of time in days it takes the inventory to turn over. As with inventory turnover (above) fewer days mean that inventory is being sold more quickly.

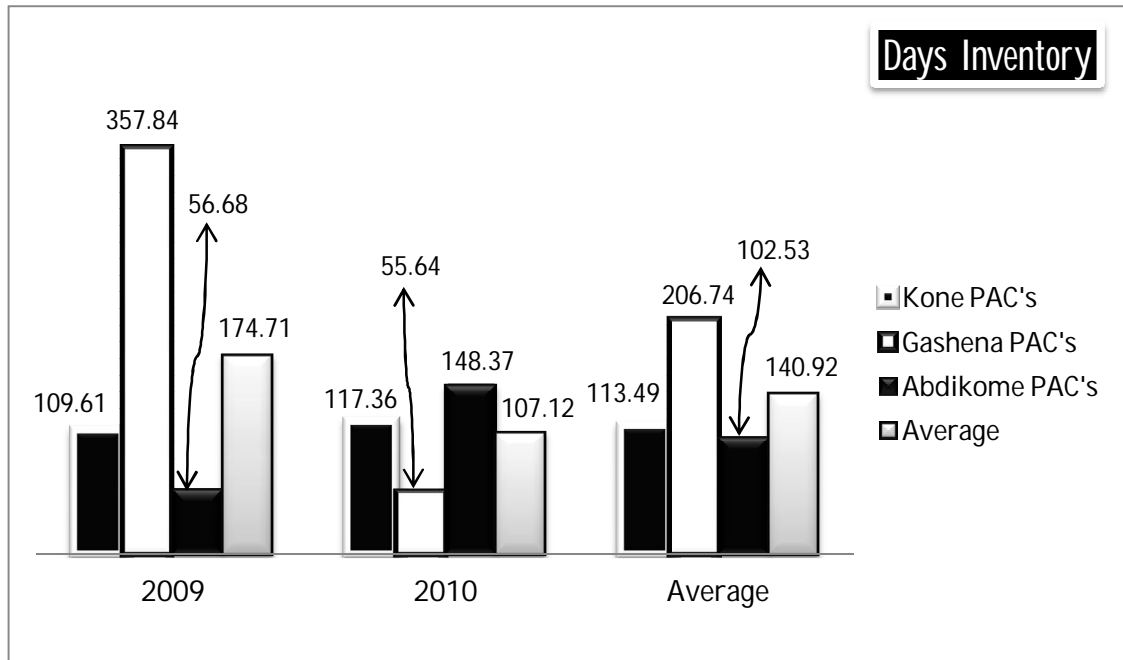
It is obtained by dividing the 365 days by the inventory turnover.

$$\text{Days Inventory} = \frac{365 \text{ days}}{\text{Inventory Turnover}}$$

As indicated below, Kone has about 109.61 (365/3.33), Gashena has about 357.84 (365/1.02) and Abdikome has about 56.68 (365/6.44) days of inventory on hand at the end of the year 2009. In 2010 fiscal year Kone has about 117.36 (365/3.11), Gashena has about 55.64 (365/6.56) and Abdikome has about 148.37 (365/2.46) days of inventory on hand (Figure 4-5).

A low turnover ratio means that a cooperative with large stocks on hand may find it difficult to sell its product and this may be an indicator that the management was not able to control its inventory effectively. A low inventory turnover also indicates a sizable amount of funds was tied up. A high turnover ratio may mean that the enterprise was able to recover its inventory investment rapidly and that there was a good demand for its product. On average there was an increasing trend of inventory turnover ratio from year 2009 to 2010 by 12.2%. One cooperative i.e Gashena PAC's had radically increased their turnover in the year 2010 as compared to year 2009.

Figure 4-5: Characteristics of the sample cooperatives by days inventory of the cooperatives



Source: Cooperatives Audit Report

4.3 Results from Probit Econometric Model

Probit models were estimated using STATA program version 9 imported from SPSS 19 for the analysis of the determinants of the satisfaction of members of the primary agricultural cooperatives in the study area against socio-economic and institutional variables.

4.3.1 Factors Influencing the Satisfaction of Members' of Primary Agricultural Cooperatives

The estimates of parameters of the variable expected to influence the satisfaction of members of primary agricultural cooperatives is given on Table 4-30 and the influences of these variables on each dependent variable are discussed below.

4.3.1.1 Overall Members' Satisfaction

With reference to the satisfaction of members on the overall performance of primary agricultural cooperatives as dependent variable, the result of the model analysis showed that four variables were found to be significant as discussed below.

Age of the Household (AGEHH): This variable is significant at 10% level of significance influencing the satisfaction of members negatively. This is because of historical background of cooperatives organization and development system in the country that comparatively in the past, cooperatives were organized without the inherent belief of members and used to accomplish political objectives. In connection to cooperatives development and performance, members developed a bad image. This situation was also confirmed by Yeshitla (1997) and Zemen (2005).

Generally, the peasant does not like the idea of agricultural cooperatives. Peasants in fact were forced to set-up such cooperatives. The dislike for these kinds of cooperatives could be witnessed immediately after the declaration of the economic reform program in 1990, which stipulated, "The organization of the cooperatives was not based on the absolute democratic decision of the members". The result was that some of the service cooperatives and almost all of the agricultural cooperatives were brought to an end by their own members (Yeshitla, 1997).

In this study the result illustrates that, other things being constant, as the age of the farmer's increases by one year, the satisfaction of members of cooperatives in the study area decreases marginally by 0.78%. This result tells us because of the bad

image printed in the mind of the members about the cooperatives organization and development during the past years; older members were less satisfied than young members on the overall performance of their cooperatives and because of the above believe, they may become less advantaged.

Family Size (FSIZE): It was negatively associated with the satisfaction of members on the overall performance of cooperatives at 10% level of significance. This result depicts that as the family size increases by one adult equivalent, the probability of satisfaction of member's decreases by 6.78%.

Position in the Cooperative (POSITION): influenced positively the probability of satisfaction through the cooperative (significant at 1%). Having a position (in the management (board of director) or ordinary members) in the cooperative increases the probability of satisfaction through the cooperative and its intensity by 20.13%. Having position in the cooperative increases the attachment of the farmer to the cooperative than the ordinary members and helps them to realize the benefits of the cooperative. So their participation in the cooperative is better than the ordinary members.

Distance of the Cooperative from the Farmer's House (DCFH): influenced the member's satisfaction through the cooperatives service negatively (significant at 1%). Farmers who are relatively nearer to the cooperative more services rendered through the cooperatives. As the house of the farmer is far by a meter from the

cooperative the probability of satisfaction level through the cooperatives and its intensity decreases by 31.55%.

The plausible reasons for this are proximity of the cooperative to the farmer reduces the costs of time and labor that the farmer spent in searching for the buyer and closeness (nearness) of the farmer to the cooperative also helps in having more knowledge about the cooperative and its benefits.

Table 4-24: Maximum likelihood estimates of probit model for overall member's satisfaction

Explanatory Variables	Estimated Coefficients	Standard Errors	T-Ratios	Coefficient for Marginal effect after svy probit (dy/dx)
Constant	1.563332	1.356195	1.15	-
EDULELHH	-0.0690142	0.0576473	-1.20	-0.0261685
AGEHH	-0.0207983**	0.0116742	-1.78	-0.0078862
FSIZE	-0.1790159**	0.0953997	-1.88	-0.0678785
POSITION	0.5309941	0.6376796	0.83	0.20134
TOTNMEM	-0.0003718	0.0007931	-0.47	-0.000141
TOTASSET	5.81e-09	1.91e-07	0.03	2.20e-09
MEMBERSHIP	0.0781915	0.0723237	1.08	0.0296483
DCFH	1.166221**	1.5272029	2.21	-0.3155414

*, **, and ** *, represent level of significance at 1%, 5% and 10%, respectively.

Source: Computed from own survey data

4.3.1.2 Member Satisfaction on Services Provided by Cooperatives

With respect to the satisfaction of members on the services rendered by the cooperatives as dependent variable, the result of the model analysis showed that only one variable, family size of the household was found to be significant (Table 4-

31). The influence of this variable on the services rendered by the cooperatives was found to be significant at 1% level. As it is discussed before, as the members' family increases by one adult equivalent, the satisfaction of members decreases marginally by 11.85%. This tells us that as the members had got more labor they tend to decrease using the service the cooperatives were rendering.

Table 4-25: Maximum likelihood estimates of probit model for the determinants of member satisfaction on services provided by cooperatives

Explanatory Variables	Estimated Coefficients	Standard Errors	T-Ratios	Coefficient for Marginal effect after svy probit (dy/dx)
Constant	2.115048	1.479844	1.43	--
EDULELHH	0.0208869	0.055394	-0.38	-0.0080693
AGEHH	-0.0013324	0.0111095	-0.12	0.0005148
FSIZE	-0.3068173*	0.0941236	-3.26	-0.1185344
POSITION	0.2788774	0.6792259	0.41	0.1077402
TOTNMEM	-0.0000151	0.000798	-0.02	-5.85e-06
TOTASSET	-8.25e-08	2.05e-07	-0.40	-3.19e-08
MEMBERSHIP	0.1154120	0.0745103	1.55	0.0445877
DCFH	0.4402854	0.603485	0.73	0.174045

*, **, and ***, represent level of significance at 1%, 5% and 10%, respectively.

Source: Computed from own survey data

4.3.1.3 Member Satisfaction on Better Prices Provided by Cooperative

With reference to the satisfaction of members on price of multipurpose services in the primary agricultural cooperatives as dependant variables, the result of the model analysis showed that four variables were found to be significant as discussed here under (Table 4-32).

Educational level of the household (EDULELHH), age of the household (AGE), family size of the household (FSIZE) and size of membership in the cooperatives

(TOTNOMEM) influenced the satisfaction level in the agricultural cooperatives negatively at statistical significance level of 1%, 10%, 10% and 5%, respectively. From model analysis the marginal effects revealed that as the above variables increases by one unit, the satisfaction of members in the primary agricultural cooperatives decreases marginally by 3.8%, 0.65% 7.7% and 0.11%, respectively. The result revealed that the agricultural cooperatives were not providing competitive price as evaluated by various socio-economic and institutional variables. The result approved that one of the reasons for the dissatisfaction of members by their cooperatives was caused by the uncompetitive price provided by the cooperatives. The rest of the variables that are total asset holding of the cooperatives (TOTASSET) had influenced the satisfaction level in the primary agricultural cooperatives positively at statistical significance level of 5%.

Table 4-26: Maximum likelihood estimates of probit model for member's satisfaction on better price services provided by cooperative

Explanatory Variables	Estimated Coefficients	Standard Errors	T-Ratios	Coefficient for Marginal effect after svy probit (dy/dx)
Constant	7.456529	2.224452	3.35	-
EDULELHH	-0.1239758***	0.0616921	-2.01	-0.0383606
AGEHH	-0.0208764***	0.0105877	-1.97	-0.0064596
FSIZE	-0.2485355***	0.1030176	-2.41	-0.0769018
POSITION	1.195699	0.7586458	1.58	0.369973
TOTNMEM	-0.0037135**	0.0016034	-2.32	-0.001149
TOTASSET	9.73e-07**	4.22e-07	-2.31	-0.01e-07
MEMBERSHIP	0.1750098**	0.08555992	2.04	0.0541515
DCFH	1.052654**	0.4548483	2.31	0.3925017

*, **, and ***, represent level of significance at 1%, 5% and 10%, respectively.

Source: Computed from own survey data

4.3.1.4 Member Satisfaction of Information Service Provided by Cooperative

With reference to the satisfaction of members on information access by primary agricultural cooperatives as dependent variable, the result of the model analysis showed that two variables were found to be significant as discussed here under (Table4-33):

Family Size of the Household (FSIZE): This variable was statistically significant at 5% significance level influencing the satisfaction of the household negatively. This implies that, as the household family member increases by one adult equivalent (AE), the chance of getting market information decreases marginally by 6.89%, indicating the household decreases the dependency on the cooperatives as a source of information because of greater contact to other sources, like Extension Agents, Mass Medias and the interaction of farmers within and outside the family increases enough to get market information. Thus, farmers could have other markets more important than cooperatives.

Total Membership of the Cooperatives (TOTMEM): It positively influenced the satisfaction of members on information access from cooperatives at 1% level of significance. Principally, the cooperatives were expected to post day-to-day market information on the cooperatives notice board. In this situation, information dissemination from the cooperatives was facilitated when the number of members increases, perhaps due to interpersonal transmission of the information.

Table 4-27: Maximum likelihood estimates of survey probit model of member satisfaction on information source

Explanatory Variables	Estimated Coefficients	Standard Errors	T-Ratios	Coefficient for Marginal effect after svy probit (dy/dx)
Constant	-0.6262558	1.323292	-0.47	-
EDULELHH	-0.0385593	0.0503235	-0.77	-0.014669
AGEHH	0.0054318	0.0114647	0.47	0.0020664
FSIZE	-0.1811887**	0.0818101	-2.21	-0.068929
POSITION	0.2234941	0.6143248	0.36	0.0850232
TOTNMEM	0.0021027*	0.0007493	2.81	0.0007999
TOTASSET	-6.45e-07*	1.92e-07	-3.36	-2.45e-07
MEMBERSHIP	0.1250907***	0.0739046	1.69	0.0475879
DCFH	-0.5073688	0.585641	-0.87	-0.1731361

*, **, and ***, represent level of significance at 1%, 5% and 10%, respectively.

Source: Computed from own survey data

4.3.1.5 Member's Satisfaction on Receiving Patronage Dividend

Patronage dividend paid by the cooperative was one of the dependent variables to determine the satisfaction of members of the primary agricultural cooperative services provided. The result of the model analysis showed that one variable was found to be statistically significant as discussed below (Table 4-34).

Family Size (FSIZE): It influences the satisfaction of members on dividend positively at significance level of 10%. It implies that, as the family size of the member's increases by one member, the satisfaction on dividend increases marginally by 4.42%.

Table 4-28: Maximum likelihood estimates of survey probit model for members satisfaction on receiving dividend

Explanatory Variables	Estimated Coefficients	Standard Errors	T-Ratios	Coefficient for Marginal effect after svy probit (dy/dx)
Constant	0.9644919	1.333713	-0.72	-
EDULELHH	-0.0120334	0.0565045	-0.21	-0.0037443
AGEHH	-0.0089736	0.0106872	-0.84	-0.0027922
FSIZE	0.1419503***	0.0852424	1.67	0.0441695
POSITION	0.5207415	0.6761021	0.77	0.162035
TOTNMEM	0.0001423	0.0007591	0.19	0.0000443
TOTASSET	-9.37.e-08	1.94e-07	-0.48	-2.92e-08
MEMBERSHIP	0.0664306	0.0649805	1.02	0.0206707
DCFH	0.0466792	0.6638903	0.07	0.0147456

** and * represent level of significance at 5% and 10% respectively.

Source: Computed from own survey data

4.3.1.6 Member Satisfaction on Credit Service Provided by Cooperative

Credit service rendered by the cooperative is one of the dependent variable for the satisfaction of the cooperative members as a function of socio-economic and institutional variables. Three variables were found to be statistically significant as a result of the model analysis (Table 4-35).

Among the significant variables, two of them were negatively influencing and the rest one had influenced positively the satisfaction of members on credit services provided by the primary agricultural cooperatives as discussed below.

Educational Level of the Household (EDULELHH): This variable influenced the satisfaction of members negatively at 5% statistical significance level. As the

educational level of the household increases by one level, the probability of satisfaction of members on credit service decreases by 15.60%.

Family Size of the Household (FSIZE): It influences the satisfaction of members on credit access negatively at 5% level of significance. The result implies that as the household family increases by one adult equivalent, the probability of satisfaction of members on credit provision by the cooperative decreases by 32.20%.

Total Assets of the Cooperatives (TOTASSET): It influenced positively as statistical significance level of 0.005%. As the total asset constitutes the current asset (Cash), its increment enables the cooperative to provide credit for demanders. The increment of asset enables the cooperative to provide credit for demanders. So, the increment of a unit of total asset increases the probability of the satisfaction of members on their cooperative as a source of credit.

Table 4-29: Maximum likelihood of the estimates of survey probit model on member satisfaction on credit services provided by cooperatives

Explanatory Variables	Estimated Coefficients	Standard Errors	T-Ratios	Coefficient for Marginal effect after svy probit (dy/dx)
Constant	0.1387846	1.504324	0.01	-
EDULELHH	-0.1560702**	0.078756	-2.00	-0.1560108
AGEHH	-0.0047477**	0.154864	-0.31	-0.0059193
FSIZE	-0.3219267***	0.141379	-2.28	-0.3220784
POSITION	-1.376412	0.7442596	-1.85	0.0786388
TOTNMEM	-0.000247***	0.0011204	-0.22	0.0002232
TOTASSET	5.12e-07	2.95e-07	1.73	1.66e-08
MEMBERSHIP	-0.0232272**	0.099672	-0.23	0.02716671
DCFH	-1.004609	0.4133493	-2.43	-0.1521259

*, **, and ***, represent level of significance at 1%, 5% and 10%, respectively.

Source: Computed from own survey data

4.3.1.7 Member Satisfaction on Training Services Provided by Cooperative

Training service was one of the dependent variable for the satisfaction of members of agricultural cooperatives as a function of socio economic & institutional variables as independent variables. The result of model analysis showed that three variables were statistically significant as discussed below (Table 4-36).

Family Size of the Household (FSIZE): It influenced the satisfaction of members on training service negatively at statistical significance level of 10%. This shows that, as the family size increases by one adult equivalent, the probability of satisfaction of the household decreases by 46.59%. The reason behind is related to the perception of farmers on cooperatives and the decreasing tendency of the dependency of farmers on cooperatives when they increase capability in different undertakings.

Total Number of Members (TOTNMEM): It influenced the satisfaction of household on training service negatively at significance level of 1%. Cooperatives which have large number of members, have faced problem of providing training services for each of the members, in that training requires scarce resources like finance. The model analysis depicts that, as the number of members of the cooperatives increases by one member, the satisfaction of the household decreases marginally by 0.06%.

Total Asset of the Cooperatives (TOTASSET): It was positively influencing the satisfaction of the household on training services of the cooperatives at 5% level of significance. This result shows as that, as the cooperatives total asset increase by

one percent, the satisfaction of the household incensed marginally by 0.00014% implying cooperative with large amount of total asset provide training better than the lower one.

Table 4-30: Maximum likelihood of the estimates of survey probit model for member satisfaction on training services provided by cooperative

Explanatory Variables	Estimated Coefficients	Standard Errors	T-Ratios	Coefficient for Marginal effect after svyprobit (dy/dx)
Constant	6.549958	1.492084	4.39	-
EDULELHH	-0.0562883	0.0667841	-0.84	-0.013401
AGEHH	-0.0139856	0.0110449	-1.27	-0.0033297
FSIZE	-0.1957192***	0.1103935	-1.77	-0.0465965
POSITION	-0.0828247	0.748318	-0.11	-0.0197188
TOTNMEM	-0.0027765*	0.0008663	-3.21	-0.000661
TOTASSET	5.82e-07**	2.36e-07	2.47	1.38e-07
MEMBERSHIP	0.0664306	0.0649805	1.02	0.0206707
DCFH	-0.860636	0.5202472	-1.65	-0.2789656

*, **, and ***, represent level of significance at 1%, 5% and 10%, respectively.

Source: Computed from own survey data

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATION

5.1 Summary

Agriculture is the dominant economic sector of Ethiopia. In spite of its great importance, poor performance is the major characteristics of the sector. Its progress very much determines the destiny of the country in terms of her economic development.

Agricultural cooperatives are considered to be important social and economic units, which aim to the agricultural development. In Ethiopia, these organizations are expected to play a very important role in solving problems in rural society through agricultural production improvement and a balanced stabilization of imports and exports and they are supposed to increase efficiency of the marketing system and promote agricultural development in the rural area.

For the purpose of assessing the financial performance of primary multi-purpose agricultural cooperatives and the extent to which their members are satisfied with the services they obtain from the cooperatives in Wadla woreda was purposefully selected. A two stage random sampling technique was applied. The first stage involves sampling of 3 primary agricultural cooperatives from the 13 cooperatives in the woreda. In the second stage, random sampling of individual member's in the cooperatives of which the sampled cooperatives are organized.

To achieve the objectives of this study, two questionnaires were designed, pre-tested, modified and formulated in their final shape. The first questionnaire attended the agricultural cooperatives members (farmers) and the second attended the cooperatives managers. Data were collected through personal interviews with 3 managers and 214 members of agricultural cooperatives in the study woreda.

The required secondary data was collected from relevant data sources. Audit reports of primary agricultural cooperatives were used as sources of information to evaluate performance related stakeholders and key informants.

The financial performance of the cooperatives was examined using the financial ratios. Current ratio, debt ratio, profitability (return on total asset) ratio and efficiency ratios (inventory turnover and days inventory) indicators were used to examine the financial performance of the cooperatives. Statistical software called "SPSS 19 version" was employed to analyze the descriptive statistics of the sample farmers. Econometric software called "STATA program version 9" was also employed to estimate the probit model with the aim to analysis the determinants of the satisfaction of members of the primary agricultural cooperatives in the study area against socio-economic and institutional variables. The model was selected or chosen since it has advantage in revealing the objective of the study cited above. As for the current status of agricultural cooperatives in Wadla woreda, the most important results of this study could be summarized as follows:

The most important problems and obstacles that the agricultural cooperatives in Wadla woreda face are the followings:

- i. The Low level of cooperatives managers' education and training level,
- ii. A weak participation of members in the meetings of the General Assembly,
- iii. All of the studied agricultural cooperatives have 7 board members and about 1/3 of the board members are chosen by election while 2/3 were chosen on the basis of their by records.
- iv. About 2/3 of the agricultural cooperative centers were built on locations that are not suitable for business.
- v. A low level of cooperation of the cooperatives with other organizations in the village.

The most critical problems that cooperatives and managers face and hinder them from achieving their goals and activities were outlined. The attitudes of farmers towards the agricultural cooperatives were listed, mostly evaluating them as low performance.

Ratios were analyzed taking the two years financial data 2009 and 2010. The liquidity analysis showed that the cooperatives under investigation were below the satisfactory rate (a current ratio of less than 2.00) for the two years. All of the cooperatives under investigation in the district use financial leverage (financed more of their total asset with creditors fund i.e. on average 88.01% of the assets of the cooperatives was financed with creditors fund in the two years). The profitability ratio of the cooperatives under investigation in the district was showed

that very weak. All the cooperatives earn return on their asset below the interest rate the financial institution extend credit.

5.2. Conclusion

To solve problems of farmers, the role of agricultural cooperatives has long been recognized. According to Anderson and Vincze (2000), customer expectations about the types and quality of services that should be offered and their criteria for performance of these services have a major impact on the level of satisfaction by members. Customer satisfaction is the difference between service expectation and perceived service performance.

To create good performing primary cooperatives, it is essential to assess the performance of the already existing ones and draw practical lessons on the critical operational problems and constraints faced by the cooperatives. To accomplish such an important task, empirical investigations have paramount importance in areas of cooperatives performance and level of members' satisfaction. However, there is paucity of empirical information supported with scientific research that shows the performance of cooperatives in general and primary agricultural cooperatives and member's satisfaction in particular.

This study, therefore, attempts to contribute to better understanding of the performance of agricultural cooperatives and members' satisfactions of the various services provided by the agricultural cooperatives, using Wadla woreda, Amhara National Regional State, as a case study.

Ratios were computed referring to all the study primary agricultural cooperative's audit reports of two years (2009 and 2010). The computed efficiency ratio was low. A low turnover ratio means that cooperative holding larger stock in hand may find it difficult to sell and this may be an indicator that management was not able to control its inventory effectively or it indicates a sizable amount of fund was tied up.

The profitability ratio was very low and was below borrower's lending interest rate and this shows that there was either low sales revenue or too excessive or non-productive assets. The average profitability of the agricultural cooperatives under investigation in the two years was low.

The cooperatives were also evaluated with respect to their ability and readiness in settling their debt over years. On average, liquidity was showing a decreasing trend from 2009 (1.28) to 1.13 in 2010. Based on the benchmark of liquidity ratio (2.00), all the studied cooperatives exhibited lower performance. This implies that their ability to satisfy their members with respect to provision of credit and settlement of current debt of the cooperatives was low.

Based on debt ratio computation, the cooperatives under investigation in the study area used financial leverage. On average, the creditors financed them in greater proportion than their own worth.

To identify factors influencing the satisfaction of members of agricultural cooperatives in the study area, probit regression model was employed with regard to member's satisfaction of the overall service provided by the cooperatives.

Overall results showed that, agricultural cooperative were inefficient in reference to computed current ratio, debt ratio, profitability ratio and efficiency ratios. In reference to efficiency ratio, inventory turnover and days inventory was used. Based on both inventory turnover and days inventory, the agricultural cooperatives in the study area were inefficient. This shows that the management of the cooperatives was unable to control their inventory. Basically farmers should be owners, users and controllers of their cooperatives. But, in the study area, it was observed that some farmers were using other opportunities to get the services.

Generally, the results of the study show the cooperatives under consideration were inefficient both on their business management and members handling that led to dissatisfaction of the members as customers. Based on the findings it is time for all stakeholders to think about cooperatives' efficiency improvement or other alternative to benefit individual agricultural farmers in the study area.

Agricultural cooperatives provide all types of economic and social services to their members. They demand effective, enlightened and skilled leaders. They need initiatives and services to sustain the interests of their members through the provision of education, training, guidance, extension and farm inputs, farm credit and marketing opportunities. They have to be running along democratic lines.

Agricultural cooperatives, to be effective and acceptable, must take their members' views and their felt-needs into consideration. An active communication has to be established and sustained between the management and the members and between

the leadership and the management. Agricultural cooperatives have no reason to be afraid of the open market pressures if their members remain united and respond to the needs of the market. The unity of members is the strength of the cooperative business.

5.3 Recommendations

On the basis of this study, the following points are suggested for consideration in improving the performance of the agricultural cooperatives in the study district. These may be broadly viewed as improving the financial condition of the cooperatives, identifying the factors that influence farmers' satisfaction through the cooperatives and changing the attitudes of the farmers towards cooperatives.

5.3.1 General Recommendations

- 1) The study has shown that the liquidity ratio (current ratio) of the cooperatives in the study area is below the desirable rate. The cooperatives' current asset base is its members i.e. cooperatives should make members contribute certain amount of money as additional share capital (Chukwu, 1990). And this money, which is contributed as additional share capital will improve the cooperatives liquidity position. In addition, the contribution improves the operating/working capital of the cooperatives rather than depending on external sources.
- 2) The debt ratio shows the financial risk i.e. as debt increases the cooperatives' financing source, the cooperatives hardly meet debt obligations. This ratio showed that the cooperatives have shortage of their own capital to meet their objectives of rural development so the government should be their source of

capital until they get strengthened which is common in most developing countries (Chukwu, 1990; Taimni, 2000) as the government is the major initiator of cooperatives. Government support for the cooperative development should be without impairing their cooperative character (Dwivendi, 1996). The capital can be given in the form of grant or loan. Grants are usually non-repayable and loan may have interest payment or not. If it has interest payment, it has to be subsidized when compared to other financial institution i.e. the loan has to have a concessional rate of interest.

- 3) The efficiency ratio analysis shows that, even though there was a progress, most of the agricultural cooperatives operated at low inventory turnover. Thus, more active participation and coordination of members, managerial staffs and government bodies are required to make the cooperatives become more capacitated and efficient by performing ex-ante and ex-post performance evaluation in each year in addition to annual auditing services to the cooperatives.
- 4) With respect to profitability, the agricultural cooperatives in the study area were inefficient. Therefore, giving greater emphasis to member's satisfaction, the members, the management bodies and the staff members of the cooperatives need to be trained in business and marketing management and improving the financial capacity of the cooperatives and the participation of the farmers. Possibly it is also better to organize experience sharing mechanism with those cooperatives performing better in or outside the country.

- 5) As the econometric model result revealed, the satisfaction of members on overall performance and services rendered by the cooperatives were influenced by socio-economic variables, which had created bad image on farmers towards their cooperatives. To reverse the implication of the result, the concerned stakeholders stated above should have to make campaign to change the bad image of cooperatives through a strong sustainable cooperative extension and promotion scheme for members and the surrounding societies.
- 6) According to proclamation 147/1998, 70% of the surplus the cooperatives earned during the year should be appropriated to members. This study revealed that appropriation of surplus in the form of patronage refund motivates the farmers to market their farm produces through the cooperative. So cooperatives need to appropriate surplus in the form of patronage refund to farmers.
- 7) With respect to complaints or the negative attitude towards the credit provision of the cooperatives to their members observed in the result, the best solution could be, strengthening the financial sector within the cooperatives sub-sector i.e., establishing a Cooperative Bank to provide loans necessary for agricultural cooperatives with suitable interests and consequently overcoming the problem of the budget deficit.
- 8) Allowing the agricultural cooperatives to contract directly with the agro-industries at suitable time, prices and quantities.
- 9) Organizing training programs for board members, official employees and farmers by using modern technology.

- 10) Providing and establishing warehouses necessary for storing agricultural products.
- 11) Cooperatives should be managed in a more business-like manner – these are not social clubs or charity organizations and the cooperatives should be led and managed by energetic, professional and dynamic persons. Business should be conducted in accordance with modern management principles.

5.3.2 Specific Recommendations

The specific recommendations that can be derived from this study are the following:

- 1) It is necessary to combine small agricultural cooperatives that are located in low populated areas to form large agricultural cooperatives of large economic entities that could provide, mobilize and employ resources.
- 2) The agricultural cooperatives must be given more economical and organizational freedom to make them less dependent on the government, especially in obtaining and distributing of production inputs.
- 3) During planning of agricultural development, government should activate the coordination and cooperation among the roles of both agricultural cooperatives and other organizations in the villages, in order to enhance their abilities and the organizational effectiveness in agricultural and rural development.
- 4) The administrative efficiency of agricultural cooperatives must be raised and developed through :

- a) Clear separation of responsibilities of the General Assembly and the board of directors on one side and the management (professional staff), which is in charge of implementation of the plans approved by the board of directors on the other side.
 - b) The board of directors have to be responsible for supervising and implementation through professional management and staff, within the frame of the cooperatives by-law.
 - c) Forming a strong board of directors that are capable for managing cooperatives effectively through :
 - ▲ Reconsidering preconditions of Board of Directors membership.
 - ▲ Representing women and the younger generation in the Board of Directors membership.
 - ▲ Forming the board of directors by free election within the General Assembly members.
 - d) Training the cooperative board members on cooperative principles and management to improve their administrative performance.
 - e) The system of surplus distribution in cooperatives must be reconsidered for ensuring reasonable and suitable profits to members from their investment in cooperatives capital shares.
- 5) The cooperation between the agricultural cooperatives and agricultural extension centers, agricultural research institutions and universities must be supported.

- 6) Disseminating cooperative awareness among members of the general assembly with regard to their rights and responsibilities especially in controlling, monitoring and evaluating the performance of cooperatives is necessary.
- 7) Government should give more importance and provide greater attention to agriculture sector if agricultural cooperatives are to perform satisfactorily;
- 8) Cooperatives would function well with least government intervention. Discipline and good governance contributes much to the efficient operation of cooperatives.
- 9) Allowing the cooperatives to import agricultural products from abroad;
- 10) The cooperative promotion office should be paying attention for holding the general assembly's on time as it is determined by law.

Above all, changing the attitudes of the farmers towards their cooperatives is a crucial factor in improving the performances of the cooperatives in the study area. Most of the sample farmers need only immediate economic advantages from the cooperatives i.e. getting fertilizer on credit. They don't pay attention to the sum total of the different advantages they can get in the long-run if they actively participate and strengthened their cooperatives. The concerned bodies should create awareness on cooperatives and the agricultural benefit it can bring to the area in the long-run. Continuous education and enlightenment, high commitment and sense of ownership of the farmers will have a positive impact on their attitudes towards the cooperatives.

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