

**PERFORMANCE OF COFFEE MARKETING CO-OPERATIVES AND MEMBERS'
SATISFACTION IN DALE DISTRICT:
SNNPRS-SOUTHERN ETHIOPIA**

M.Sc. Thesis

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Haramaya University**

**PERFORMANCE OF COFFEE MARKETING CO-OPERATIVES AND MEMBERS'
SATISFACTION IN DALE DISTRICT, SOUTHERN ETHIOPIA**

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Master of Science in agriculture
(Agricultural Marketing)**

**BY
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September, 2007

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DEDICATION

I dedicate this thesis to my adored parents and brother; my father, Tilahun Dejene, my mother, Zewdnesh Zerfu and my brother Teshome Tilahun, for tending me with affection and love in all steps of my life.

STATEMENT OF THE AUTHOR

First of all, I declare that this thesis is my work and that all sources of the materials used for this thesis have been duly acknowledged. This thesis has been submitted to in partial fulfillment of the requirements for M.Sc. degree at Haramaya University and is deposited at the University library to be made available to borrowers under the rules of the library. I solemnly declare that this thesis is not submitted to any other institution any where for the award of any academic degree, diploma or certificate.

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ACRONYMS AND ABBREVIATIONS

ACCOSCA	African Confederation of Credit Unions
AESE	Agricultural Economics Society of Ethiopia
CADU	Chilalo Agricultural Development Unit
CLU	Coffee Liquoring Unit
CSA	Central Statistics Authority
ENTACCS	Ethiopian Thrift and Credit Cooperatives Societies
GDP	Gross Domestic Production
GNI	Gross National Income
FAO	Food and Agriculture Organization
FCC	Federal Co-operative Agency
ICA	International Cooperative Alliance
ICO	International Coffee Organization
ILO	International Labor Organization
ILRI	International Livestock Research Institute
IPMS	Improving Productivity and Market Success of Ethiopian Farmers
JICA	Japan International Co-operation Agency
NGO	Non Governmental Organizations
UN	United Nation
SNNPRS	Southern Nations Nationalities Peoples Regional State
UNIDO	United Nations Industrial Development Organization

BIOGRAPHY

The author was born in 1966 in Shirka found in arsi province, from his father Ato Tilahun Dejene and his mother W/ro Zewdnesh Zerfu. He attended his primary and junior secondary school education in Shirka School from 1972-1978. He completed his secondary education at Assela comprehensive senior secondary School in 1983.

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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 of 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 coffee marketing cooperatives and thereby to identify factors that impede members' satisfaction. To evaluate the performance of coffee marketing cooperatives in the study area, financial ratios was computed based on annual audit reports of the cooperatives. Here, efficiency ratios, income ratios and creditworthiness ratios were calculated as performance indicators. As a result, almost all the coffee marketing cooperatives in the study area were performing their business 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, terms of payment for red cherry and dry cherry were found to be statistically significant at significance level of 5%, 5% 1% and 5% respectively to influence negatively except the terms of payment for dry cherry which was influenced positively, the satisfaction of members' of the coffee marketing cooperatives in the study area, with reference to the overall performance of the cooperatives as dependent variable.

1. INTRODUCTION

1.1. Background

Agriculture remains 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 are 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 (Warren C. and Strokes M., 1985).

World trade in agricultural products has been growing especially in the 1990s. In 2001, the total nominal value of world agricultural trade was US\$412 billion, compared with US\$326 billion in 1990 and US\$234 billion in 1980. In addition, there is a breakdown between developed and developing countries. Developed countries account for approximately 70% of the agricultural trade although the share has been falling over the past decade (JICA, 2005).

Ethiopia is an agrarian country and agriculture accounts for 54 percent of the domestic product (GDP) and agriculture employs about 80 percent of the population and accounts for about 90 percent of the exports (CSA, 2000). The total population country is estimated to be about 7507 million (CSA, 2006) and with a per capita gross national income (GNI) in 2004 of US\$110 (World Bank, 2006). She is one of African least developed countries with about 85% of her population living in the rural areas. The estimated average annual population growth rate is about 2.8%. The economy has recorded an annual growth rate of 4.4% for the period 1997 to 2001 (UNIDO, 2004).

Coffee has remained the main export of the country; however, other agricultural products are currently being introduced on the international market. Despite secular decline in the international coffee price, coffee still remains the country's dominant export commodity. According to Villanger (2006), the major export products from Ethiopia in 2004/05 were coffee (41%), oil seeds (13%), Khat (12%), leather and leather products (8%), Gold (6%) and pulses (4%).

Although agriculture is the chief economic activity, most Ethiopian farm households struggle to produce just enough food for the subsistence of their families. The main crops produced include teff, wheat, corn, sorghum and other grains. Many farmers in the southwest grow coffee plants. Oilseeds and sugarcane are other crops grown for sale. Improvements in farming equipment and methods, marketing, and transportation are needed to increase agricultural output (The World Book Encyclopedia, 1993).

In rural areas, smallholders are often geographically dispersed; roads and communications are poor, and the volume of business is insufficient to encourage private service provision. In other words, there are high probabilities of market failure. Inefficient and underdeveloped markets, results in low and variable prices thereby reducing the profitability of new technologies for farmers, discouraging business people from investing in processing activities, retailers and transporters from investing in improved market and transport services (Mulat and Tadele, 2001).

In this regard, Kaddar (1975) cited in Barker (1989) claims that only a few farmers understand the necessity of producing to meet the market and of finding a market for their produce. His solution to this dilemma is to encourage the growth of cooperatives to undertake the marketing responsibilities. This suggests that most farmers are basically, production oriented, and may experience very little application of marketing principles in their business management. Viaene (1977) cited in Barker (1989) identifies three new trends in the marketing of agricultural products by farmers; these are: (1). Direct marketing to the consumer, bypassing the middlemen and reducing cost, (2). Contract production, which benefits both producers and buyers; the farmer receives guarantees on finance and prices, thus reducing risks, and the buyer is assured of quality, quantity, and time of delivery and (3). Marketing through cooperatives, by farmers tends to improve their bargaining power.

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 economic activity (Krisiinaswami and Kulandaiswamy, 2000). Cooperatives are viewed as change agents. The change supposed to be brought about by the cooperatives is not simple. Improved performance of agricultural cooperatives is assumed to have a role in fostering agricultural production through the promotion of efficiency and better resource allocation.

In 1995, the International Co-operative Alliance (ICA), the apex organization that represents cooperatives worldwide, defined 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.**

This definition emphasizes that cooperatives are independent of government and not owned by anyone other than the members. They are associations of persons, which can mean individual people but also 'legal persons', organizations that may themselves have members. This means that federal bodies whose members are primary cooperatives can also be cooperatives, and that small businesses can also be members of their own cooperatives. They are united voluntarily, and should be free to join or leave. This means that collective farms or village or neighborhood associations that include all people in an area (whether or not they want to be members) are not genuine cooperatives. They are designed to meet their own needs as defined by the members; organizations that are set up primarily to meet the needs of others are not cooperatives. Nor can cooperatives be diverted into meeting needs that have not been sanctioned by the members, without them ceasing to be cooperatives. They are distinguished from shareholding firms by their democratic nature, with voting rights being assigned by person rather than by size of shareholding. Finally, they are enterprises, and not charities, NGOs, or branches of government (ILO, 2003).

In Ethiopia, the formation of modern cooperative societies was started soon after the Italian invasion. However, it was only in 1960s that a cooperative was legally enacted. During the reign of Haileselassie, the cooperative legislation No 241/1966 was proclaimed and about 154 different types of cooperatives were organized. During the Durg regime, cooperatives that were organized earlier were considered unnecessary and discarded. The newly organized

cooperatives under the regime have purposefully made instruments of political power. Their organizational procedures were not based on internationally accepted cooperative principles. New era in cooperative development was then started in 1998 when new cooperative legislation No 147/1998 was enacted. Since then, cooperatives have been playing significant role in the rural Ethiopia, especially in the areas of input supply, saving and credit, coffee and grain marketing (FCC, 2004). The establishment of cooperative unions in coffee and grain growing areas is a new experience for the country in general and for the organization of cooperative federation in particular.

At present, there are 19147 organized primary and 124 secondary cooperatives, of which 206 primary and 6 secondary cooperatives are coffee marketing cooperatives and the total number of members in primary cooperatives reached 3,903,683 (11.55% female) owning birr1, 475,256,047 capital (FCC, 2006). It is evident that the cooperatives are playing a great role in the local and international trade of the country. Although such signs of success are there, greater efforts should still be made by organizing and promoting agricultural cooperatives to enhance the efficiency of agricultural marketing in the country. In the area where this study has been conducted coffee is the major crop produced and marketed both under individual farmers and coffee marketing cooperatives.

Coffee is one of the highest valued commodities in international trade, with annual export revenues worth around \$10 billion on average, and annual retail sales of approximately \$50 billion. It is a highly labor-intensive industry employing an estimated 100 million people in over 60 developing countries, where it is often a vital source of export revenues and income to producers, many of whom are smallholders. The dependence in coffee is greatest in Africa, where there are some 25 coffee exporting countries. There are two major varieties of coffee, namely arabica coffee (*Coffea arabica* L.) and robusta coffee. Ethiopia produces only arabica coffee, which is believed to have originated in the rain forests of southwestern Ethiopia – hence Ethiopia is known as “the home of coffee”. Annual coffee production fluctuates between 6 to 7 million tones, with production in the 2004/05 crop year totaling 113 million bags (of 60 kg). Three countries, Brazil, Colombia and Vietnam, account for almost 60% of world coffee production.

Global production of coffee has shown a fluctuating trend in the last few years. Latin American producers, especially Brazil and Colombia, account for over 60% of global output; Asia (where Indonesia and Vietnam dominate) accounts for around a quarter of total production, while Africa, whose share has been falling, produces between 15% and 18%. Ethiopia is now Africa's largest producer but still only accounts for about 2% of global output. There are significant annual variations in production, which is due to various factors including climatic factors, the biennial arabica yield cycle, price changes and the impact of pests and diseases. Many other factors affect the production environment including input distribution, credit and crop finance, infrastructure and the provision of research and extension services. Coffee suffers from long periods of oversupply and low prices, followed by brief periods of short supply and high prices, often associated with Brazilian production changes. Thus, during the past year there has been an increase in coffee prices following several years of very low prices. Price volatility is a major feature of the market and a major influence on smallholder farmers' income. Not only do coffee prices show wide intra- and inter-seasonal fluctuations, but also since 1950 coffee prices have fallen in real (inflation-adjusted) terms by about 2% per annum.

Despite the recent price recovery, projections by the World Bank, the ICO, and the FAO all point to oversupply and downward price pressure, as on balance production continues to expand faster than consumption, partly because of increased planting in the mid-1990s and market maturity in the major industrialized markets. Climatic and disease factors will, however, continue to lead to sizeable annual variations in both output and prices (JICA, 2005).

Smallholder farmers in particular face uncertain production environment and enormous constraints and higher cost in accessing markets. The farmers also exchange with actors who have more resources, information, and options and more economically powerful organizations, including markets. Moreover, there is a high level of uncertainty surrounding the activities of peasants in developing countries (Embden, *et al.*, 1997). This uncertainty is the reflection of climatic factors, which are more extreme in the tropics, unstable markets, the paucity of information; low social and economic status, etc. and these are the main problems

of agricultural marketing. To solve such marketing problems, the role of agricultural marketing cooperatives is indispensable. This study, thus, tries to emphasize on understanding of the performance of coffee marketing cooperatives with respect to their members' satisfaction through delivering various marketing services.

1.2. Statement of the Problem

It is believed that the characteristics of modern cooperative businesses have mostly been developed in the past 160 years. People form cooperatives to do something better than they could do individually or through a non-cooperative form of business. Acting together, say, in bringing agricultural produce (e.g. coffee) collectively, members can develop bargaining power, enjoy the benefits of a larger business and can access information, which has important impact in the process of marketing. Sometimes people believe that forming a cooperative automatically will solve business problems faced by individual farm households. In reality, cooperatives are subject to the same economic forces, legal restrictions and international relations that other businesses face (Krisiinaswami and Kulandaiswamy, 2000).

In connection to coffee marketing activities, various forms and extent of problems could be identified, and prioritized, to decide upon them by the decision makers. In addition, the cooperatives decision-making procedures purchase capacity, sales volume, profitability, and other marketing performance parameter needs to be assessed. This may also be true for cooperatives. To bring maximum profits to all institutions concerned, a channel of distribution should be treated as a unit- a total system of action (Mamoria, *et al.*, 2003). But some members of cooperatives have an experience of selling their produce to other marketing channels. In addition, there may be various problems in collecting coffee from members. This might be caused by the dissatisfaction of members with services rendered to them by their cooperatives. There may be various problems in collecting and exporting coffee through cooperatives. Based on the principles of cooperatives, coffee farmers' marketing cooperatives are expected to genuinely perform their marketing activities and provide adequate services to their members.

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. This can be represented as:

$$\text{Customer Satisfaction} = \text{Service expectations} - \text{perceived service performance.}$$

So, cooperatives performance should be continuously checked against the level of members' satisfaction.

From time to time, it is essential to check whether they are on the right track or not. It will then contribute to the understanding of factors hindering improvement and modernization of the coffee farmers' marketing cooperatives. This would enable the cooperatives to check whether they are on the right track and measures to be taken to correct any undesirable courses 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. This study therefore, aims at assessing the performance of primary coffee marketing cooperatives and identifying their problems and opportunities as well as evaluates the level of members' satisfaction and analyzes the determinants of member's satisfaction.

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). As any other enterprises do, cooperatives need to also periodically control and evaluate their marketing activities. There are basically four types of marketing controls, namely annual-plan control, profitability control, efficiency control, and strategic control. However, in spite of a serious need to monitor and control marketing activities, many companies

including cooperatives have inadequate control procedures (Kotler, 2003). Actually, there is no empirical information supported with scientific research that shows the performance of primary cooperative societies and/or their unions, the magnitude of members benefit from these cooperative organizations and the degree of satisfaction. This research will, therefore, attempt to empirically investigate the above issues and bridge information gaps.

1.3. Objectives of the Study

The overall objective of this research is to assess the overall marketing activities and performance of primary coffee farmers' marketing cooperatives and the extent of member's satisfaction in terms of the services they obtain from the same in Dale district.

The specific objectives of the study are: -

1. Examine performance of primary coffee farmers' marketing cooperatives and identify factors influencing their performance,
2. Analyze satisfaction of cooperatives members with the services provided by their cooperatives,
3. Identify and describe key coffee marketing channels, and
4. Identify major problems of primary coffee farmers' marketing cooperatives.

1.4. Research Questions

Attempt will be made in this study to find answers for the following key questions.

- 1) What are the different marketing services provided by primary coffee marketing cooperatives members?
- 2) What has been the performance of primary coffee farmers' marketing cooperatives?
- 3) What are main constraints that hinder and favorably influence their performance?
- 4) To what extent have primary coffee farmers' marketing cooperatives have satisfied their members?, and
- 5) What are the determinants of member's satisfaction?

1.5. Scope and delimitation of the Study

This study will contribute to the understanding of coffee marketing system and major problems and constraints on the smooth performance of coffee marketing cooperatives and other coffee marketing intermediaries. This study will focus on coffee marketing with particular reference to primary coffee farmers' marketing cooperatives in Dale woreda, assessment of their performance, identification of problems encountered in their operations and the extent of members' participation and satisfaction with the services provided by the cooperatives in Dale district.

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 coffee farmers' marketing cooperatives under consideration as well as other cooperatives operating under similar conditions in improving their performance through appropriate and relevant measures. 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 Commission 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. This study could be a good stepping-ground for other studies on agricultural marketing and marketing cooperatives. In brief, this research would be useful to cooperatives societies, researchers, and governmental and non-governmental organizations for policy formulation, planning and development of agricultural marketing and cooperatives in the country.

1.7. Organization of the Thesis

This thesis consists of five major chapters. Chapter 1 presents the background, statement of the problem, objective of the study, significance of the study and scope and limitations of the study. Chapter 2 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 3.

Chapter 4 presents the results and discussion part of the study. Finally, the conclusion and recommendation of the study are presented in chapter 5.

2. LITERATURE REVIEW

2.1. Market

Market may be defined as “a particular group of people, an institution, a mechanism for facilitating exchange, (Solomon, 2002). The market concept has also been linked to the degree of communication among buyers and sellers and the degree of substitutability among goods. The concept of perfect market, for example, is an abstraction used by economists as a benchmark for evaluating the performance of market situations that deviate from its specifications (John and Sathan, 1988; cited in Solomon, 2002).

2.2. Marketing

The definitions of marketing can be grouped into two major categories: classical (narrow) definitions and modern (broad) definitions. In classical terms, marketing is defined as “the performance of business activities that direct the flow of goods and services from producer to consumer or user or the process in a society by which the demand structure for economic goods and services is anticipated (enlarged) and satisfied through the conception, promotion, and physical distribution of such goods and services”. These classical definitions of marketing are oriented toward the physical movement of economic goods and services.

The breadth of marketing was officially recognized by the American Marketing Association (AMA) in 1985 when it replaced the classical definition it had approved in 1960 with the following: Marketing is the process of planning and executing the conception, pricing, promotion, and distribution of ideas, goods, and services to create exchanges that satisfy individual and organizational objectives” (Joel R. Evans and Barry Berman, 1990).

There is no universally accepted definition of marketing, indicating the variety of options, which exist concerning the subject (Barker, 1989). Terpstra (1972), cited in Barker (1989) offers a very broad definition of marketing as “the collection of activities under taken by the firm to relate profitability to market”.

Marketing is a societal process by which individuals and groups obtain what they need and want through creating, offering, and freely exchanging products and services and value with others (Kotler, 2003). Rodger (1971) cited in Barker (1989) offers a definition of marketing which is applicable to most agricultural systems: “Marketing is the primary management function, which organizes and directs the aggregate business activities involved in converting consumer purchasing into effective demand for a specific product or service and in moving the specific product or service to the final customer or user so as to achieve company-set profit or other objectives” (Rodger, 1971). The American Marketing Association (AMA) offers the following definitions: Marketing is the process of planning production, pricing, promotion, and distribution of ideas, goods, and services to create exchanges that satisfy individual and organizational goals (AMA (1995), cited in Kotler, 2003).

2.3. Evolution of Modern Marketing

The modern marketing concept has evolved over a period of more than a century. The role and significance of marketing is primarily a function of the stages of economic development in a country. In a primitive society based on agriculture and handicrafts, exchange is very limited and marketing is more or less non-existent. In early stages of industrialization also, marketing does not pose a serious problem because of the excess of demand over supply. The main function of marketing in this stage is the movement of goods from the points of to the points of consumption. In the third stage when production takes place on a mass scale, production exceeds demand and mass production needs mass distribution, marketing starts assuming an important role in the enterprise. In this stage, main focus of marketing is on selling and distribution. It is in an affluent economy where customer is highly sophisticated and his wants take a specific shape, marketing-orientation takes place (R D Agarwal, 2004).

According to Agarwal (2004) the evolution of Modern Marketing stages is summarized as follows:

1. Production-orientation: In a pre-industrial society as well as industrializing society, demand of most goods exceeds supply. Firms are mostly production-oriented, and the

main function of marketing is the movement of goods from the points of production to the points of consumption.

2. Sales-orientation: the excess of production over demand characterized the great depression of the thirties.
3. Marketing-orientation: more and more companies are now putting increasingly greater emphasis on marketing. It is characterized by the integration of all marketing activities in the marketing division, and close coordination between marketing and other functions, particularly manufacturing, industrial engineering and credit management.
4. Marketing Company Stage: At this stage, companies plan from market backward to the factory. Manufacturing and all other activities are guided by the market place.
5. Social Responsibility-Future Orientation: Business enterprises will in future be more concerned with social responsibility in performing their marketing activities, in response to growing consumerism and threat of government intervention (Agarwal, 2004).

Marketing can be studied from distinct standpoints. The two simplest, and probably most important, aspects identified are, on the one hand, marketing policy, which is concerned with macro-aggregate issues such as market structure, the nature and level of competition, the forms of, and reasons for, government intervention, and so on, and, on the other hand, marketing management, which is related largely to issues confronting individual businesses (Barker, 1989).

2.4. Agricultural marketing

Agricultural marketing is the performance of all business activities involved in the flow of goods and services from the point of initial agricultural production until they are in the hands of the ultimate consumer (Kohls and Uhl, 1985).

The way in which farmers view their businesses depends very much on their personal aspirations and opinions. Two extreme positions, which can be identified, are those of 'production-oriented' and the 'marketing-oriented' farmer. The production-oriented farmer regards the major part of his business as being concerned with the goods, which he wishes to produce. In contrast, the marketing-oriented farmer will endeavor to produce goods which

can profitably be sold, giving due consideration to the likelihood of profit before production is under taken. It has been stated previously that production orientation is likely to be most successful in conditions where a seller's market exists and the central problem to be faced by farmers is to find ways of increasing output. Unfortunately, in agriculture this situation very rarely arises, apart from quirks arising for climatic reasons. The marketing orientation concept can be applied to agriculture to a large extent; to date however, there has been only a limited amount of work undertaken to define the orientations of farmers. (Mitchell (1975), cited in Barker, 1989) studied the extent to which, and the manner in which, farmers are influenced in their livestock marketing decisions by publicly available sources of market information. He reached two general conclusions about the marketing behavior of farmers. For the most part, farmers' actions with regard to marketing are the result of long-term policy decisions, and as such will not be subject to review each time the farmer has occasion to sell. Also, when marketing decisions are of a short-term nature, they will be influenced by many things, which do not come within the preview of conventional market intelligence. Typical factors quoted as affecting sales decisions were prices, price expectations, and selling policy. (Bateman (1972), cited in Barker, 1989) gives a good illustration of the advantages accruing to farmers who utilize marketing-oriented management: 'Farmers essentially produce goods, which satisfy consumers' demands for food. In the long term an alternative source for satisfying this demand could come from the development of synthetics. The production-oriented farmer would do little about this situation other than sit back and hope that the potential competition will not come about. The marketing-oriented farmer, in contrast, would be prepared to respond to such developments. The obvious response would be for the farmer himself to investigate how far it would be possible for him to take some direct part in the development of synthetics. Although this is unlikely to be feasible there are other, more realistic, alternatives. It is possible that the development of synthetics might strengthen the demand for "fresh food" unpolluted by artificial fertilizers, etc. The farmer who foresaw this and built up a reputation and a market for such produce would not suffer, but would actually benefit, from the development of synthetics.'

The recent increase in the popularity of food grown using 'organic farming' methods is evidence of the potential for concentrating on a particular sector of the market (Barker, 1989).

2.5. Marketing management

Kotler (1972) a broader definition as “Marketing management is the analysis, planning, implementation, and control of programs designed to bring about desired personal or mutual gain First, it relies heavily on adaptation and coordination of product, price, promotion, and place for achieving effective response”.

Marketing management is the art and science of choosing target markets, getting, keeping, and increasing customers through creating, delivering, and communicating superior customer value (Kotler, 2003).

It is coordinated planning, implementation, and control of marketing efforts. (Evans and Berman, 1990).

The marketing manager performs all those functions, which are performed by all other managers. Major aspects of these functions are: (1) setting marketing objectives, including sales targets (2) planning the marketing mix comprising the product, pricing, promotion, and distribution, (3) organizing, (4) staffing, (5) coordinating, (6) directing and (7) controlling.

2.6. Marketing performance

Marketing performance is defined as the way in which markets and marketing contribute to various aspects of economic performance. Performance criteria could be divided into two categories, namely those related to economic efficiency and other performance objectives. The former group includes technical efficiency, operational efficiency and exchange efficiency, while the latter group includes innovation, inter-sectoral resource transfer, equity, employment, and co-ordination efficiency (Scarborough and Kydd, 1992).

Performance expectations are based on a company’s strategic goals, the standards that are met or exceeded by leading marketers. Standards may be established on the basis of the company’s vision for the future, historical company data and forecasts for future performance, or by benchmarking against key success factors in the industry. A firm establishes performance criteria consistent with its mission and objectives. Typically

marketing managers are concerned with overall performance in five key areas as they apply to design and implementation of the marketing mix: profitability, productivity, liquidity, and leverage (Anderson and Vincze, 2000).

2.6.1. Performance measures of marketing

Performance generally is controlled by measuring factors such as profitability, sales, market share, shareholder value, employee productivity, and customer satisfaction. Although variables are analyzed, managers usually consider a number of standards simultaneously that combine to provide an overall measure of performance. Even though the most common variables that are used to represent an organization's performance are quantitative (e.g., net profit, return on equity), many qualitative measures (e.g., customer satisfaction, attitude change toward the company or its products) are also considered in an overall assessment of performance. For example, a firm might consider the efficiency of its operation based on cost containment and contribution margins and the productivity of its personnel who make goods in the factory, sales people who call on the company's customers, or the rate of new product introduction in to the market. Qualitative factors that are more elusive, and hence more subjective, help management gain a better understanding of overall performance. For example, customer satisfaction, product quality (as it is perceived by the customer), and return on investment in advertising can be combined with quantitative factors in measuring performance (Anderson and Vincze, 2000).

2.6.2. Efficiency of marketing

Economic efficiency objectives is mainly concerned with the cost of performing several marketing functions, such as purchasing, transportation, storage, processing, exchange, etc. Marketing efficiency is usually measured in the following ways: (a) technical efficiency (b) operational efficiency (c) allocative (exchange) efficiency (Solomon, 2002).

If a marketing system is allocatively efficient, consumer preferences are transferred without distortion to producers who will use such price information to make production decisions, which are allocatively efficient in turn. But the evaluation of the efficiency of an agricultural marketing system is seriously theoretically compromised in two aspects: the state of perfect

competition does not actually exist, and there is thus no deinstitutionalized means whereby supply is supplied and demand demanded and in relation to which actually existing marketing systems can be evaluated; and the degree of pareto suboptimality of a market cannot be determined from analysis of single market alone (Scott, 1995).

Technical efficiency refers to the efficiency with which resources are used in marketing, in terms of physical input and output ratios. A technically efficient firm, or market, produces the maximum possible output from the inputs used, given locational and environmental constraints, and it minimizes resource inputs for any given level of output (Scarborough and Kydd (1992), cited in Solomon, (2002).

Operational efficiency is usually defined as the provision of goods, or services at least-cost and at a high level of output, or combination of inputs, which ensures that the value of marginal product equals marginal factor costs. Operational efficiency is also some times referred to as firm level allocative or pricing efficiency (Scarborough and kydd, 1992).

Exchange efficiency refers to market-level allocative, pricing or economic efficiency and is both dependent on, and influential in, the above two efficiency criteria (Scarborough and kydd, 1992).

Economic efficiency implies that a firm and an industry are operating on the lowest cost basis feasible with the techniques, skills and knowledge available, and that the benefits of all possible economies are reflected in the prices and margins prevailing in the market. Thus, all enterprises concerned with the marketing sequence must be continually on the lookout for new and better ways of performing their functions and providing services, and must adopt them as soon as they promise savings in cost (Abbott, 1958).

2.7. Marketing channels

Marketing channels are sets of interdependent organizations involved in the process of making a product or services available for use or consumption. Marketing channel decisions

are among the most critical decisions facing management (Kotler, 2003). The sequence of intermediaries and markets through which goods pass from producer to consumer is known as marketing channel (Kohl and Uhl, 1985). The complex pattern of marketing channels and the part played by each in the total market movement can be shown best in flow charts (Abbott, 1958). The importance of the distribution function in marketing is apparent when one considers the magnitude of goods and services that are transported and sold at millions of locations through out the world. Many experts believe that the distribution decision is the most important marketing decision a company can make. The design of an organization's distribution system is a key factor in creating customer value and in differentiating one company's offering from that of another (Anderson and Vincze, 2000). As Anderson and Vincze (2000) notes, the field of distribution is made up of two distinct branches: channels of distribution and physical distribution. Channels of distribution consist of a network of intermediaries that manages a flow of goods and services from the producer to the final consumer. The success of this network depends on relationships among manufacturers (producers), wholesalers, retailers, sales representatives, and others. As products move from one intermediary to the next, exchange takes place-exchange of physical goods, intangible services, and value added dimensions. Physical distribution activities include the actual movement of goods and services (i.e., logistics), with a focus on transporting and warehousing them.

A number of well tried and tested channels have been used throughout generations by farmers, and the most important of these will be considered from the point of view of their use for particular commodities, and their individual advantages and disadvantages (Barker, 1989). There are two particular marketing channels through which farmers dispose of their output. They are marketing channels used by farmers acting independently and in unison.

2.7.1. Farmers choice of marketing channels

All farmers must utilize marketing channels, regardless of whether they are production-oriented or market-oriented, if they produce goods, which are in excess of their domestic

consumption. For some, this is simply a matter of routine, selling through the same outlets year in and year out. However, farmers are required to choose between various marketing channels in order to dispose of their produce. Possibilities certainly exist for the market-oriented farmer to improve his profit potential, if he is prepared to spend time deliberating over which marketing channel to use, and then makes his decision on the basis of sound economic motives (Barker, 1989).

2.7.2. Channels used by farmers acting individually

When a farmer operates as an individual in the market, his ability to influence that market is negligible. Despite this disadvantage, the bulk of agricultural produce is marketed by farmers acting independently through various outlets (Barker, 1989).

2.7.3. Marketing channels used by farmers acting in unison

One of marketing channels used by farmers acting in unison is cooperative. One of the main aims of cooperation is to reduce the inherent weaknesses of farmer who operates as an individual in the market, since the influence of the individual on the market is severely limited by the relative smallness of his scale operations compared to the people with whom he is trading. It has long been held that if farmers act in the market, not as individuals, but cooperate in some way to market their produce in unison, and then there will be synergistic returns available because of the increased scale of operation. When farmers cooperate, there is a pooling of a variety of resources, including management and marketing competence and know how (Barker, 1989).

The rationale behind the legislation establishing farmers' rights to form cooperatives is that farmers generally market their crops to large, highly organized, commodity merchant firms or to large processing firms. Since these firms combine expertise and capital, farmers should be allowed to develop their own marketing firms in order to deal (compete) with them on equal footing (Douglass and Norvell, 1983).

2.8. Legal Organization of Business

From the standpoint of legal organization, there are three basic types of private business organizations in the free enterprise system: individually owned businesses; partnerships of two or more persons; and corporations. Corporations may be either profit-type (standard investor-oriented) or non-profit type (patron-oriented or Cooperatives). It may be just as well to classify the forms of business organizations as:

1. Individually owned businesses or sole proprietorships.
2. Partnerships.
3. Standard or regular corporations.
4. Cooperatives.

2.8.1. Cooperatives

2.8.1.1. Concepts of cooperatives

The International Cooperatives Alliance (ICA, 1995) defines cooperative, as “an autonomous association of persons, united voluntarily to meet their common economic and social needs through jointly-owned and democratically-controlled organization/enterprise”. In its own definition, the International Labor Organization (ILO) also points out that members accept a fair share of the risks and benefits of their cooperative undertakings (ICA-UN, 1995). A cooperative has been defined by the Central Council for Agricultural and Horticultural Cooperation as an “association of producers/consumers who together can achieve some commercial objective more successfully than they can as individuals” (Barker, 1989).

A cooperative is a business voluntarily owned and controlled by its member patrons, and operated for them and by them on a nonprofit or cost basis. A cooperative enterprise belongs to the people who use its services, i.e., members control it, and its gains are distributed to the members in proportion to the use they make of its services.

It is organized and incorporated to engage in economic activities with certain ideals of democracy, social consciousness, and human relations included. A cooperative provides services and benefits for its members in proportion to the use they make of their organization rather than earning profits for the shareholders as investors. A cooperative is part of free enterprise, competitive, capitalistic system rather than a welfare agency or charitable and benevolent society. The primary goal of a cooperative is to meet members' needs in an economical, efficient manner, whereas the goal in the investor-oriented corporation, the partnership, and the sole proprietorship is to maximize profits for the owners of the business (Marvin A., 1980).

The basic principles of cooperative societies as a form of self help and mutual help are the membership shall be open and not determined by religion, sex, race, political stand, or other considerations irrelevant to the objectives of the society, that the affairs of the society be controlled in a democratic manner on the basis of one man one vote, not in proportion to capital, that interest on capital be fixed, and the members benefit from the activity of the society in proportion to the business they do with it. In essence, membership is voluntary, based on mutual interest in removing disadvantage or achieving the desirable objective, and requiring a willingness and ability to conform the conditions agreed upon (Belshaw, 1959; cited in Zemen, 2005).

A true cooperative is defined as “a business voluntarily organized, operating at cost, which is owned, capitalized and controlled by a member patrons, sharing risks and benefits proportionally on their participation”. Cooperative may render at least four valuable services at capitalistic system of which they are a part: 1) enhance private property, 2) preserve market competition, 3) retain profit motive and 4) maintain and strengthen the individual consumer and entrepreneur. The main purpose of the cooperatives is to make a profit for its patrons or users of the cooperative, not for its investors. The member of cooperative serves them selves. They are both the owners and users of the service. A contractual arrangement between the cooperative and the member patrons requires that all margin above the cost of production be returned to the member patrons in proportion to their business with the cooperative (Roy, 1965).

2.8.1.2. Agricultural cooperatives

Being in the framework of the general cooperative concept, an agricultural cooperative represents an attempt by farmers, each of who has a different set of resources and perhaps goals, to integrate vertically in to the food and fiber system. The cooperative involves farmers, qua farmers, however; an elected board of directors, hired management, organized labor, government officials, bankers, and others may be involved in decision by cooperatives (Staath, 1965).

2.8.1.3. Agricultural marketing cooperative

In agricultural marketing cooperative, farmers join together to market part, or all, of the produce of their holdings. The theoretical basis for such cooperation is related to three major factors.

1. Bargaining power: increasing farmers' bargaining strength, which is weak and disorganized in relation to buyers?
2. Marketing economies: reducing the cost of marketing by improving the efficiency of existing services, or achieving scale economies in certain operations.
3. Market investment: providing an additional investment opportunity in marketing of a commodity or commodities covered by the cooperative is considered as an additional enterprise to those already carried out by the farmer (Barker, 1989).

2.8.1.4. Basic principles of cooperatives

Cooperatives in general have their own guiding principles and value concepts, such as self-help, self-responsibility, democracy, equality, equity, solidarity, honesty, openness, social responsibility, and caring for others. The guiding principles of cooperatives have been developed since 1937, (i.e., the first Rockdale cooperative principle). The latest version of the guiding principle is that of 1995 (Veerakumaran, 2003). The changes that have taken place in cooperative principles are summarized as follows:

Table 1 Cooperative Principles at various stages in different years

1934	1937	1967	1995
1. Open membership	1. Open membership	1. Voluntary and open membership	1. Voluntary and open membership
2. Democratic control	2. Democratic Control	2. Democratic Control	2. Democratic member and Control
3. Patronage on purchase	3. Patronage on purchase	3. Patronage on purchase	3. Members economic participation
4. Limited % on capital (if any)	4. Limited % on capital (if any)	4. Limited % on capital	4. Autonomy and independence
5. Political and religious neutrality	5. Political and religious neutrality	5. Cooperative education	5. Education, training and information
6. Cash trading	6. Cash trading	6, Cooperation among cooperatives	6. Cooperation among cooperatives
7. Promotion of education	7. Promotion of education	=====	7. Concern for Community

Source: Veerakumaran (2003)

As indicated, cooperatives have features and fundamental concepts, which distinguish them from ordinary corporations. In addition, the following distinctive principles identify business-type cooperatives:

1. Control by member users-also called democratic control.
2. Operations on a cost-of-doing business basis-that is, non-profit operations.
3. Limited returns or dividends upon ownership capital.

Based on these principles and national cooperative proclamation; members manage and control the day-to-day activities of their cooperatives. In doing so, cooperatives had their own organizational structure and division of labor. The organizational structure of cooperatives could vary from one form of cooperatives to another. The structure may also change depending on the level and strength of the cooperatives. The higher authority is owned by the general assembly, which constitutes all members of the cooperatives. The day-to-day marketing and other operational activities are decided and effected by the electoral managing committee or board. As per the strength and/or the level of cooperative, the committee or board will delegate a manager, who will be employed by the cooperatives to accomplish and manage the cooperative's undertakings.

Cooperatives are owned and financed by their members, who also are its customers. Their purpose is to provide services to members at the lowest possible cost and not to generate profit for the cooperatives as business entity. Profits are distributed to cooperative members based on how much the members used the cooperative, not on how much the members have invested in it (Marvin, 1998).

Members usually control cooperatives on a one-person, one-vote basis. By working together, cooperative members may be able to meet objectives that would not be feasible for them to do as individuals. Size is a key factor in gaining higher bargaining power in the market (Marvin, 1998). If done properly; a cooperative organization can create a competitive edge for farmers. Cooperatives are subject to the same limitations as many business. They face the same economic environment, and many of the same legal restrictions and interpersonal problems.

However, some unique problems relate to the agricultural industry in general and specifically to cooperative organization (Mather and Preston, 1990).

Cooperatives peculiar characteristics as opposed to any other corporations could enable them out of such problems. These peculiar characteristics are known as primary operating procedures. According to Burt (1997), the basic principles underlying modern cooperatives include user-control concept and user-benefits concept. In the user-control concept the controllers and users of a cooperative are one and the same. Members have a management role. Members' votes usually guide the cooperative's board economic decision making. In the user-benefits concept, the cooperatives sole purpose is to provide and distribute benefits to users based on the amount of their use.

A cooperative is not a mere association. It is both an association and an enterprise. The enterprise aspect gives primacy to the economic and business functions of cooperative. A cooperative enterprise comes into being when the participating members decide to establish a joint enterprise or undertaking, which is collectively operated. A cooperative aims at optimization of resource use and maximization of net returns to its members (Burt, 1997).

In a cooperative enterprise, there is direct relation between users and the enterprise, and the specific objective of the enterprise is the satisfaction of common users, user-sellers, user-purchasers and user-workers. The aim of cooperative is not to maximize the return on share capital, but to render service to owner-users at a minimum cost. It is, thus, a service enterprise as distinct from profit enterprise. A cooperative, like any other enterprise, must seek out opportunity for expansion and diversification, so that it can confer better benefits to members, i.e., it must strengthen its viability (Krisiinaswami and Kulandaiswamy, 2000).

The efficiency of a cooperative enterprise is measured primarily, not in terms of return on investment, but in terms of quality, adequacy, and cost of service rendered to member users. For achieving the economic efficiency, a cooperative organization must plan, organize, motivate and control its operation (Knapp, 2000). As any other enterprises do, cooperatives need to also periodically control and evaluate their marketing activities. There are basically

four types of marketing controls in many companies including cooperatives, namely: annual-plan control, profitability control, efficiency control, and strategic control. However, in spite of a serious need to monitor and control marketing activities, many companies including cooperatives have inadequate control procedures (Kotler, 2003).

Market 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 in relation to economic efficiency or other objectives.

Firm organization, management structures, motivation and incentive arrangements, and decision-making rules and processes were seen as having important influence on the efficiency of operations. This approach suggests that performance of marketing system can be analyzed by looking on the productive efficiency (the combination of technical and operational efficiency) of each firm in the system (Scarborough and Kydd, 1992).

In cooperatives, member's economic right is measured by the extent of his participation in undertakings business transaction, while his right of control is based on 'one member one vote'. In the division of surplus, the cooperative enterprise excludes share-based division and applies the rule of distribution in proportion to patronage. A cooperative is said to be successful, only when it achieves success in both enterprise and association aspects. It must, therefore, synthesize the association and enterprise characteristics.

Cooperation is a social philosophy, the ultimate aim of which is the creation of better social order and the economic betterment of the society. Cooperative is organized with the immediate objective of satisfying the needs of its members and the social system (community) in which it operates. A cooperative, therefore, directly aims at serving both its members and the community as a whole. Social responsibility is inherent in the very idea of cooperation. Cooperatives are not an end in them; but they justify themselves by their usefulness to society. By means of the service they render to the society, they make the community stronger (Knapp, 2000).

2.8.1.5. Cooperative Movement in Ethiopia

2.8.1.5.1. Imperial Regime

Modern cooperatives were introduced in Ethiopia soon after the Italian invasion of 1936. But, however, it was only in 1960s that cooperative was legally enacted (Federal Cooperative Agency, 2005).

The Ethiopian Majestic Government attempted to organize the land-less people and the retired military into agricultural cooperatives through the Ministry of National Community Development in 1960. Accordingly the government issued also a farm workers Decree number 44/1961 to facilitate the organization of land-less people into cooperatives. However, it did not work well because the scheme met various problems that arose directly or indirectly from the then landlords who feared that the project/scheme would eventually diminish the tenant work force on which they totally depend for cultivation. The plan was to organize about 20 cooperatives but it was accomplished only 2. As most of the land lords were at the same time, part of the existing government machinery, it was not so disrupt any program that seemed to work against their interests (Yeshitla and Zehirul, 1997).

However, a modern cooperative in Ethiopia was started first in 1961. During this time the first cooperative legal action was made and it is known by Decree number 44/1961. The main reasons for this decree was the increase in the rate of unemployment, the fast increase of migration from rural area to urban, the increase in number of students who drop out of their education, and finally the disarmament of the military without proper compensation and pension. Mean while, in order to incorporate the international principles and regulation of cooperatives, the above decree was replaced by proclamation number 241/1961.

According to Wolday (2003), cooperative movements in Ethiopia started to accelerate in the late 1960s with the launching of the comprehensive agricultural development projects such as the Chilalo Agricultural Unit (CADU). According to yeshitla and Zehirul (1997), the employees of Ethiopian Airlines organized the first savings and credit unions (cooperatives) in the country in 1964. In 1966, the government issued a special proclamation for this type of

cooperatives, which became popular among the formal sector employees. All primary credit unions were associated with Ethiopian Thrift and credit cooperative societies Ltd (ENTACCS) as national apex body. ENTACCS became a member of the African Confederation of Credit Unions (ACCOSCA) in the same year. The number of savings with credit unions continued to increase even after the abolition of the national apex body in 1975.

After the “Cooperative Societies Proclamation” of 1966, the modern cooperative began to emerge in Ethiopia. The third five-year plan (1968-1973) also placed great emphasis on the formation of cooperatives in the rural sector and multi-purpose agricultural cooperatives were considered to be among the best institutional forms for carrying out programs necessary for the development of peasant agriculture. The target of establishing new cooperatives was to create 300 new ones, of which 158 were formed. Out of 158, 98 agricultural multi-purpose cooperatives, 23 coffee growers cooperatives and the remaining were other types of cooperatives such as consumers, weavers etc.

During that time, relatively wealthy farmers who often employed land-less people as farm workers formed most agricultural coffee cooperatives. The main purpose of joining cooperatives at that time was to get loans for farm inputs, funds for processing and marketing of coffee. However, the coffee grower cooperatives were almost entirely engaged in marketing activities aimed at obtaining better prices for their members. But only a small portion of the marketed Ethiopian coffee was sold through cooperatives. Virtually no inputs were distributed to growers by these cooperatives.

Much cannot be said about these cooperatives, as they were practically at their infant stages by the time the Derg regime took over the leadership of the country. As it is well known the military government had destroyed all rural as well as urban institutions including the multi-purpose cooperatives that were replaced by new types of rural organizations in line with socialist doctrines.

2.8.1.5.2. Derg Regime

2.8.1.5.2.1. Peasant Associations

Shortly after the revolution of 1974, Peasant Associations emerged as a result of proclamation (No.71 of 1975) and proclamation number 138/78 issued by the military government on land reform and cooperative organization respectively. Peasant associations, the lowest form of administrative hierarchy were mainly formed to consolidate peasants' participation in political, economic and social activities of the nation. The peasant associations not only replaced the traditional rural administrative organs in regard to land distribution, land use, and local defense, but also, aimed at rural self-administration, cooperative organization, and villagization programmes. They were also engaged in assessing input needs and the distribution of inputs to the peasants (Yeshitla and Zehirul, 1997).

2.8.1.5.2.2. Service Cooperatives

The proclamation on land reform and cooperative organization proclamation stipulated that service cooperatives were to be formed by 2 to 10 peasant associations. The objectives of the service cooperatives were mainly to provide the following services to the members.

1. Provide political education with a view to establish agricultural producers' cooperative societies,
2. Provide extension services,
3. Provide marketing services for the produce of members at fair prices,
4. Arrange loans for members at fair interest rates,
5. Provide storage and savings services,
6. Supply consumer goods to members according to needs, and
7. Supply improved agricultural implements and provide tractor services.

2.8.1.5.2.3. Producers' Cooperatives

The Derg regime considered service cooperatives just as a first step of a massive “co-operatization” programme, which ultimately aimed at transforming the rural economy into the socialist mode of production. Therefore, the individual farmers were encouraged to form producers' cooperatives with collective ownership of production.

The organization and stage-by-stage development of producers' cooperatives was elaborated in the 1979 directives of agricultural producers' cooperatives. There were three stages as per directives:

1. Malba – (Primary)
2. Wolba – (Advanced), and
3. Weland – (Union of Wolbas)

1. Malba: It required to transfer private holdings of land to communal holding leaving 1/5th of a hectare, for individual cultivation. Draught animals and farm implements were to remain private property and the cooperative would pay rent to owners.
2. Wolba: In the advanced producers' cooperatives, all land holdings becomes communal holding and all animals and implements are transferred to cooperatives. The farmers can individually cultivate up to 1/10th of a hectare. All members or a minimum of 30 members of peasant associations could form advanced cooperatives.
3. Weland: It was a union of advanced agricultural producers' cooperatives having an average land holding of 4000 hectares and membership of 500 peasants.

Generally, the peasant does not like the idea of producers' 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 producers' cooperatives were bring to an end by their own members.

The steps taken by the cooperative organization clearly indicates that any form of organization without the full and direct participation of the beneficiaries will never be

successful (Yeshitla and Zehirul, 1997). However, up to 1990 there were 10,524 different types of cooperatives with 4,529,259 members and total capital of Birr 465,467,428 throughout the country. From these cooperatives, 80 percent were rural cooperatives (Zemen, 2005).

2.8.1.5.3. Present Regulation

2.8.1.5.3.1. Preliminary period

During the change of Derg Regime by the present government of 1991, the negative view towards cooperatives was manifested in the actions of the farmers looting and destroying of the properties and records of their own cooperatives. According to Desalegn (1994), more than 24 million Birr was misappropriated by those cooperatives, which the Ministry of Agriculture had audited. The audited cooperatives were certainly not more than 25%.

2.8.1.5.3.2. Onward activities to date

The current free market economic policy believed on the importance of the cooperatives. Further more, the cooperatives are expected to perform a great role in the marketing of goods and services to satisfy the needs of producers and consumers.

The present government issued a proclamation on agricultural cooperatives societies named proclamation number 85/94 in 1994 (Yeshitla and Zehirul, 1997). This proclamation incorporates the international cooperative principles; however, its focus was only to solve the agricultural cooperatives problems. In addition there was no separate entity to support these cooperatives both at federal as well as regional level (Zemen, 2005).

To solve all the problems and gaps with relation to organization of cooperatives in the country, a proclamation was enacted called cooperatives proclamation number 147/98 in 1998. This proclamation has accepted all the international standardized cooperative principles

which was issued by the International Cooperatives Alliance and it also permits to establish federal and regional cooperatives promotion bureaus.

At present, cooperatives are playing significant role in the rural Ethiopia economy specially, in the area of input supply, saving and credit, coffee and grain marketing. The establishment of cooperative unions in coffee and cereal growing areas, as well as the start up of Cooperatives Federation as apex cooperatives organization in areas of grain, coffee, dairy and saving & credit activities is a great deal achievement to improve the agricultural marketing system in the country in general, and increasing the livelihood of the farmers and the general citizens in particular.

By the present economic policy and rural development strategy of the country, cooperatives are taken as pertinent institutions or tools to advance the livelihood of the general population. To realize this responsibility, the process of cooperative policy formulation becomes an important factor to organize and promote cooperatives as to participate in the economic (marketing) activities of the nation in the future and it is by now on process by the Federal Cooperative Agency.

2.9. Empirical studies on cooperatives

Before market liberalization program of 1990, a few studies were undertaken on cooperatives and marketing cooperatives. Asmare (1989) concluded that, the factors of production employed in producer's cooperatives were inefficiently used. Inefficiency includes under utilization of labor, fertilizer and capital expense and size groups. However, positive marginal value products of input indicated that the potential for the improvement of the efficiency level and for maximizing the growth of income of the producer's cooperatives was high.

Getenesh (1988) examined how proper record keeping and audit reports will help the farmer in analyzing the management performance of his enterprise efficiency, and concluded; cash and non-cash inflows and outflows should be distinguished. The gross return should be broken down by major products, expense should be allocated to different sub-headings avoiding rather large amount of "miscellaneous" expenses.

Admasu (1998) analyzed the performance of coffee marketing system with the aim of evaluating the overall performance of coffee marketing and concluded that there was marketing inefficiencies prevailing in the system. He has also summarized that the pricing inefficiencies, lack of standardizations at rural market centers, lack of appropriate price information system, abnormal profit in marketing, lack of short run integration between central and local prices.

Mulat and Bekele (1995) analyzed market integration using secondary and primary data and indicated that food grain marketing efficiency need to be improved through a combination of several policy measures; improving infrastructure, like road, providing price information, checking the activity of unlicensed intermediaries.

Tesfaye (1995) analyzed the role of producer's cooperatives for agricultural development, and concluded that, the existence of authentic and effective rural peasant organizations is indispensable to ameliorate the problems that have been identified as major obstacles to Ethiopia's agricultural development, such as limited access to agricultural credit, inefficient input delivery system, low price of agricultural produce, poor infrastructure and weak research-extension linkage. So organizing farmers is not of the past. Peasants' still exist in different forms though they are being used by the traditional government for political purposes and peasant cooperatives are reviving. The Ethiopian Herald (1995) cited in Tsfaye (1995) explore that some peasant cooperatives in coffee growing regions of Oromiya and the southern Ethiopia Regions had been reorganized and have success stories. In a way, it was commented that their performance could be a model to those, which are yet aspiring to pool their resources and form cooperatives.

The overall conclusion of this review is that previous studies of cooperatives have focused on producer's cooperatives and no empirical study has been conducted on marketing cooperatives or coffee marketing cooperatives. This study, therefore, try to address information gap on the performance of coffee marketing cooperatives and members'

satisfaction in Dale woreda located in the Southern Nations Nationalities and Peoples Regional State (SNNPRS).

2.10. Marketing margin

Each market participant generally should obtain some profit margin. The services of various agencies constituting a marketing channel are remunerated out of the marketing ‘margin’. This term is used to denote the difference between the price paid to the first seller (producer) and that paid by the final buyer. It is made up of individual margins obtained by intermediaries who actually assume ownership of a product and then resell it, together with specific charges for marketing services rendered. In general terms, marketing margin refers to price difference between any two stages in the marketing system (Abbott, 1958).

The total marketing margin in the coffee marketing system constitutes the marketing costs plus profit earned (mark-up price) by different actors in the system (Tadesse, 2006).

3. RESEARCH DESIGN AND METHODOLOGY

The objective of the present chapter is to discuss the choice and interpretation of appropriate methodology to understand the physical and socio economic features of the study area.

3.1 Description of the study area

3.1.1. Geography and location

The study was conducted in Dale woreda, in the Southern Nation, Nationalities and Peoples Regional State (SNNPRS) of Sidama Zone, Southern Ethiopia. Yirgalem town is the capital of Dale woreda and it is located 325km far away from Addis Ababa Along main highway to Moyale, 5km to the left after traveling 40km from the regional capital of Awasa. The total area of the woreda is 1326km². The woreda borders with Shebedino in the north, Arbagona in the west, Hula in the west-east, Aleta wondo in the east, Foramina in the east south, Hunbo in the south, and Comot woyade in the southwestern part. The administrative map and location map of the woreda are presented in Fig. 1 . It is noted that Dale Woreda was subdivided since the start of the study, the data presented here represent the “old” Dale.

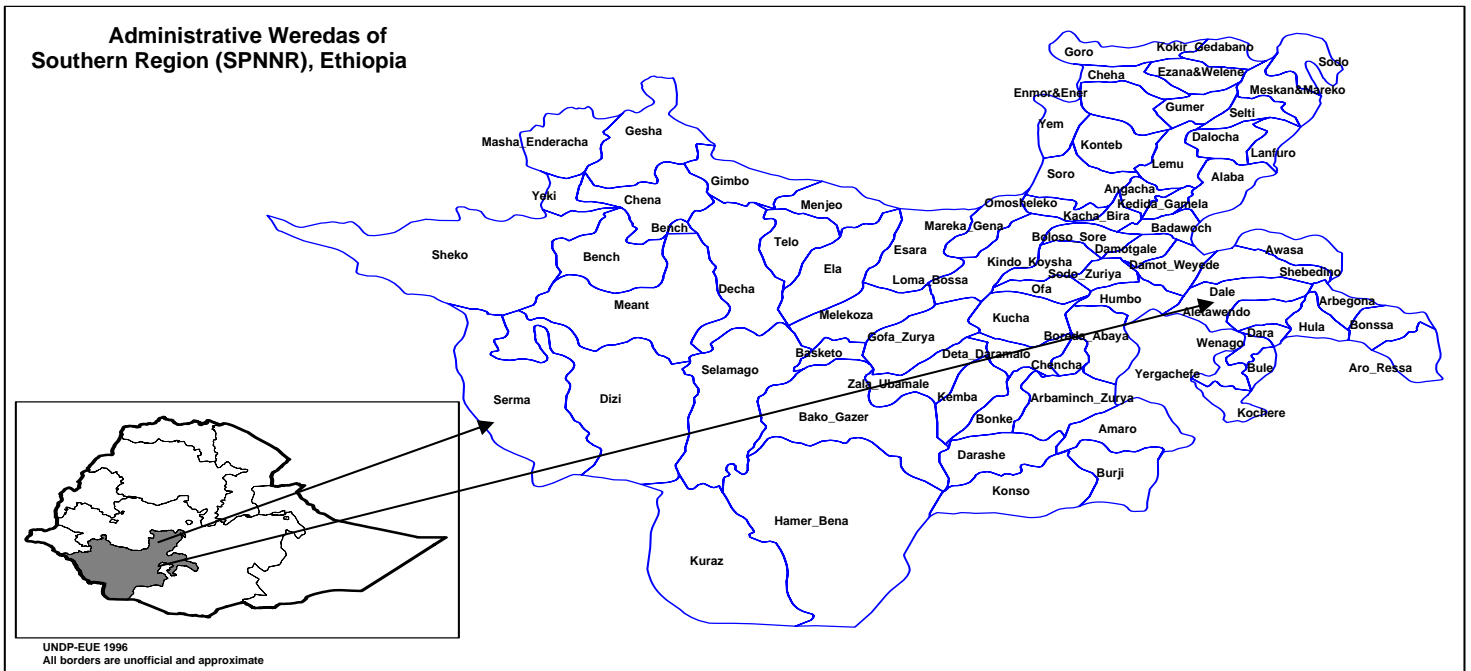


Figure 1 Map of the study area

3.1.2. Population characteristics

According to IPMS-ILRI baseline survey, based on the 1994 national census, the total population of the Dale woreda in 2004 is 416,842 from this 203,774 are female and the rest 213,068 is male. The population density is 314 persons per square km. The woreda is subdivided into 76 kebele administrations. The total agricultural household is 75,215 from this 13,689 are female and the rest 61526 are male. The economically active population is estimated at 89 %. More than 95 % of the population is protestant religion followers.

3.1.3. Farming system and land use

The farmers dominantly practice garden coffee farming systems that include intercropping of various crops (enset (false banana), maize, and haricot bean), vegetables, spices and fruits including chat as commodity crops. Livestock also begin to play an important role in the farming systems of the woreda. They serve as a source of; cattle-milk/butter/hide, sheep/goat-meat/skin, and poultry-egg/meat. According to IPMS-ILRI (2004), the total livestock population is about 438,617. The major animal species kept in the study areas are 166142 heads of cattle (37.8%), 36740 heads of goats and sheep (8.4%), 16381 heads of equine (here only donkey) (3.7%), 218923 numbers of chickens (50.1%) and 10506 beehives.

Table 2 Land use of the woreda in 2004/05-production year

No	Crop	Area (ha)	Percentage
1	Coffee	16154	10.47
2	Enset and other food crops	98319	62.16
3	Forest Land	4453	2.81
4	Grazing Land	16750	10.58
5	Settlement	681	0.43
6	Unused Land	21812	13.55
	Total	158170	100.00
	Potential land for coffee production	15863	72.70

Source: Dale woreda Agricultural and Rural Development Office

3.1.4. Climate, soil and topography

The altitude of the woreda varies from 1161 to 3167m above sea level, which gave the woreda different climatic zone Dega (highland)), Weyina Dega (midland), and the rest Kola (lowland). Ethiopian agro ecological conditions are commonly classified into three categories, namely dega (highland), weyinadega (midland) and kola (lowland). Dega zones refer to highland areas with an altitude of over 2,300 masl, while weyina dega represents midlands with an altitude of 1,500 to 2,300 masl. Areas lying below 1,500 masl are known as kola, which represent lowland. The average annual rainfall varies from 1027mm to 1452mm. The average temperature is 19.2 Degree Celsius, with minimum 11 Degree Celsius and maximum 22 Degree Celsius.

3.1.3. Coffee marketing cooperatives

In Sidama zone, there are 42 primary coffee farmers' marketing cooperatives distributed in all the woredas in which Dale is one of the woreda having 15 coffee marketing cooperatives with total members of 30149 (3.3% female) and mobilizing a total of birr 18,260,108.00 capital. With the aim of securing better price in coffee market and entering into export marketing, these primary cooperatives have formed secondary coffee marketing cooperative called Sidama Farmers Coffee Marketing Cooperatives union. The union has opened an office in Addis Ababa, for the purpose of facilitating market positioning, especially coffee exporting activities.

Table 3. Coffee Marketing Cooperative Status of the woreda in 2004/05

No	Name of Cooperatives	Number of members			% Of female	Capital
		Female	Male	Total		
1	Goida	84	1773	1857	4.52	1626275.00
2	Gane	50	1489	1539	3.25	2027636.00
3	Selakebado	10	202	212	4.71	12089.97
4	Gorbe	4	205	209	1.91	160437.40
5	Shoye	123	4402	4525	2.72	4992681.00
6	Fero	117	2944	3061	3.82	3673539.00
7	Hunkute	11	1631	1642	0.67	347752.60
8	Wicho	136	3327	3463	3.92	128212.60*
9	Hantete	0	364	364	0	8989.00
10	Kege	62	2793	2855	2.17	293799.50
11	Bekaso	40	1571	1611	2.48	359713.70*
12	Buabegedelo	174	3171	3345	5.20	2288247.00
13	Weyinenata	50	1970	2020	2.48	1096926.00
14	Megera	41	1521	1562	2.62	1806494.00*
15	Wayicho	85	1799	1884	4.51	1731736.00
	Total	987	29162	30149	3.38	18,260,108.00

Source: Dale Woreda Cooperative Promotion Office

* Represents data obtained from 2003 audit report the rest from 2006.

3.2. Data Requirements and sources

Both secondary and primary data on a wide variety of variables are used to meet the objectives of the study. The study requires a large variety of information that will enable to know the performance of coffee marketing with particular reference to primary coffee farmers' marketing cooperatives and/ or the services offered by the cooperatives to their members and the satisfaction of the same. Information was collected based on recording of the day to day activities, information exchange and treatment, time series data of (purchases, sales, members (composition), prices, assets, liabilities, credits taken, repayments, dividends, profits/ losses and defaults was collected from cooperatives audit reports and relevant offices, such as Cooperative Promotion Offices, Rural and Agricultural Development Offices, etc.

3.3. Sampling Techniques Used

For the purpose of assessing performance of primary coffee marketing cooperatives and identification of factors influencing the same, Dale woreda is purposefully selected as already mentioned. All 15 primary coffee farmers' marketing cooperatives in the woreda was purposively considered. For the purpose of assessing the satisfaction of members of primary cooperatives, a two-stage random sampling technique was applied. The first stage involves purposive sampling of 5 primary coffee farmers' marketing cooperatives out of the fifteen. In the second stage, random sampling of individual member farm households was selected on the basis of proportionate to size of the population in the peasant administration of which the sampled cooperatives are organized. 14 Coffee marketing traders were also randomly sampled on basis of the size and type of coffee traders in the study area.

3.4. Methods of data collection

The required secondary data was collected from diverse secondary sources including primary coffee marketing cooperatives and from cooperative union, Agricultural Bureau of the region and Dale Woreda Cooperative Promotion Office, Customs Office, Federal Cooperatives Commission, National Bank of Ethiopia, Coffee, Tea and Spices Department, Coffee Liquoring Center and IPMS_ILRI. In the collection of secondary information, a well-structured schedule was used in collecting primary data.

Most of the data related to the performance of the cooperatives was collected for ten years for each of the 15 primary coffee marketing cooperatives. An informal discussion was also conducted with the cooperatives' members, officials, and other key informants. Relevant primary data was collected through formal survey of sampled traders.

Primary data required for the assessment of member's satisfaction with the services of the cooperatives was collected from sampled cooperative members from the sampled primary cooperatives. The data was collected using structured questionnaire. The questionnaire was pre-tested and its contents were refined on the basis of the results obtained during the pre-test. In the process, eight enumerators were used. These individuals was recruited and trained on

interviewing techniques and the general approach to respondents. Researcher was closely supervising them during data collection period.

3.5. Methods of data Analysis

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

3.5.1. 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, marketing 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 will be made to use all types of marketing performance control techniques, the performance of the coffee marketing cooperatives in Dale woreda 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 were used to calculate key performance criteria.

Marketers are increasingly using financial analysis to find profitable strategies beyond sales building (Kotler, 2003). The researcher uses financial analysis to identify the factors that affects the cooperative's rate of return on total asset. The return on total asset is the product of two ratios, the company's (cooperative's) Net profit margin (Net profits per Net sales) and its Asset turnover (Net sales per total Assets) (Kotler, 2003). Similarly, (Anderson and Vincze, 2000), confirms that the return on assets relates profits to the assets required to produce them, i.e., return on assets is net profit/total assets. In general, the larger this ratio, the better is the marketer's (cooperatives) performance.

3.5.1.1. Ratio analysis

Ratios can be used as one tool in identifying areas of strengths or weaknesses in cooperatives. Financial ratios enable to make comparison of cooperative's financial conditions over time or in relation to other cooperatives. Ratios were calculated from the audit reports of Coffee Marketing Cooperatives.

3.5.1.2. Financial Ratios of the coffee marketing cooperatives

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.

The financial ratios were calculated using the most significant financial ratios that allow forming a judgment about the efficiency of the cooperatives, the return on key aggregates (income ratios) and its creditworthiness.

3.5.1.2.1. Efficiency ratios

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

One of the 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.

$$\text{Inventory turn over} = \frac{\text{Cost of goods sold}}{\text{Inventory}} \text{-----Eq (1)}$$

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.

The other important efficiency ratio used to measure the efficiency of cooperative was operating ratio. It is obtained by dividing the operating expense by the revenue.

$$\text{Operating ratio} = \frac{\text{Operating expense}}{\text{Revenue}} \text{-----Eq (2)}$$

The operating ratio is an indicator of the ability of the management to control operating costs, including administrative expenses (Gittinger, 1982). If the ratio is increasing, it may mean that the cost of raw material is increasing, that the management is having problems controlling costs.

3.5.1.2.2. Income Ratios

Income ratio used to judge net income or profitability-return on sales, return on equity, and return on assets.

The return on sales shows how large an operating margin the enterprise has on its sales. This is determined by dividing the net income by the revenue.

$$\text{Return on sales} = \frac{\text{Net income}}{\text{Revenue}} \text{-----Eq (3).}$$

Lower return on sales indicates that the cooperatives were making lower operating margin and greater sales must be made to make an adequate return on investment.

One of the most important ratios is the return on equity (Gittinger, 1982). It is obtained by dividing the net income after tax by the equity.

$$\text{Return on equity} = \frac{\text{Net income}}{\text{Equity}} \text{-----Eq (4)}$$

The larger ratio is related to effective use of the owners' capital (Anderson and Vincze, 2000).

The earning power of the assets of an enterprise is vital to its success. A principal means of judging this is to determine the return on assets (Gittinger, 1982). Profits, the amounts of money left for the marketer after paying all expenses, was calculated relative to other indicators, such as sales, assets, and capital of the cooperatives (Anderson and Vincze, 2000). The same authors utilize rate of return on asset for profitability ratio. With the same notion it is taken to analyze cooperative performance. The formula for rate of return on assets is: -

$$\text{Return on total asset} = \frac{\text{Net income}}{\text{Total asset}} \text{Eq (5)}$$

A crude rule of thumb is that, once the enterprise is operating at normal capacity, the return on asset should exceed the cost of capital in the society as measured by, say, the bank lending rate to industries-provided that there is no interest subsidy (Gittinger, 1982).

3.5.1.2.3. Creditworthiness ratios

The purpose of creditworthiness ratios is to enable a judgment about the degree of financial risk inherent in the enterprise before under taking a project. The ratios that measures credit worthiness include liquidity ratio (e.g., current ratio) and leverage management ratio (e.g., debt-equity ratio).

3.5.1.2.3.1. Liquidity ratios

As day-to-day operations are directly affected by the cooperative's degree of liquidity, they must remain liquid. Liquidity ratios are quick measure of cooperative's ability to provide sufficient cash to conduct business and settle its debts in the short run. According to Nevue (1985), Bringham *et al.* (1998) and William *et al.* (2003), cited in Daniel, (2006) one of the most commonly used liquidity ratio is the current ratio that is computed by dividing current asset by current liabilities.

$$\text{Current ratio} = \frac{\text{Current asset}}{\text{Current liability}} \quad \text{Eq (6)}$$

A rule of thumb sometimes applied to the current ratio is that it should be around 2 (Gittinger, 1982).

3.5.1.2.3.2. Financial leverage management ratio

The relationship between a firm's assets and debt position can be evaluated with leverage ratios. Whenever a cooperative finances a portion of asset with any type of financing such as debts, the cooperative is said to be using financial leverage. According to the above authors, financial leverage management ratio measures the degree to which a firm is employing financial leverage and recommends the debt ratio to evaluate marketing firm's performance. The formula for determining debt to equity is Total liabilities/net worth (net capital).

$$\text{Debt-equity Ratio} = \frac{\text{Total liabilities}}{\text{Net worth}} \quad \text{Eq (7)}$$

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).

3.5.3. Market Channels and margins

The analysis of marketing channels is intended to provide a systematic knowledge of the flow of the goods and services from their origin (producer) to their final destination (consumer). The price the consumer pays for the goods and services rendered compensates the marketing agent for his efforts. This price also serves as a signal to all the actors in the marketing channel, i.e., producers, rural assemblers, transporters, wholesalers, and retailers (Mendoza, 2002)

Taking the cooperatives and other intermediaries as links in coffee marketing channels, attempt will be made to compute total gross marketing margin (TGMM). This is the difference between the prices paid to the first seller and that paid by buyer.

$$\text{TGMM} = \frac{\text{End buyer price} - \text{producer /seller price}}{\text{End buyer price}} \times 100$$

It is somehow useful to determine the portion of the price paid by the consumer that goes to the producers. The producers' margin is calculated as:

$$\text{GMMP} = \frac{\text{Price paid by end buyer} - \text{Marketing gross margin}}{\text{Endbuyerprice}} \times 100$$

3.5.3.1. Marketing Agents

Some traditionally accepted definitions help to identify and classify participants in the marketing processes.

The fourth objective will be addressed and discussed using the information collected from the field through formal and informal discussion with coffee cooperative members and management committees. In addition to assessment of the procedures of overall activities of the cooperatives, the study tried to identify the yardstick problems they face and identify some possible market opportunities in due course.

Using descriptive statistics, it is also possible to clearly compare and contrast different characteristics of the sampled households along with the econometric model. Hence, descriptive statistics such as mean and percentage were computed to analyze the collected data. T- test was also employed.

3.5.4. Specification of econometric models

3.5.4.1. 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 cooperatives with various types of socio- economic variables. Some of the variables include educational background, age of the household, terms of payment, farm size of the household, participation of members to various decisions making in their cooperatives, sex, and capital of the cooperatives. As the dependant variable i.e., satisfaction and cooperative services are a discrete qualitative, the right modeling specification would be a multi-nomial 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 coffee marketing cooperatives.

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

$$Y_i^* = \beta' X_i + U_i$$

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: $S_i = S_{1i}$, if $-\infty < Y_i^* \leq \mu_1$
 $S_i = S_{2i}$, if $0 < Y_i^* \leq \mu_2$
 $S_i = S_{3i}$, 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 coffee marketing cooperatives, a probit regression model will be 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

In addressing the third objective of the study, coffee marketing intermediaries including coffee cooperatives involved in coffee marketing channels and margins were described and assessed.

3.6. Hypothesis and Definition of Variables

In the process of determining factors influencing the degree of satisfaction of coffee marketing co-operatives' 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 as marketing channel for this product (coffee) was discussed here under.

3.6.1. Dependent Variable

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

Patronage Refund (PATRON): 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.

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 implements in preparing grafting his coffee tree and transport cherries to the market during production and harvesting time respectively. Therefore, it is expected that this variable would have positive influence on the satisfaction of coffee marketing cooperatives.

Information Access (INFORMN): It is dummy variable that takes a value 1 if obtained price information service from his cooperative and 0 otherwise. According to Eleni Z. *et al.* (2003) survey respondents respond that the farmers rely entirely on their own observations and interactions with other traders for information on local and distant market prices. It is clear that producers (smallholders) are severely constrained with regard to market information. Therefore, this variable anticipated influencing farmer's satisfaction positively.

Transportation Access (TRANSPORN): It is dummy variable that takes a value 1 if the members' cooperative facilitates transportation and 0 otherwise. The availability of transport network and commercial vehicles is an important element for the speedy movement of agricultural produce. Almost all agricultural produces were transported on road. The rural markets are connected with the central market by poorly paved roads. Many of the roads to the villages and rural markets are not accessible during the rainy season (Eleni Z.*et a.* 2003). Thus, this variable is expected to influence 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 selling their product (coffee) to the cooperative. So training of members will have a positive influence for satisfaction.

Genuine Scaling (SCALING): This variable is dummy variable that takes a value of 1 if cooperative is better than other traders and 0 otherwise. One of principal values of the cooperatives is genuine scaling (Cooperatives ethical values). So, this variable influences the level of satisfaction positively.

Price of red cherry (PRICERED): This is a dummy variable taking a value of 1 if price of the cooperative pleases members and 0 otherwise. If the cooperative declare price better than the other marketing agents, the member will be satisfied both wit the price received and future dividend payment if the cooperative makes profit. Therefore, cooperative price for red cherry influence the members' satisfaction positively.

Price of dried cherry (PRICEDRIED): This is a dummy variable taking a value of 1 if price of the cooperative pleases members and 0 otherwise. If the cooperative declare price better than the other marketing agents, the member will be satisfied both wit the price received and future dividend payment if the cooperative makes profit. Therefore, cooperative price for dried cherry influence the members' satisfaction positively.

3.6.2. The Independent variables

Members' satisfaction in using cooperatives as marketing channel 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 operates. In this study, a total of (18) variable were hypothesized to explain the dependent variable. The selected explanatory variables are briefly explained and presented below.

Educational level of the Household (Education): 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.

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.

Family Size (FAMILYSIZE): 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.

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.

Number of members (NOMEMBERS): 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.

Total farm Size (TFARMSIZE): This variable is a continuous variable and it refers to the total area of farmland that a farmer owned in hectare. The usage of the co-operative as marketing channel requires having participation in either selling products or purchasing of goods and services from co-operatives. The farmer needs to produce in order to sale to the cooperative or to another marketing agent. The usage of the co-operative as marketing agent requires substantial economic resources of which land is the principal one (Wadsworth, 1991). Under normal condition, if the farmer participates actively he will get benefit from the co-operatives also he will maximize his satisfaction. Therefore, this variable expected to

influence satisfaction positively. Moreover, richer farmers may also benefit more than poorer farmers.

Coffee Farm Size (COFARMSIZE): It continuous variable and it represents the land allotted to coffee production in hectare. As the land of household for coffee increases the yield proportionally may increase, so that the amount of coffee sold to the cooperative increases or decreases based on the cooperatives efficiencies in handling their members. Therefore, this variable expected to influence positively.

Terms of payment for red cherry (TERMPAYR): This variable also is dummy. It takes a value of 1 if the term of payment is in cash and 0 otherwise. Farm households sale their produce (red cherry) not only for based on marketing concept, but also for immediate demand of that particular money to settle his day-to-day expenses. If the cooperative do not have enough money, it is obvious that there is immediate payment. This farmer will not come again to the cooperative, i.e., it has a negative influence on member's satisfaction.

Terms of payment for dried cherry (TERMPAYR): This variable also is dummy. It takes a value of 1 if the term of payment is in cash and 0 otherwise. Farm households sale their produce (dried cherry) not only for based on marketing concept, but also for immediate demand of that particular money to settle his day-to-day expenses. If the cooperative do not have enough money, it is obvious that there is immediate payment. This farmer will not come again to the cooperative, i.e., it has a negative influence on member's satisfaction.

Total Assets (TOTAL ASSETS): It is continuous variable that represents the amount of total asset each cooperative owned in which the farmhouse hold 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.

Total Livestock holding (TLU): This variable is a continuous variable and refers to the total number of livestock the household own in terms of TLU. It is assumed that the household with larger TLU can have a better economic strength and financial position to purchase coffee grafting tools and hire labor during peak season. The member also transports their product using pack animals to the cooperative or else where. So, this variable is expected to influence members' satisfaction positively.

4. 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 Asset turn over ratios were used in the analysis to examine the performance of the cooperative organized in the Dale district. In the descriptive statistics mean, percentage, standard deviation, and T-test were employed. Econometric model were employed to identify the factors that influence the members' satisfaction on the over all 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 and institutional characteristics of the sampled household and/or members of the coffee marketing cooperatives organized in the study area.

4.1.1. Household characteristics

4.1.1.1. Age of households and proximity to different institutions

The age of the sampled household head ranges from 20 to 80 years. The average age of the sampled heads is about 44.6years. About 62.50% of the respondents were found in the most actively working age category (20-64 years).

Proximity to different marketing and information centers has an economic advantage especially in saving time and reducing labor cost that may used for important production and marketing activities. In the study area, the average distance from homestead to their cooperative (56.63 walking minute) was less than the distance from homestead to woreda market (141.79 walking minute). The other markets like Awasa are very far from household homestead that the farmers could not accessed without transportation. This situation has a positive impact to improve the participation rate of members in their cooperative in the future; in that, using cooperative as a market place actually saves time and decreases marketing costs.

Proximity to development center (34.83 waking minute) has also a great advantage for the farmers and even for the development agents to exchange valuable information and share knowledge between them.

Table 4 Distribution of sample farmers by age groups and distance from different institutions

Age category	Total sample (n=120)			
	N	Mean	Minimum	Maximum
20-45	75			
46-64	32			
>64	13			
Mean		44.64		
Distance from institutions (minute)	N	Mean	Minimum	Maximum
DFHWM *	120	141.79	15	310
DFHCO*	120	50.63	5	240
DFHDO*	120	34.83	5	240

Source: Computed from own field survey data.

*DFHWM: Distance From Homestead to Woreda Market.

*DFHCO: Distance From Homestead to Cooperative Office.

* DFHDO: Distance From Homestead to Development Office.

4.1.1.2. Agro-ecology and personal characteristics

Out of the 120 sampled respondents, 82.50% were dwelling in dega (semi-humid or midland) and 17.50 % were in lowland area. With regard to sex characteristics, 98.33% of the sampled households were male headed and 1.67% was female headed. This indicates that nearly the entire cooperative member households were male headed. Even though female's participation in the cooperative is encouraged, female involvement was very low, in the study area.

With respect to marital status, 97.50%, 1.70% and 0.80% of the respondents were married, single and divorced, respectively. Most of the sampled households in the study area follow Protestant religion (88.33%) and the rest of the respondents 5%, 3.33%, 1.67%, and 1.67% follow Orthodox, Muslim, Catholic and no religion, respectively. The culture and religion as

behavioral (the way a person(s) act(s)) and ideal action of the human being has an important influence to the strategic development endeavor, the above information could be utilized for the extension of organized and efficient marketing activities for the area in question (Table 2).

Table 5 Distribution of sample farmers by agro-ecology and personal characteristics

Characteristics	Total sample(n=120)	
	N	%
Agro-ecology		
Midland	99	82.50
Lowland	21	17.50
Sex		
Male	2	1.67
Female	118	98.33
Religion		
Orthodox	6	5
Muslim	4	3.33
Protestant	106	88.33
Catholic	2	1.67
No religion	2	1.67
Marital status		
Married	117	97.50
Single	2	1.70
Divorced	1	0.80

Source: Computed from own field survey data.

4.1.1.3. Family size and educational status of farm households

The average family size of the sample farmers was 4.68 persons, with maximum and minimum family size of 12 and 1 person respectively. Out of the total family members (562) of the sampled household, the number and proportion of children who were less than 15, economically active (15-64), and elderly (>64) years old was, 267 (47.51%), 292 (51.96%) and 3 (0.53%), respectively.

As it is observed on (Table 3), out of the sampled household, 15.83% were illiterate or had not received any type of education. The rest of the sampled households had attended elementary (56.67%), junior secondary (15.83%), and high school (11.67%).

Table 6 Characteristics of education status and family size of sample farmers

Total sample (n=120)			
Characteristics	Mean	Minimum	Maximum
Household family size	4.68	1	12
	N		%
Children<15 years	267		47.51
15-64 years	292		51.96
>64 years	3		0.53
Household educational status	N		%
Illiterate	19		15.83
Elementary (1-6)	68		56.67
Junior (7-8)	19		15.83
H/ School (9-12)	14		11.67

Source: Computed from own field survey data.

4.1.2. Land holding, work experience and asset ownership of farm households

As indicated in (Table 4), in the study area, the average land holding was 1.03 (ha.) per household. Based on sampled farm households, the proportion of farmers of land holding, less than 0.5(ha.), between 0.5 (ha) and 2.0(ha) and greater than 2.0(ha) were 15.83%, 70.83% and 13.33% respectively.

Out of sampled households, all were practicing farming activities, especially garden coffee farming system earning average annual income of around Birr1994. Some of the farmers reported, as they were practicing off and non-farm activities as the proportion of 38.33% and 11.67% 38.33% and earned an average annual income of Birr 475 and 196 respectively.

With regard to asset ownership, out of the sampled farmers the majority of them owned grass roofed house (92.50%), iron sheet roofed house (58.33%), grafting tools (56.67%), baskets

(79.83%) and digging tools (92.50%); as opposed to lower number of the farmers had been the owner of store/gottera (24.17%), mofer kenber (10.83%) and cart (1.67%).

Table 7 Distribution of sampled households, by the land holding, work experience, and asset ownership.

Land holding (ha)	Total sample(n=120)				
	N	%			
<=0.5	19	15.83			
>0.5-2.0	85	70.83			
>2.0	16	13.33			
Mean (ha)	1.03				
Farm experience	Yes		No		
	N	%	Income obtained (Mean)	N	%
Farming activities	120	100	1944.38	0	0
Off-farm experience	46	38.33	475	74	61.67
Non-farm experience	14	11.67	196	106	88.33
Asset ownership	N	%	Value of assets in birr (Mean)	N	%
Grass roofed house	111	92.50	912	9	7.50
Iron sheet roofed house	70	58.33	4930	50	41.67
Grafting tools	68	56.67	14	52	43.33
Baskets	95	79.83	7	25	20.83
Digging tools	111	92.50	33	9	7.50
Mofer kenber	13	10.83	7	107	89.17
Cart	2	1.67	-	118	98.33
Store/gottera/	29	24.17	/12/	91	75.83

Source: Computed from own field survey data.

4.1.3. Livestock holdings

This is the total number of livestock holding of the household measured in Tropical Livestock Unit (TLU). Livestock are farmers' important sources of income, food and drought power for crop cultivation and transportation. Among 120 sampled households, the average livestock holding was 3 TLU. Except cow (2.29 cows/person) and poultry (3.48 poultry /person) all the other livestock holding on average were less than one per person. There is no any horse owned by the sampled household in the study area. It was also observed that in the study area, the cooperative members cultivate their farmland using digging tools (table 5).

Table 8 Distribution of sample households by livestock holdings

Particulars	Total sample (n=120) (Mean)	Minimum	Maximum	Average Price in Birr
TLU	3.00	-	-	-
Cow	2.29	0	8	731
Oxen	0.33	0	2	886
Heifers	0.38	0	5	450
Bulls	0.18	0	2	760
Calves	0.58	0	2	200
Mature Sheep	0.59	0	5	265
Mature Goat	0.13	0	4	120
Donkey	0.11	0	1	542
Horse	0	0	0	-
Mules	0.01	0	1	-
Poultry	3.48	0	30	14.50
Bee colony	0.08	0	7	35.46

Source: Computed from own field survey data.

4.1.4. Major crops produced and farming system of households

As presented in table 6, in the study area, coffee is the dominant crop produced and the basis of livelihood. Every farmer was cultivating in his garden followed by enset (false banana). Empirically, the sampled farmers confirmed that together with the major crop Coffee (0.55ha), they were also producing other products like Enset (false- banana) (0.29 ha), Maize (0.12ha), Fruits (0.05ha), Chat (0.019ha) and others (0.003ha).

About 80.83% of the farmers in the area were practiced intercropping haricot bean (45%), enset (29.17%), and peas (25.83%) with coffee. The reason of intercropping was reported as for consumption purposes (95.83%) and because it helped them to produce more coffee (4.17%). Production of coffee in the study area was undergone using shade trees. Out of the consulted farmers (79.17%) of them reported as they were using shade trees and the types of trees used were Enset (20.83%), Wanza (10.83%), and both of them (78.34%).

Either to replace the old coffee tree or to expand coffee plantation farmers tends plant new coffee seedlings. In the study area, 68.33% of the sampled farmers were planted coffee seedlings and the sources of seedlings were from both farmers' own nursery (57.31%), from market (36.59%) and from woreda bureau of agriculture and rural development (5%).

Table 9 Area of major crops and of sample farmers and farming practices

Types of crops	Total sample (n=120) Mean (ha)		Standard Deviation	
Coffee		0.55		0.396
Enset(False banana)		0.29		0.263
Maize		0.12		0.177
Fruits		0.05		0.132
Chat		0.019		0.044
Others		0.003		0.045
Characteristics		Yes		No
Respondents response for Practicing intercropping with coffee	N	%	N	%
	97	80.83	23	19.17
Crops intercropped		N		%
Haricot bean		54		45
Enset (false banana)		35		29.17
Peas		31		25.83
Reason for intercropping		N		%
Producing for consumption		115		95.83
Helps to produce more coffee		5		4.17
Shade tree	N	%	N	%
Practicing shade for coffee production	95	79.17	25	20.83
Trees or crops used for shade tree		N		%
Enset		25		20.83
Wanza		1		0.83
All the above trees		94		78.34
Coffee plantation activities	N	%	N	%
Seedling Planting (Coffee)	82	68.33	38	31.67
Source of seedling		N		%
Own nursery		47		57.31
Market		30		36.59
Bureau of Agriculture		5		6.10

Source: Computed from own field survey data.

In solving production and marketing problems of the farmers, the government employed extension agents to serve around the farming area. Extension and education provide skilled human resources that are needed to enhance the technical capacity of farmers and other system actors, and otherwise stimulates innovation processes in agriculture. Like the research system, Ethiopia's agricultural extension and education systems has experienced a growth in funding since the early 1990s and several structural transformations (Berhanu, *et al*, 2005). However, in the survey area, the majority of sampled farmers (69.17%) reported as they faced production problems. Most of the respondents (95%) in fact had been contacted extension workers in different time schedules. The majority of the farmers reported as they were contacted the extension agent weekly (75%). The rest had a chance to contact

extension agents only monthly (18.34%), twice in a year (3.33%) and once in a year (3.33%). The extension advices were geared to largely in improving coffee production and productivity such as coffee pruning (40%), grafting (10.83%), and post harvest management (15%). The respondents were also asked whether the extension advice was adequate or not, and the majority of them (75%) replied as it was adequate even if they faced production problems (Table 7). This shows that, there is lack of awareness to the side of the farmers, as to how they can use the extension agents to solve their production as well as marketing problems.

Table 10. Distribution of sampled households by production problem and extension services

Particulars	Total sample (n = 120)			
	Yes		No	
	N	%	N	%
Is there a production problem?	83	69.17	37	30.83
Types of production problem	N		%	
Land scarcity	102		84.90	
Frost	2		1.70	
Erosion/run-off	2		1.70	
Coffee Berry Disease (CBD)	6		5.00	
Fertilizer shortage	8		6.70	
Chemical shortage	0		0.00	
Increase in the price of inputs	0		0.00	
Is there extension contact?	114	95.00	6	5.00
Frequency of extension contact	N		%	
Weekly	90		75.00	
Monthly	22		18.33	
Twice in a year	4		3.33	
Once in a year	4		3.33	

Source: Computed from own field survey data.

As it is shown in Table 8, the average yields of red cherry and dried cherry for the sampled farmers was a 7.48 and 1.93 quintal respectively. These shows, the sample farmers were producing more of red cherry in the study area. Even though, the yield of dried cherry was lower than red cherry, its price (Birr306.35/qt) was higher than that of red cherry (Birr208.50/qt). Respondents were asked whether they have applied chemical fertilizer in the year 2004/05. All of them were not used for their coffee production, but some of them (5%) were applied chemical fertilizer (DAP and Urea) for maize production in the study area. This confirms that the coffee produced in the study area was naturally organic. The respondents were reported that, instead of chemical fertilizer they have used cultural practices like plant

residue (9.47%), animal dung (4.21%) or both (86.32%) for coffee production. Respondents were asked whether they were storing their coffee, which forms of coffee, how they were storing and what advantage did they obtain from storing practices. Among the respondents, only 41.67% of them were stored their coffee and they stored both forms of coffee as the proportion of dried coffee (88%) and red cherry (12%). The respondents also confirm that the time elapse of storing for red cherry was less than one day and it was extended for more than three months for dried cherry. The systems utilized for storing were either storing the coffee beans by filling in the bag (83.67%) or storing simply the beans in the store (16.33) it was reported. The reason of storing coffee was aimed to obtain higher price in later time (66%), absence of demand (2%), saving purpose (22%) and for combined reason mentioned above (10%). The respondents were asked if they were sold as they expected and only 20.83% of them were soled as they expected.

Table 11 Major crops productivity and management of sample farmers

Characteristics		Total sample (n=120)			
Types of crops		Yield (qt)/ha (Mean)		Price of crops/qt	
Coffee	Red cherry (before pulping)	7.483		208.50	
	Dried cherry (before hulling)	1.925		306.35	
Enset (False banana)		35.15		106.20	
Maize		4.06		113.10	
Fruits		0.875		-	
Chat		0.22		-	
Roots		0.56		-	
Application of chemical fertilizer/		Yes		No	
Cultural Practice		N	%	N	%
Did you apply chemical fertilizer?		6	5	114	95
Did you use cultural practice?		92	76.67	28	23.33
Kinds of cultural practice used		N		%	
Plant residue		9		9.47	
Animal dung		4		4.21	
Animal dung and plant residue		82		86.32	
Respondents major coffee characteristics and management		Yes		No	
		N	%	N	%
Uniformity of maturity		7	5.83	113	94.17
Storing		50	41.67	70	58.33
Form of coffee stored		N		%	
Dried cherry		44		88.00	
Both types		6		12.00	
Way of storing = In the store with bag		41		83.67	
= In the store simply the beans		9		16.33	
Reason of storing = expecting higher price		33		66.00	
= Lack of market demand		1		2.00	
= Saving purpose		11		22.00	
= Expecting one of the above mentioned		5		10.00	
Did you sell at higher price as you expected		Yes		No	
		N	%	N	%
		25	20.83	95	79.17

Source: Computed from own field survey data.

Even though, credit is very important for production and marketing activities for farmers who cannot finance by themselves, the demand of credit in among the sampled farmers in the study area was low. About 39% of the respondents were in need of credit and only 13.33% credited. Being the dominant source of credit was friends/relatives (81.25%), the other sources of credit were Commercial bank (6.25%) and Micro finance institution (Omo micro finance) (12.50%). The respondents were also asked for the purpose of credit they have demanded or taken. About 50% said to purchase farm inputs and the rest said to purchase animals (6.25%), paying labor cost (12.50%) and to purchase seedlings (31.25%) (Table 9).

Table 12 Distribution of sampled farmers by demand and utilization of credit

Particulars	Total sample (n = 120)			
	Yes		No	
	N	%	N	%
Credit demand	39	32.50	81	67.50
Take credit	16	13.33	104	86.67
Sources /credit	N		%	
Commercial Bank	1		6.25	
Micro finance institution	2		12.50	
Friends/Relatives	13		81.25	
Purpose of credit	N		%	
Farm input purchase	8		50.00	
Animal (ox, cow) purchase	1		6.25	
Paying for labor cost	2		12.50	
Seedlings purchase	5		31.25	

Source: Computed from own field survey data.

Grading of coffee is one of the methods of increasing the price of it by sorting the product (coffee) in to different quality levels. High quality coffee sellers eventually are rewarded through price difference paid by purchasers than low quality coffee sellers.

Respondents in the study area were asked about the grading and grading systems of their coffee. About 74.17% of respondents were sorted/graded their coffee. They were utilized various indicators for grading of coffee such as; size, color, extent of damage, cleanness, maturity and uniformity, for both red and dried cherry. The farmers were also asked about the demand of coffee in the area comparing red and dried cherry, and they respond that red cherry

was more demanded than the dried one. About 85% the respondents said red cherry has more demand than dried cherry (1.67%) and some of the farmers (13.33%) were reported as both form of coffee demanded equally. As to the packing material used to bring the coffee to the market was by sisal sack (84.17%), plastic sack (13.33%) and basket (2.50%) (Table 10).

Table 13 Distribution of respondents by grading and other marketing and extension services

Characteristics	Total sample (n = 120)			
	Yes		No	
	N	%	N	%
Grading Practice	89	74.17	31	25.83
Demand of coffee forms	N			%
Red cherry	112			85.00
Dried cherry	2			1.67
Both	16			13.33
Packing materials used	N			%
Sisal sack	101			84.17
Plastic sack	16			13.33
Basket	3			2.50

Source: Computed from own field survey data.

Marketing problems are factors that cause market inefficiencies. Market inefficiencies will lead to hosting unsatisfied customers, or members for the cooperatives, and high marketing costs. In this study, sampled farmers were asked about the presence and types of marketing problems. Out of the total respondents, 90% of them reported they faced marketing problems. The types of marketing problems they faced were reported as from the most to the least problematic factor was observed as under. Coffee price fall (87.50%), transportation (41.67%), theft (38.33%), price setting (27.97%), credit (26.67%), market information (24.17%), scaling/weighing (23.33%), operational/management know-how (17.50%), loan repayment (8.33%), packing materials (1.67%), storage (1.67%), grading system (1.67%) and double taxation (1.67%) were subsequent marketing problems of the farmers in the study area (Table 11). The result points out that, the dominant problems rest on the price fall and instability of coffee price followed by transportation that expressed, as it was unavailable and/or expensive. Theft and price setting problems was also the next prevailing problems that was expressed by the farmers as matured coffee cherries were collected by thieves during the night and price was decided without the knowledge of the producers respectively.

Table 14 Distribution of sampled farmhouse holds by coffee marketing problems

Particulars	Total sample (n=120)			
	Yes		No	
	N	%	N	%
Is there marketing problems	108	90.00	12	10.00
Types of marketing problem faced	N	%	N	%
Transportation	50	41.67	70	58.33
Credit	32	26.67	88	73.33
Packing materials	2	1.67	118	98.33
Market information	29	24.17	91	75.83
Storage	2	1.67	118	98.33
Grading system	2	1.67	118	98.33
Loan repayment	10	8.33	110	91.67
Theft	46	38.33	74	61.67
Operational/management know how	21	17.50	99	82.50
Labor shortage	0	0	120	100
Coffee price fall	105	87.50	15	12.50
Double tax problem	2	1.67	98.33	
Price setting	33	27.97	85	72.03
Scaling/weighing	28	23.33	92	76.67

Source: Computed from own field survey data.

As indicated below in Table 12, almost all (99.17%) of the respondents sell their red cherry immediately after harvest. This is because of the nature of the form of coffee that red cherry should be pulped with in 12 hours after harvest. On the other hand, in the case of dried cherry the majority of the farmers sold their coffee between 1 to 3 months after harvest (Table 12).

Table 15 Distribution of sampled households by coffee marketing time

Particulars	Total sample (n = 120)	
	N	%
Time of sale of coffee(Red cherry)		
Immediately after harvest	119	99.17
After 7-15 days	1	0.83
Time of sale of coffee (Dried cherry)	N	%
Immediately after harvest	3	4.62
After 7-15 days	7	10.77
After a month	12	18.46
After two month	10	15.38
After 3 month	13	20.00
After 4 month	9	13.85
After 5 month	6	9.23
After 6-12 month	5	7.69

Source: Computed from own field survey data.

According to Anderson and Vincze (2000), many experts believe that the distribution decision is the most important marketing decision a company can make. The design of an organization's distribution system is a key factor in creating customer value and in differentiating, one company's offering from that of another.

As the starting point for the distribution of coffee from producer to final consumer, respondents were asked where they were selling their different forms of coffee. The majority of them sold red coffee to coffee marketing cooperatives (64.17%) as a market place and other respondents were sold to different market places as follows: village market (collectors) (30.83%), Yirgalem (woreda market (0.83%) and other markets (4.17%). With respect to dried cherry, the majority i.e., about 70.83% of the respondents sold at yirgalem (woreda market) to different marketing agents. The remaining farmers sold to village market (collectors) (16.67%), Awasa (1.67%) and other markets (10.83%).

With respect to whom they are selling among different marketing agents (intermediaries), the sampled household reported that about 75.84% of them sold to the cooperatives. The remaining 18.33%, 3.33% and 0.83% sold to Local collectors, Wholesalers/suppliers and Government organization respectively. The rest of the respondents (1.67%) respond, as they

did not sell red cherry at all. The participation of sampled farmers in selling dried cherry was lower than from that of red cherry. About 46.67% of the farmers in the study area did not sell dried cherry at all in the production year (2004/05). The remaining respondents sold to Local collectors (18.33%), wholesalers (21%), retailers (8.33%), and consumers (5%).

In the assessment of the advantages of the farmers obtained when they sold red cherry, about 14.17%, 10%, 1.67%, 1.67%, and 72.50% were privileged in; lesser transport cost, give higher price, scaling fairness, transport availability and securing secondary payment respectively. On the other hand the advantage attained when they sold dried cherry, were similarly observed as lesser transport cost (19.70%), give higher price (36.36%), scaling fairness (6.06%), transport availability (1.52%), has secondary payment (18.18%), sustainable customer (13.64%) and other advantage (4.55%). From this result it was learned that, price of dried coffee has been considered as a higher valued advantage by the sampled farmers (Table 13).

Table 16 Distribution of sampled households by coffee marketing channel and related characteristics

Particulars	Total sample (n= 120)	
	N	%
Where do you sale red cherry		
Village market	37	30.83
Yirgalem (woreda market)	1	0.83
Cooperative	77	64.17
Other market	5	4.17
Where do you sell dried cherry		
Village market	20	16.67
Yirgalem	85	70.83
Awassa	2	1.67
Other market	13	10.83
To whom did you sell red cherry		
Local collectors	22	18.33
Wholesalers/suppliers	4	3.33
Cooperatives	91	75.84
Government organization	1	0.83
No participation	2	1.67
To whom did you sell dried cherry		
Local collectors	22	18.33
Wholesalers/suppliers	26	21.00
Retailers	10	8.33
Consumers	6	5.00
No participation	56	46.67
Advantage of selling to buyers (Red cherry)		
Lesser transport cost	17	14.17
Give higher price	12	10.00
Scaling fairness	2	1.67
Transport availability	2	1.67
Has secondary payment	87	72.50
Advantage of selling to buyers(Dried cherry)		
Lesser transport cost	13	19.70
Give higher price	24	36.36
Scaling fairness	4	6.06
Transport availability	1	1.52
Has secondary payment	12	18.18
Sustainable customer	9	13.64
Other advantage	3	4.55

Source: Computed from own field survey data.

Terms of sale are referred to the way at which the farmer's produce, coffee, was exchanged in terms of cash or credit basis. In the study area, 60%, 13.33% and 26.67% of the respondents sold their red cherry in terms of cash, credit and both terms respectively. In the case of dried cherry, almost all of the respondents sold in terms of cash (96.66%). In the marketing activities of coffee brokers and commission agents play a facilitating and connecting role between sellers and buyers as discussed under.

Brokers

Brokers specialize in bringing the buyers and sellers together. They disseminate price and other information to the market participants and playing the leading role in influencing coffee trade and price formation. This marketing agent plays an important role in the process of arbitrage farm gate (village) markets, for farmers and wholesalers.

Commission Agents

Commission agents are buyers from the farmers or woreda markets. Without investing their own finance, they buy on behave of wholesalers and some of them may have their own capital to collect coffee from the farmers to deliver for the wholesalers/suppliers and/or to the cooperatives.

In the study area, respondents sold red cherry and dried cherry both directly to the purchaser (87.50), through broker (1.67) and through commission agents (10.83) for red cherry and directly to the purchaser (74.24), through broker (7.58) and through commission agents (18.18) for red cherry respectively (Table 14).

Table 17 Distribution of sampled households by terms and system of sale of coffee to the purchaser.

Particulars	Total sample (n = 120)	
	N	%
Terms of sale by form of coffee		
Terms of sale of red cherry		
On cash	72	60.00
On credit	16	13.33
Both	32	26.67
Terms of sale of dried cherry	N	%
On cash	116	96.66
On credit	2	1.67
Both	2	1.67
System of coffee sale	N	%
How do you sale red cherry		
Directly to the purchaser	105	87.50
Through broker	2	1.67
Through the commission agent	13	10.83
How do you sale dried cherry	N	%
Directly to the purchaser	49	74.24
Through broker	5	7.58
Through the commission agent	12.00	18.18

Source: Computed from own field survey data.

As described in table 18 about 51.67% of the farmers in the study area faced problems in finding buyers. More over, 30.83% and 55.83% of the sampled members didn't know near by market and central market price of coffee before they have sold respectively.

It was reported by 55% of the respondents that the price of coffee in the study area at the same market and in the same day was not uniform. As the response of the respondents, the reason for difference in the price of coffee was: color difference (1.67%), Quality difference (94.17%) and Farmer's negotiating capacity (4.17). It was observed that, if coffee was not sold, respondents had taken different actions in selling their coffee such as, carried their product back home (42.50%), transport to another market (6.67%), sold on another market day (40%) and sold by lower price (10.83%).

The majority of farmers asked in the study area were price takers; i.e., the price setter was buyer (62.50%) and only 18.83% of the respondents were in a position to decide on price of

coffee. The majority of the respondents (63.33%) reported as they were received the price of their red cherry as soon as they sold. But, some of them said that they have been receiving the money after sell other day after sale (25%) and after some hour (11.67%).

With regard to the source(s) of price information, 13.33%, 78.33%, 0.83%, 6.67% and 0.83% of the respondents had used traders, radio, extension agents, surrounding farmers and personal observation as the source(s) of coffee price information, respectively. The result depicts, the majority of the farmers had obtained price information of coffee before they sold.

Table 18 Distribution of sampled households by demand, coffee price information and related characteristics

Particulars	Total sample (n = 120)			
	Yes		No	
	N	%	N	%
Coffee demand and price information				
Did you face problem of finding buyer?	62	51.67	58	48.33
Knowledge of near by market price	83	69.17	37	30.83
Knowledge of central market price	53	44.17	67	55.83
Uniformity of price at the same market day	54	45.00	66	55.0
Reason for price difference in the same market	N		%	
Color difference	2		1.67	
Quality difference	113		94.17	
Farmer's negotiating capacity	5		4.17	
Action taken when coffee was not sold	N		%	
Took back to home	51		42.50	
Took to another market	8		6.67	
Sold on other market day	48		40.00	
Others (decrease price)	13		10.83	
Who set the selling price	N		%	
My self	22		18.33	
Buyers	75		62.50	
Set by demand and supply	20		16.67	
Negotiation	3		2.50	
When did you receive your money you sold	N		%	
(Red cherry)				
As soon as I sold	76		63.33	
After some hours	14		11.67	
Other day after sale	30		25.00	
When did you receive your money you sold	N		%	
(Dried cherry)				
As soon as I sold	36		54.55	
After some hours	26		39.39	
Other day after sale	4		6.07	
What was the source of information	N		%	
Traders	16		13.33	
Radio	94		78.33	
Extension agent	1		0.83	
Surrounding farmers	8		6.67	
Personal observation	1		0.83	

Source: Computed from own field survey data.

4.1.5. Cooperatives management and members' participation

The management of cooperative is composed of three separate and distinct groups: members, directors and managerial staff. It requires the active participation of all three categories 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 others 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 association has to operate to carry out most effectively the expected wish of the members. If these procedures are kept, the members' satisfaction will maximized and minimized otherwise leading them to dissatisfy.

In this study, out of 120 sampled members 72 (60%) of them reported that they were satisfied in their cooperative services while the rest 48 (40%) reported that they were dissatisfied. In the same way, the sampled household revealed that, their satisfaction and dissatisfaction on the overall performance of their cooperative was in the proportion of 47 (39.17%) and 73 (60.83%) respectively.

The member's view of satisfaction or dissatisfaction was assessed based on both the participation in the formulation and implementation of their cooperative policies and regulations as well as their cooperatives performance of service delivery efficiency. The survey result on the participation shows that on the average, 61.67%, 44.17% and 40.83% of the sampled farmers had participated in the election of directors, planning activities and approving annual audit reports respectively. This result indicates that the participation of members in their cooperative decision making activities was averagely low, especially in the planning of activities and approving the annual audit reports, which was below 50% in both cases (Table10). This shows that after nominating the cooperatives managing committee; the majority of cooperative members in the study area was inclined to run away from the

cooperative and was not controlling the physical and financial performances of the cooperatives. This situation opens the door for mismanagement of resources and lead to corruption. The neglect ion of members on the major cooperative decisions could result dissatisfaction to them and it will have a negative impact on the future development of cooperatives as a whole.

Table 19 Distribution of sample farmers by cooperative participation

Table 19. Distribution of sample farmers by cooperative participation

Respondents response to wards participation	Total sample (n = 120)					
	Participation in election of Directors		Participation in Planning of activities		Participation in Approving annual audit report	
	N	%	N	%	N	%
Yes	74	61.67	53	44.17	49	40.83
No	46	38.33	67	55.83	71	59.17

Source: Computed from own field survey data.

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, genuine scaling, accessibility to sell produce, storage services, immediate payment, management/ expert advise and activities in environmental services. Concerning to cooperative services satisfaction analysis in this study, the following was observed. Observation was analyzed by summing up very satisfied, moderately satisfied and satisfied categories as satisfied and dissatisfied / very dissatisfied as dissatisfied. Out of the sampled members in the study area, the result revealed that, 73.33%, 60.83%, 12.5%, 40%, 23.33%, 66.50%, 63.33%, 66.67%, 34.16%, 68.34%, 46.66% and 51.50% were satisfied on payment of patronage refund, price information, provision of credit, transportation, training Better price than other traders, genuine scaling, accessibility to sell produce, storage services, immediate payment, management/ expert advise and activities in environmental services availed by their cooperatives respectively. This revealed that credit, transportation, training, storage, management / expert advice and activities in environmental development services dissatisfied the greater number of the members. Detailed information displayed bellow in (Table 20).

Table 20 Distribution of the sample farmers by the satisfaction or dissatisfaction of services rendered from their cooperative.

Cooperative Services to members	Respondents response to wards degrees of service satisfaction or dissatisfaction									
	Total sample (n=120)									
	Degrees of satisfaction					Degrees of dissatisfaction				
	Very satisfied		Moderately satisfied		Satisfied		Dissatisfied		Very dissatisfied	
	N	%	N	%	N	%	N	%	N	%
Patronage refund	25	20.83	28	23.33	35	29.17	20	16.67	12	10.00
Price information	7	5.83	28	23.33	38	31.67	26	21.67	21	17.50
Provision of credit	1	0.83	5	4.17	9	7.50	33	27.50	72	60.00
Transport service	10	8.33	11	9.17	27	22.50	39	32.50	33	27.50
Training service	2	1.67	7	5.83	19	15.83	44	36.67	48	40.00
Better price than other traders	36	30.00	20	16.67	25	20.83	30	25.00	9	7.50
Genuine scaling	20	16.67	24	20.00	32	26.67	30	25.00	14	11.66
Accessibility to sell produce	23	19.17	26	21.67	31	25.83	18	15.00	22	18.33
Storage services	4	3.33	23	19.16	14	11.67	35	29.17	44	36.67
Immediate payment	50	41.67	18	15.00	14	11.67	28	23.33	10	8.33
Management/ expert advise	8	6.67	16	13.32	32	26.67	26	21.67	38	31.67
Activities in environmental development	14	11.67	18	15.00	31	25.83	37	30.83	20	16.67

Source: Computed from own field survey data.

4.2. Financial ratio analysis

Financial ratios were calculated from the audit reports of the cooperatives. These ratios allowed to made judgments about the efficiency, return on key aggregates, and credit worthiness of cooperatives in question.

4.2.1. Efficiency ratios

In the study area, three cooperatives namely: Salakebado, Gorbe, and Hantete were not actively participated in the coffee marketing activities. They were reorganized in 2003/ 04 and lacks enough information for analysis.

The efficiency of each cooperative has been computed by their inventory turnover (cost of goods sold/inventory) and operating ratio (operating expense/revenue) based on their audit report in the year 2002/03 and 2004/05 production years. The average inventory turnover in 2002/03 was 109.97. This shows the average length of time a cooperatives keeps its inventory on hand. The largest inventory turnover was recorded by Shoye (150.69) followed by Bokaso (94.98) and Buabegedelo (62.20). On the other hand, the smallest inventory turnover was observed in Gane (1.30) followed by Megera (2.06) and Goida (2.33) (Table 18). As indicated above, Shoye has about 2.42 (365/150.69) and Gane has about 280.77 (365/1.30) days of inventory on hand at the end of year 2002/03 respectively. 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 2002/03 to 2004/05. 9 cooperatives had increased their turnover in the year 2004/05 as compared to year 2002/03.

As to operating ratio (operating expenses/revenue), the average operating ratio (in percent) was decreased over years, that the average operating ratio recorded in 2002/03 which was 1.79 has decreased to 1.41 in 2004/04 that shows increased efficiency of management to control operating costs and administrative expenses or else the cost of factors has decreased. According to Gittinger (1982), if an enterprise has a high operating ratio, say in the neighborhood of 90 percent, it may have difficulty making an adequate return. If it is absolutely low, say 50 percent, then some costs have likely been omitted or underestimated.

From the ratio analysis result, it was observed that, 3 cooperatives in the study area had above 90 percent operating ratio, namely: Wicho (790%), Gane (576%), and Megera (284%). On the other hand, 11 cooperatives had near and below 50 percent operating ratio and on average (operating ratio of 141%) the coffee marketing cooperatives were operated inefficiently.

Table 21. Efficiency ratios of the coffee marketing cooperatives

Name of Cooperatives	IT		OR	
	2002/03	2004/05	2002/03	2004/05
Goida	2.33	22.80	1.47	0.36
Gane	1.30	5.65	3.38	5.76
Salakebado	-	16.23	-	0.32
Gorbe	-	0.28	-	0.02
Shoye	150.69	14.32	7.8	0.69
Fero	12.17	10.05	7.52	0.44
Hunkute	35.04	2284.9	1.65	0.20
Wicho	26.89	0.76	2.22	7.9
Hantete	-	51.51	-	0.67
Kegie	24.65	5.21	0.06	0.46
Bokaso	94.98	21.84	0.49	0.53
Buabegedelo	62.2	3.03	0.37	0.37
Wenenata	8.78	6.93	0.38	0.36
Megera	2.06	13.26	0.14	2.84
Wayicho	23.66	5.69	0.41	0.25
Average	109.97	307.71	1.79	1.41

Source: Dale woreda coffee marketing cooperatives' audit report

IT: Inventory Turnover

OR: Operating Ratio

4.2.2. Income ratios

Because of their importance in income ratio analysis (Anderson and Vincz (2000) and Gittinger (1982), the author analyzed the profitability of the cooperatives, using the under discussed ratios.

4.2.2.1. Return on asset

This ratio determines the payback on assets used to operate the business by relating business to the assets required to produce them. For the coffee cooperatives, an investment of 1 birr in assets is required to generate the respective cents in profit for each cooperative listed in Table22. In 2002/03, the highest ratio was 3.63, which was scored by Wicho and the lowest was -1.77, which was scored by Weyinenata. In 2004/05, the highest ratio was 23.84, which was scored by Goida and the lowest was -0.26, which was scored by Gane. The average profitability of the coffee cooperatives under investigation in 2002/03 was -1.19 out of which 12 cooperatives were not profitable. The average profitability of the coffee cooperative under investigation in 2004/05 was 1.69 out of which 11 were not profitable. The two years average profitability ratio was -0.15.

The profitability ratios were very low and were below the borrower's interest rate (7.5%) and this shows that there were either low sales revenues or too excessive or non-productive assets

4.2.2.2. Return on sales

The return on sales (net income/revenue) was normally computed as percentage terms. The lower the return on sales-hence, the operating margin-the greater the sales that must be made to make an adequate return on investment (Gittnger, 1982). This ratio represents the percentage of each dollar of revenue that the cooperative retains as profit.

As shown in table 19 below, in the study area, the averages return on sales in the cooperatives was 0.9 and 0.19 in 2002/03 and 2004/05 respectively. Larger number of cooperatives in the study area, had below 50 percent return on sales i.e., only 2 in 2002/03 and 5 in 2004/05 cooperatives were above 50 percent return on sales. This result reveals that there was inadequate profit retained in the cooperatives enough to made patronage refund for their members and met other obligations.

4.2.2.3. Return on equity

It was also expressed in terms of percentage. It is the ratio of net income over equity or the payback on equity. According to Anderson and Vincz (2000), a larger ratio is related to effective use of the owners' capital.

Among the cooperatives under consideration, only 2 in the year 2002/03 and 4 in 2004/05 cooperatives were above 50 percent concerning pay back on equity. On average, there was a progressive trend referring to the year 2002/03 (-5.77)

Table 20 Income ratios of the coffee marketing cooperatives

Name of Cooperatives	ROA		ROS:		ROE	
	2002/03	2004/05	2002/03	2004/05	2002/03	2004/05
Goida	0.10	23.84	0.31	5.54	0.27	3.39
Gane	-0.27	-0.26	-2.35	-4.71	3.38	0.36
Salakebado	-	0.27	-	0.71	-	0.32
Gorbe	-	0.26	-	0.16	-	2.53
Shoye	0.08	0.15	2.34	0.32	0.08	0.18
Fero	0.13	0.29	0.26	0.66	0.02	0.49
Hunkute	-0.06	-0.12	-0.65	-0.20	-0.041	0.21
Wicho	3.63	0.21	2.21	1.60	3.37	1.58
Hantete	-	0.15	-	0.34	-	0.54
Kegie	-0.15	0.03	-1.05	0.14	-44.21	0.22
Bokaso	-0.08	0.06	-0.34	-0.72	-0.02	-0.72
Buabegedelo	-0.11	0.11	1.60	-0.05	0.06	0.01
Wenenata	-1.77	0.06	-0.64	0.18	-20.13	0.08
Megera	-0.19	0.55	-0.29	-1.62	-2.90	1.23
Wayicho	-0.02	0.15	-0.06	0.53	-0.02	0.31
Average	-1.19	1.69	0.09	0.19	-5.77	0.72

Source: Dale woreda coffee marketing cooperatives' audit report

ROA: Rate of Return On Asset

ROS: Rate of Return On Sales

ROE: Rate of Return On Equity

4.2.3. Creditworthiness Ratios

The purpose of creditworthiness ratios is to enable a judgment about the degree of financial risk inherent in the enterprise before undertaking a project. Here, current ratio and debt-equity ratio were employed to analyze the coffee marketing cooperatives performance in their endeavor to satisfy their members.

4.2.3.1. Liquidity analysis

A ratio of less than 1.0 indicates that liabilities exceed current assets and that if the current liabilities were called; the cooperative cannot readily pay to the creditors in the short run. According to (Anderson and Vincze, 2000) the benchmark ratio is 2:1. Therefore, for the five cooperatives in this study, the current ratios were below the benchmark. In 2002/03 the average current ratio for the 15 coffee marketing cooperatives was 2.06 (Table 5). The highest ratio was 8.14 scored by Wicho and the lowest was 0.07 that was scored by Kege. In this year the performance of the coffee cooperatives in the study area was good to provide cash for their members.

In 2004/05 the average current ratio for all coffee marketing cooperatives under investigation was 1.27 (Table 23). The highest ratio was 3.34 scored by Megera and the lowest was 0.14, which was scored by Gane. This shows that, in the respective year, the cooperatives capable to satisfy their members' cash demand except Gane. As it was observed the performance of the cooperatives, with respect to their liquidity ratio on average decreased in 2004/05 as compared to the 2002/03. This implies their ability to satisfy their members was decreased with respect to provision of credit in cash and settlement of current debt of the cooperative. As it is revealed in table 23, one cooperative (Buabegdelo) in the study area cleared its debt in 2003/03 and 2004/05 production year.

Table 21 Credit worthiness ratios of the coffee marketing cooperatives

Name of Cooperatives	CR	CR	DR	DR
	2002/03	2004/05	2002/03	2004/05
Goida	3.96	2.47	0.26	0.43
Gane	0.06	0.14	2.31	1.84
Selakebado	-	1.10	9.18	9.18
Gorbe	-	1.11	8.64	8.64
Shoye	3.12	3.29	0.13	0.25
Fero	2.76	1.92	0.15	0.37
Hunkute	0.64	0.77	2.23	10.68
Wicho	8.14	2.52	0.97	14.88
Hantete	----	1.24	----	4.13
Kege	0.07	0.42	3.41	8.83
Bokaso	0.48	1.32	1.73	1.55
Buabegedlo	----	----	0	0
Weyinenata	2.29	1.51	0.12	0.73
Megera	0.09	3.34	16.65	0.25
Wayicho	10.18	1.20	0.04	1.07
Average	2.06	1.27	3.05	2.47

Source: own data computation

ROA: Return on Asset

CR: Current Ratio

DR: Debt-equity Ratio

4.2.3. Financial leverage management analysis

Based on debt ratio, the cooperatives under investigation in the district use financial leverage and on the average the creditors financed them in greater proportion. In 2002/03, the average debt-net worth ratio was 3.05 (Table 23). In 2004/05 the average debt-net worth ratio decreased by 81% as compared to 2002/03.

The two years average debt-net worth ratio was more than 100% implying that if not it be needed for more profitable undertakings, no more credit was required. It has a negative impact to the future credit provision by the creditors.

The other performance indicator is profit margin of the cooperatives in the study area. From each cost structures of the different levels of the cooperatives gross margin and net margin was calculated. From the results of computation, it is observed that the net margin of primary cooperatives (1.44 birr /kg) was found to be less than the net margin of the union (2.03 birr/kg) as exporter. Taking the F.O.B. price as common denominator, the gross marketing margin for primary cooperatives was 15.01% which was less than that of the union (25.33%) and the producers share was 59.66%.

4.3. Results from Probit Econometric Model

Probit models were estimated using STATA program (version 9) for the analysis of the determinants of the satisfaction of members of the coffee marketing cooperatives in the study area against socio-economic and institutional variables.

4.3.1. Factors influencing the satisfaction of members' of coffee marketing cooperatives.

The estimates of parameters of the variable expected to influence the satisfaction of members of coffee marketing cooperatives on Table 24-31 and the influences of these variables on each dependent variable are discussed below.

4.3.1.1 Overall Member Satisfaction

With reference to the satisfaction of members on the overall performance of coffee marketing cooperatives as dependent variable, the result of the model analysis showed that 4 variables were found to be significant as discussed below.

Age of the household (AGE): 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 and Zehirul (1997), Zemen (2005). Generally, the peasant does not like the idea of producers' 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 producers' cooperatives were brought to an end by their own members (yeshitla and Zehirul, 1997).

In this study the result illustrates that, other things being constant, as the age of the farmers increases by one year, the satisfaction of members of cooperatives in the study area decreases marginally by 0.80%. 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 time; older members were less satisfied than young members on the overall performance of their cooperatives and because of the above 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 members decreases by 1.8%.

Terms of payment for red cherry by the cooperatives (TERMPAYRED): It influenced negatively at significance level of 1%. It means payment style of either in cash or credit terms. The result implies that terms of payment for red cherry imposes the satisfaction of members on the overall performance of the cooperatives negatively. Coffee Marketing Cooperatives in the study area, paid price for members' coffee price after they sold to and received from the union. It takes long time to be available for settlement of immediate members' expenses. In accordance to this situation, the result revealed that, as the

cooperatives delay the payment had not been performed in accordance to the interest of the members, the satisfaction of members of the cooperatives decreases by 53.53%.

Terms of payment for dry cherry by the cooperatives (TERMPAYDRY): It influenced positively at 10% level of significance. In this study, about 96.67% of the household were sold their dry cherry in cash terms for private traders and there was no complain about the terms of payment by the dry coffee sellers about the overall performance of the cooperatives.

Table 23 Maximum Likelihood Estimates of Probit Model for overall member satisfaction

Explanatory variables	Estimated coefficients	Standard errors	T-ratios	Coefficient Marginal after (dy/dx	for effect svyprobit
Constant	1.563332	1.356195	1.15	-	
Edulelhh	-0.0690142	0.0576473	-1.20	-0.0261685	
Age	-0.0207983**	0.0116742	-1.78	-0.0078862	
Fsize	-0.1790159**	0.0953997	-1.88	-0.0678785	
Areacoffha	0.5309941	0.6376796	0.83	0.20134	
Landha	-0.0269552	0.242885	-0.11	-0.0102208	
Totnomem	-0.0003718	0.0007931	-0.47	-0.000141	
Totasset	5.81e-09	1.91e-07	0.03	2.20e-09	
TLU	0.0781915	0.0723237	1.08	0.0296483	
Tempayred	-1.067578*	0.3699095	-2.89	-0.3987058	
Termpaydry	1.166221**	5272029	2.21	0.3155414	

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

4.3.1.2 Member Satisfaction on services provided by cooperatives taken as total.

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 24). 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 24 Maximum Likelihood Estimates of Probit Model for the determinants of member satisfaction on services p provided by cooperative

Explanatory variables	Estimated coefficients	Standard errors	T-ratios	Coefficient for Marginal effect after svyprobit (dy/dx)
Constant	2.115048	1.479844	1.43	-
Edulelhh	-0.0208869	0.055394	-0.38	-0.0080693
Age	-0.0013324	0.0111095	-0.12	-0.0005148
Fsize	-0.3068173*	0.0941236	-3.26	-0.1185344
Areacoffha	0.2788774	0.6792259	0.41	0.1077402
Landha	-0.3941043	0.2650464	-1.49	-0.1522565
Totnomem	-0.0000151	0.000798	-0.02	-5.85e-06
Totasset	-8.25e-08	2.05e-07	-0.40	-3.19e-08
TLU	0.115412	0.0745103	1.55	0.0445877
Tempayred	-0.5352803	0.3467417	-1.54	-0.201372
Termpaydry	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 coffee in the coffee marketing cooperatives as dependant variables, the result of the model analysis showed that nine variables were found to be significant as discussed here under (Table 25).

Educational background of the household (EDUCLELHH), age of the household (AGE), family size of the household (FSIZE), land holding of the household (LANDHA), total number of members in the cooperatives(TOTNOMEM), and terms of payment for red cherry

(TERMPAYRED) influenced the price of coffee in the coffee marketing cooperatives negatively at statistical significance level of 5%, 10%, 5%, 10%, 5%, 5%, 10%, 1% and 5% respectively. From model analysis the marginal effects revealed that as the above variables increases by one unit, the satisfaction of members on the price of coffee in the coffee marketing cooperatives decreases marginally by 3.8%, 0.65%, 7.7%, 16.6%, 0.10% and 32.67%, respectively. The result revealed that the coffee marketing cooperatives were not providing competitive price as evaluated by various socio-economic and institutional variables. The result approved that one of the reason for the out flow of members from their cooperatives in selling their coffee to private traders was caused by the uncompetitive price provided by the cooperatives.

The rest of the variable that are, total asset holding of the cooperatives (TOTASSET), livestock holding of the household equivalent to tropical live stock unit (TLU), and terms of payment for dry cherry by the cooperatives (TERMPAYDRY) influenced the price of coffee in the coffee marketing cooperatives positively at statistical significance level of 5% for each of the variables respectively. This discloses, as the cooperatives total asset increases the paying ability of them increases as it was discussed above and the positive relationship between price of coffee marketing cooperatives and terms of payment for dry cherry. That implies, as the total asset is composed of current asset (cash), the increment of total asset influences the paying ability of the cooperative positively and there by price of coffee marketing in the coffee marketing cooperatives.

Table 25 Maximum Likelihood Estimates of Probit Model for member satisfaction on better price services provided by cooperative

Explanatory variables	Estimated coefficients	Standard errors	T-ratios	Coefficient for Marginal effect after svyprobit (dy/dx)
Constant	7.456529	2.224452	3.35	-
Edulelhh	-0.1239758***	0.0616921	-2.01	0.0383606
Age	-0.0208764***	0.0105877	-1.97	-0.0064596
Fsize	-0.2485355***	0.1030176	-2.41	-0.769018
Areacoffha	1.195699	0.7586458	1.58	0.369973
Landha	-0.5353682**	0.2685132	-1.99	-0.1656535
Totnomem	-0.0037135**	0.0016034	-2.32	-0.001149
Totasset	9.73e-07**	4.22e-07	2.31	-0.01e-07
TLU	0.1750098**	0.08555992	2.04	0.0541515
Tempayred	-1.184229*	0.3655983	-3.24	-0.3266962
Termpaydry	1.052654**	0.4548483	2.31	0.3925017

Source: Computed from own survey data

4.3.1.4 Member Satisfaction on scaling service

When we come to the satisfaction of members on scaling service provided by the cooperatives as dependant variables, the result of the model analysis showed that one variable, livestock holding of the household equivalent to tropical livestock unit (TLU), was found to be positively influencing the dependent variable and significant at statistical significance level of 1% (Table 25). The result revealed that, as the household livestock holding increases by one TLU, the satisfaction of members' of the coffee marketing cooperatives on scaling of produce by the cooperatives increases marginally by 7.39%. This tells us that as the members become stronger economically from other income sources other than coffee cultivation, like livestock, they acquire an opportunity of comparing different marketing agents that would open the room to evaluate their cooperatives with other traders with respect to fairness of scaling their produce.

Table 25 Maximum Likelihood Estimates of Probit Model for member satisfaction on scaling services provided by cooperative

Explanatory variables	Estimated coefficients	Standard errors	T-ratios	Coefficient for Marginal effect after svyprobit (dy/dx)
Constant	1.130805	1.313336	0.86	-
Edulelhh	0.004765	0.0546309	0.09	0.0017428
Age	0.0037023	0.0106574	0.35	0.0013541
Fsize	-0.0695689	0.0811021	-0.86	-0.0254446
Areacoffha	-0.328119	0.6711982	-0.49	-0.1200087
Landha	0.1046064	0.2699891	0.39	0.0382595
Totnomem	-0.0005433	0.0007805	-0.70	-0.0001987
Totasset	6.68e-08	1.98e-07	0.34	2.44e-08
TLU	0.2020342	0.0758116	2.66	0.0738935
Tempayred	0.0316731	0.3050521	0.10	0.0116
Tempaydry	-0.1824125	0.5734942	-0.32	-0.0640885

Source: Computed from own survey data

4.3.1.5 Member Satisfaction of information service provided by cooperative

With reference to the satisfaction of members on information access by coffee marketing cooperatives as dependent variable, the result of the model analysis showed that two variables were found to be significant as discussed here under (Table 26):

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 price 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 the farmers with in and outside the family increases enough to get market information. Thus, the farmers could have other market places more important than cooperatives.

Total number of members of the cooperatives (TOTNOMEM): 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 price 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.

Live stock holding of the household equivalent to tropical livestock unit (TLU): this variable influenced positively at statistical significance level of 10% showing that as the members become economically stronger by the additional income sources like livestock and its products, the ability to purchase information increases, say they could buy radio, telephone, etc and their reliance on their cooperative as a reference point increases and there by the satisfaction of them as a source of information increases

Table:26 Maximum Livelihood estimates of survey probit model of member satisfaction on information source.

Explanatory Variables	Estimated coefficients	Standard errors	T-ratios	Coefficient for Marg effect after svyp (dy/dx)
Constant	-0.6262558	1.323292	-0.47	-
Edulelhh	-0.0385593	0.0503235	-0.77	-0.014669
Age	0.0054318	0.0114647	0.47	0.0020664
Fsize	-0.1811887**	0.0818101	-2.21	-0.068929
Areacoffha	0.2234941	0.6143248	0.36	0.0850232
Landha	-0.3741336	0.2490893	-1.50	-0.1423305
Totnomem	0.0021027*	0.0007493	2.81	0.0007999
Totasset	-6.45e-07*	1.92e-07	-3.36	-2.45e-07
TLU	0.1250907***	0.0739046	1.69	0.0475879
Tempayred	-0.381629	0.35281.27	-1.08	-0.142522
Tempaydry	-0.5073688	0.585641	-0.87	-0.1731361

Source: Survey result, 2006

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

4.3.1.6 Member Satisfaction on receiving patronage dividend

Patronage dividend paid by the cooperative was one of the dependent variable for the satisfaction of members of the coffee marketing cooperative services provided. The result of the model analysis showed that two variables were found to be statistically significant as discussed below (Table 27).

Family size (F SIZE): It influences the satisfaction of members on dividend positively at significance level of 10%. It implies, as the family size of the member's increases by one member, the satisfaction in dividend increase marginally be 4.42%. The reason behind this result was may be the increase in coffee production in general and marketable coffee in particular that was reflected by the increase in labor.

Terms of payment for red cherry by the cooperatives (TERMPAYRED): It influenced negatively at statistical significance level of 5%. It implies, if the cooperatives terms of payment was on credit, the members of the cooperatives faces problems of settlement of immediate expenses and vice versa, if the terms of payment was in cash basis. Thus, the result shows, the cooperatives were paying on credit basis when they purchase red cherry in that, the balance of payment from the union reflected to the primary cooperative even for the payment of the price of members produce (coffee) leave at all the dividend. So, as the terms of payment increases by one unit on credit terms, the satisfaction of members on terms of payment for red cherry decreases marginally by 24.62%.

Table27: 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 svyprobit (dy/dx)
Constant	0..9644919	1.333713	-0.72	-
Edulelhh	-0.0120334	0.0565045	-0.21	-0.0037443
Age	-0.0089736	0.0106872	-0.84	-0.0027922
Fsize	0.1419503***	0.0852424	1.67	0.0441695
Areacoffha	0.5207415	0.6761021	0.77	0.162035
Landha	-0.3358301	0.226018	-1.29	-0.1044976
Totnomem	0.0001423	0.0007591	0.19	0.0000443
Totasset	-9.37.e-08	1.94e-07	-0.48	-2.92e-08
TLU	0.0.0664306	0.0649805	1.02	0.0206707
Tempayred	-0.8561061**	0.3536676	-2.42	-0.2461809
Termpaydry	0.0466792	0.6638903	0.07	0.0147456

Source: Survey result, 2006

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

4.3.1.8 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. Five variables were found to be statistically significant as a result of the model analysis (Table 28). Among the significant variables, four of them were negatively influencing and the rest influenced positively the satisfaction of members on credit services provided by the coffee marketing cooperatives as discussed below.

Educational of the household (EDULEH): 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%. According to Taddese (2006), cooperatives unions were weak in accessing credit for their members because of weak in both human and financial resources (limited access to back loans) the same was true for the primary cooperatives.

Family Size of he house hold (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%. As family size increases the land for coffee production was distributed accordingly to their family that adds additional demand for the credit. As it was discussed above, the absence of credit against the increased demand would aggravate the dissatisfaction of members on credit service expected to be provided by the coffee marketing cooperatives.

Area of land allocated for coffee production by the household (AREA COFFHA): This variable also influenced the satisfaction of members negatively at 10% significance level. The result shows that as the area of land allocated for coffee production increases by one hectare, the probability of satisfaction of member's decreases by 137.64%. Ownership of large coffee land plots increases the production size of coffee there by increases the income of that particular farmer who relied on his own cash for necessary production and marketing expenses. If such farmers require credit, it would likely to be larger amount of credits. Thus, in the condition of scarce credit provision, formers who demanded more credit become dissatisfied on the performance of credit services rendered by the cooperatives

Total asset 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.

Terms of Payment for red cherry (TERMPAYRED): This variable influenced the satisfaction of member negatively at 5% level of significance. Terms of payment for red cherry influences the satisfaction of members on the cooperatives credit service in that, cash payment evacuate the cash available in the hands of the cooperatives that may cause the cooperative unable to access or credit based purchase erodes the confidence of members on

their cooperatives as a source of credit. The result tells us that, the cooperative were purchasing red chary on credit basis that proved the decreased probability of satisfaction of members by about 100% as the cooperative decides to purchase one unit additional red cherry.

Table28 Maximum livelihood of the estimates of survey probit model on member satisfaction on credit services provided by cooperatives

Explanatory Variables	Estimated coefficients	Standard errors	T-ratios
Constant	0.1387846	1.504324	0.01
Edulelhh	-0.1560702**	0.078756	-2.00
Age	-0.0047477**	0.154864	-0.31
Fsize	-0.3219267***	0.141379	-2.28
Areacoffha	-1.376412	0.7442596	-1.85
Landha	0.5382628	0.3313125	1.62
Totnomem	-0.000247***	0.0011204	-0.22
Totasset	5.12e-07	2.95e-07	1.73
TLU	-0.0232272**	0.099672	-0.23
Tempayred	-1.004609	0.4133493	-2.43

Source: Survey result, 2006

*, ** and *** represents 1%, 5% and 10% level of significance respectively

4.3.1.9 Member Satisfaction on training services provided by cooperative

Training service was one of the dependent variable for the satisfaction of members of coffee marketing cooperatives as a function of socio economic & institutional variables as independent variables. The result of model analysis showed that four variables were statistically significant as discussed below (Table 29).

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 19.57%. 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 Cooperatives 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 increased marginally by 0.00014% implying cooperative with large amount of total asset provide training better than the lower one.

Term of payment for red cherry (TERM PAYERED): It influenced the satisfaction of the household negatively on training service by the cooperatives at significant level of 1%. As the terms of payment for red cherry increases in favor of the household by one percent, satisfaction of the household on training service decreases marginally by 37.56%. The favorable condition of terms of payment for the farmer as discussed before was in cash basis. Unless otherwise, the cooperative assets especially, liquid asset was not large enough, the cooperative couldn't provide training services in the short run, thereby decreases satisfaction of the house hold on services of training.

Wirth reference to transport services as dependent variables for the satisfaction of the households, the survey probit model analysis produced 3 variables to be statistically significant as discussed below.

Total number of members of the cooperatives (TOTNOMEM): This independent variable influenced the dependent variables negatively at statistical significant level of 1%. The result implies, as the number of members increases by one member, the probability of satisfaction of the household's decreases by 0.5%. Since the transportation services was expected from the cooperative, when the number of members increased, it become difficult to provide transport services for each member (house hold) at a time that the nature of coffee maturity especially red cherry harvested and transported with in a short period of time. More over the survey result showed that not only the shortage of transport that was a problem around the study area

was faced, but also the absence and expensiveness of transpiration means. Thus, it was revealed that transportation was a crucial problem in the area.

Terms of payment for red cherry (TERMPAYRED): IT was influenced the satisfaction of households on transportation service negatively at 5% level of significance. The terms of payment in favor of household or members, disables the cooperatives to arrange and provide transportation means and additional expenses such as fuel and related expenses, in that in addition to other expense huge amount of money was required for the purchase of coffee from the farmers. With this respect, the result implies, cooperatives terms of payment for red cherry in favor of the household (in cash bases) provides less transport service as compared to cooperatives in another way round. From the model analysis it was learnt that, the cooperative performing terms of payment in favor of household for red cherry in one percent, the purchase of red cherry decreases the satisfaction of the house hold (members) marginally by 28.47%.

Table 29 Maximum livelihood 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
Age	-0.0139856	0.0110449	-1.27	-0.0033297
Fsize	-0.1957192***	0.1103935	-1.77	-0.0465965
Areacoffha	-0.0828247	0.748318	-0.11	-0.0197188
Landha	-0.0581512	0.3310897	-0.18	-0.0138445
Totnomem	-0.0027765*	0.0008663	-3.21	-0.000661
Totasset	5.82e-07**	2.36e-07	2.47	1.38e-07
TLU	0.06544651	0.058222	1.13	0.0155858
Tempayred	-1.43721*	0.4134533	-3.40	-0.3756467
Termpaydry	-0.860636	0.5202472	-1.65	-0.2789656

Source: Survey result, 2006

*, ** and *** represents 1%, 5% and 10% level of significance respectively

4.3.1.10 Member Satisfaction of storage service provided by cooperative

Lastly, when we observe the satisfaction of the households by taking storage service as dependent variables only one independent variable, terms of payment for red cherry (TERM PAYRED), was found to be statistically significant (Table 30). It influenced negatively the dependent variable at 1% significant level, indicating that the shelf life span of red cherry was so short that it has no impact on the presence or absence of storage services by the cooperative referring to red cherry. The model analysis also revealed that, if the terms of payment for red cherry were in favor of the household, the importance of storage decreases by about 119%.

Table30. Maximum likelihood of the estimates of survey probit model for member's satisfaction of storage service provided by cooperative.

Explanatory Variables	Estimated coefficients	Standard errors	T-ratios	Coefficient for Marginal effect after svyprobit (dy/dx
Constant	0.1095641	1.28310	0.09	-
Edulelhh	0.0786978	0.054907	1.43	0.0268108
Age	-0.0173748	0.0133111	-1.31	-0.0059193
Fsize	-0.1138261	0.0755128	-1.51	-0.0387784
Areacoffha	0.2308285	0.660682	0.35	0.0786388
Landha	-0.1605594	0.2522923	-0.64	-0.0546995
Totnomem	0.0006551	0.0008298	0.79	0.0002232
Totasset	-4.87e-08	2.13e-07	-0.23	-1.66e-08
TLU	0.0797408	0.0577786	1.38	0.02716671
Tempayred	-1.193766*	0.3250781	-3.67	-0.4130071
Termpaydry	-0.410814	0.4730624	-0.87	-0.1521259

Source: Survey result, 2006

* represents 1% level of significance

4.4. Marketing Channels and margins

4.4.1. Marketing Channels

Generally, in the study area there were four main marketing channels in which coffee was passing from producers to consumers. The first channel was passing coffee from producers via coffee marketing primary cooperatives to export through secondary cooperatives (Unions). In the second channel producers sold dried coffee to collectors who were selling to Coffee marketing Cooperatives to be exported directly through the Union. The third and the fourth channels participates rather larger number of marketing agents and in this way producer was selling their coffee either to collectors of dried cherry or wholesalers and collectors to wholesalers to export via exporters through auction market respectively. The coffee marketing channels may be sketched like:

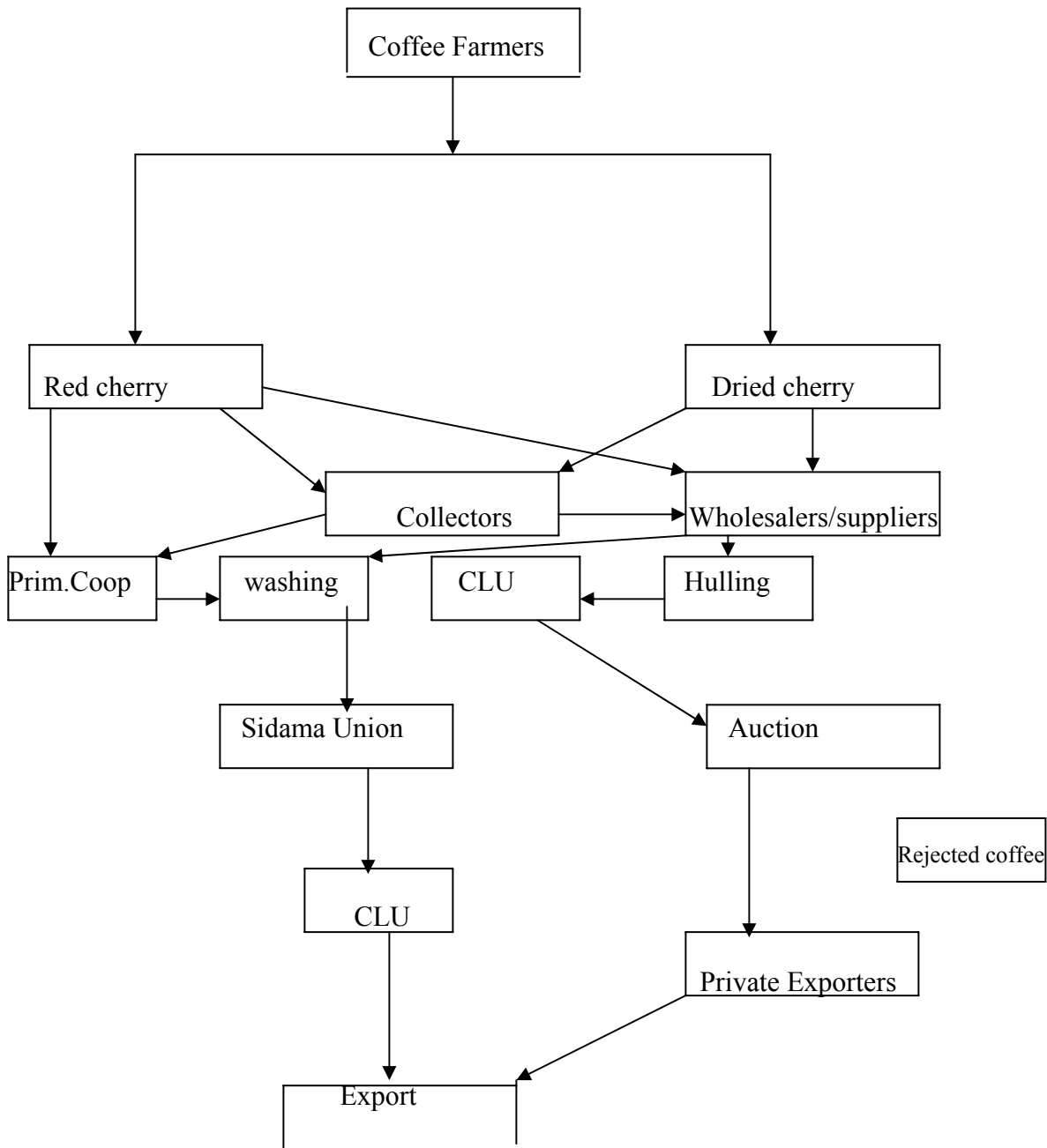
1. Producers → Coffee Marketing Cooperatives → Unions → Export
2. Producers → Collectors → Coffee Marketing Cooperatives → Unions → export
3. Producers → Collectors → Wholesalers → Auction → Exporters → Export
4. Producers → Wholesalers → Auction → Exporters → Export

Source: Authors observations

4.4.2. Coffee Marketing Structure

The structure of coffee marketing system in the study area was characterized by the presence of individual coffee farmers to the production side and coffee marketing cooperatives, collectors and wholesalers/suppliers to the marketing side. The Sidama Coffee Farmers' Cooperative Union and private exporters was the member of the coffee marketing structure out side the study area as shown on figure 3 below.

Figure 2 The Coffee Marketing structure in the study area and to end



Tadesse (2006) on his study also confirm that, the prevailing national marketing structure is characterized by the presence of individual coffee farmers, state farms, and a few private farmers on the production side, and service cooperatives, collectors, suppliers, exporters, and processors on the marketing side. The primary collectors purchase coffee from farmers and sell it to suppliers who also buy from farmers' cooperatives and sell processed clean bean at

auction markets. The two coffee terminal export markets are Addis Ababa and Dire Dawa and currently cooperatives can directly export their coffee to the importers.

The informal channel was very much blamed by legal coffee marketing agents. It is the way through which coffee passes on to the unlicensed traders. Here farmers sell red cherry to informal traders to meet urgent cash needs usually when coffee marketing cooperatives face shortage of capital to purchase on cash terms.

Cost structure and profit margins of coffee Wholesalers and Exporters

Table 31 Estimated primary cooperative's and Union's processing and marketing costs for red coffee (2004/05)

Cost Items	Cost Birr/kg (cherry)
Purchase price of coffee (average)	12.48
Cost from producer to pulping station	0.08
Pulping cost	0.30
Marketing costs (transport and gov't. taxes)	0.94
Overhead costs	0.11
Interest on capital	0.18
Weight and quality inspection	0.02
Miscellaneous costs (contributions for dev't)	0.07
Total primary cooperatives' Cost	1.70
primary cooperatives' Sales price	15.62
primary cooperatives' Gross Margin	3.14
primary cooperatives' Net margin	1.44
primary cooperatives' Sale/Unions' Purchase price	15.62
Cleaning and grading	0.28
Liquoring	0.01
Loss (due cleaning to exportable standard)	0.56
Overhead cost (packaging, etc)	0.25
insurance	0.08
Interest on capital	0.18
transport	0.27
Bags	0.16
Depreciation (trucks, buildings)	0.30
Container	0.28
Interest rate	0.13
Port handling and transit costs	0.18
Storage costs	0.05
Miscellaneous expenses	0.10
Total unions' Marketing Costs	3.27
FOB Price *	20.92
Unions' Gross Margin	5.30
Unions' Net margin	2.03

Source: Author's calculation using data from AESE and own survey Result.

*2006 National average

As it is revealed on Table 32, the net margin of primary cooperatives was found to be less than the net margin of the Union. The net margin computed for primary cooperatives and the Union were birr 1.44, and birr 2.03/kg, respectively. Of the marketing costs of primary cooperatives and the Union, transport cost was the major component for primary cooperatives which were 55.30% and Loss (due to cleaning to exportable standard) for exporters which were 17.13%.

Marketing margins

Based on the prices of each of the different market participants, summarized in Table 34, the different indicators of marketing margins for coffee are calculated and the estimates are:

TGMM (complete distribution channel) = 40.34%

GMM (primary cooperatives) = 25.33%

GMM(primary cooperatives) = 15.01%

GMM (producers participation) = 100% - 40.34% = 59.66%,

From the above information it was known that the producer share of F.O.B. value in 2004/05 was 59.66%

Traders Market Behavior

The information used in this study was obtained from different marketing agents and it was observed that traders were not specialized in only one type of marketing agent. Among the surveyed traders, the majority were participating in different market channels as shown below:

Table34. Distribution of traders by business type

Name of business type	Frequency	Percent
Wholesalers/Supplier	2	14.30
Retailer	1	7.10
Local collector	2	14.30
Wholesaler and processor	7	50.00
Exporter, wholesaler and processor	1	7.10
Local collector and wholesaler	1	7.10

Source: Authors' survey, 2006

Traders' characteristics

Personal characteristics of the coffee traders in the study area

Out of the sampled traders, only 14.3% of the traders were female. 78.6% of the sampled traders were Orthodox Christian and the rest (21.4%) were protestant. Traders were asked about their position in the business they under take, and the majority of them (57.1%) were owner-managers followed by owners (28.6%) and managers (14.3%) of the business. The majority of the traders were married (85.7%)

Table 35. Distribution of coffee traders by position and demographic characteristics

Description	frequency	Percent
Sex: Female	2	14.3
Male	12	85.7
Religion: Orthodox	11	78.6
Protestant	3	21.4
Position in the business		
• Owner	4	28.6
• Manager	2	14.3
• Owner& Manager	8	57.1
Marital Status		
• Single	2	14.3
• Married	12	85.7

Source: Authors' Survey, 2006

The main source of initial capital for the traders was both own and borrowed (35.7%) followed by own source (28.6%). Out of the sampled traders one (7.1%) coffee trader started his business with capital obtained from gift. Coffee traders borrowed their initial capital from Commercial bank (14.3%), Development bank (28.6%), family & friends (7.1%) and other traders (7.1%). The rest (35.7%) used their own (28.6%) and obtained as gift (7.1%) for initial capital. The source of working capital was dominantly obtained from bank loan (35.7%). Among the interviewed traders 8 of them were borrowed from government banks (35.7%),

family/friends (97.1%), other traders (7.1%) and Omo micro finance (7.1%) the rest (42.9%) of the traders did not borrowed cash for working capital. The respondents were also asked about repayment schedule, and the majority of them replied that they were paying their debt when they get money (21.4%). The rest of the traders reported that they were paying their debt monthly (14.3%), quarterly (14.3%) and yearly (7.1%). Almost all of the traders have opened bank account (92.9%) i.e. saving (28.6%) and current account (64.3%). The majority of the coffee traders in the study area, (78.6%), utilizes recording system of both modern (double accounting system) (21.4%) and single accounting system (67.1%).

Table 36. Distribution of coffee traders by financial sources, repayment of loan, type of bank account used, and recoding system.

Description	Frequency	percent
Source of initial capital		
Own	4	28.6
• Borrowed	3	21.4
• Gift	1	7.1
• Own and borrowed	5	35.7
• Own, borrowed and gift	1	7.1
Source of borrowed initial capital		
• Commercial bank		
• Development bank	2	14.3
• Family/friends	4	28.6
• Other traders	1	7.1
	2	14.3
Source of working capital		
• Loan	6	42.9
• Own	5	35.7
• Both own, loan and gift	1	7.1
Source of borrowed working capital		
• Banks		
• Family/ friends	5	35.7
• Other traders	1	7.1
• Omo micro finance	1	7.1
	1	7.1
Repayment schedule		
• Monthly	2	14.3
• Quarterly	2	14.3
• Yearly	1	7.1
• When appropriate	3	21.4
Possession of bank account		
• Yes	13	92.9

• No	1	7.1
Kind of account opened		
• Saving	4	28.6
• Both saving and current	9	64.3
Recording system		
• Modern (double account)	3	21.4
• Simple (single account)	8	78.6

Source: Authors' Survey, 2006

Traders' buying and selling strategy

Coffee traders in the study area utilize diversified systems to attract and retain their customer. Among the strategies relaying on fair scaling (14.3%), using inherited family customer (7.1%) and using both strategies (78.6%) were the most important promotional technique as the respondents reported.

The permanent customer for the traders were both farmers (28.6%), farmers & local traders (21.4%) and all of the coffee sellers (50%) from their supply side and the permanent buyers were suppliers/wholesalers (7.1%), retailers (7.1%), exporters (78.6%), and cooperatives as processors (7.1%) from the demand side. The purchasing activity was done in most of the time by themselves and their family which constituted about 35.7% followed by using agents (21.4%). As the respondents' response, they were not trading all the year round and they were purchasing what was the coffee available in the market (92.9%) and by extending credit to the farmers before harvest (7.1%). The respondents were asked about the criteria they employ to check the quality of coffee during purchase, and 92.9% of them reported as they use color, shrinkage & proportion of foreign matter and only 7.1% of the traders were checked the quality of the coffee bean using bean size. 64.3% of the respondents purchased coffee with price different from their competitors and they were paying in most of the time higher price (28.6%) for the reason of attracting customers. As 50% of the traders reported in the study area, the price of coffee for the same day for all traders in the same market was not the same. The rest 50% traders believed that the price of coffee was the same. This situation shows us that there was an information gap or communication barriers in the market that result in existence of market inefficiencies. According to the sampled traders, the reason for the price

difference was to win competitors (14.3%), because of information gap (14.3%), negotiating capacity (7.1%) and both to win competitors and information gap (21.4%).

Respondents were also asked about marketing problems they faced, and 14.3% of the traders agreed on the problem of too much competition with unlicensed traders where as 7.1% of the traders raised the overall shortage of coffee supply as their priority problem. The rest and the majority (64.3%) of the traders agreed both problems were observed during the production year. The survey result showed that traders were setting price in different way as the trades reported, that 57.1% of the traders were setting their coffee price in the market depending on the supply of coffee and 28.6% of them were fixed price by colluding with other coffee traders early in the morning of the market day.

Sampled traders in the study area revealed that, they were selling their coffee to exporters (78.6%) in central market. The rest (21.4%) sold for different buyers in different time period. Tax was levied on traders by government or community officials at the market on the basis of either volume of the product (28.6%), or per quintal or per feresula (28.6%), or birr/kg (14.3%), or simply on daily basis (7.1%), or per truck load (7.1%). The trader's opinion regarding the market fees or taxes paid compared with their transaction was that it was very high (28.6%), high (50%) and fair (7.1%). With regard to the necessity of coffee trade license, 7.1% of the trader replied that it was not necessary indicating the presence of unlicensed traders and 85.7% of them reported that it was necessary.

With respect to ownership of processing machine, 74.1% of the interviewed traders engaged in coffee processing activities out of which 57.1% of them were owners and the rest 14.3% of the traders process coffee by rented machine. The greater number of sampled traders reported that they grade their coffee in different grading systems to acquire a better price for their coffee. Some of the main grading systems were machine cleaning (42.9%), by liquoring (tasting) (7.1%) and smelling (14.3%). Other grading systems include, color (7.1), size (35.7%) and taste (21.4%). With regard to packing material, traders use jute bag (57.1%), polythline fiber (42.9%) purchased from local market and the type and size of packing material was decided dominantly (64.3%) by buyers or exporters. The major problem related

to packing materials as reported by sampled traders were quality and availability followed by its price.

With reference to transportation, coffee was transported from collection point by animal pack (28.6%), head loading (7.1%), pickup vehicle (7.1%) medium size truck (28.6%) and both animal pack and head loading (28.6%). The means of transportation from store to central market was both medium (Isuzu) (14.3%) and big (64.3%) size truck. Even though, among the sampled traders, 42.9% have their own truck, it was observed that there was considerable problem related with transportation. Transportation problem observed by the traders were long stay of trucks in Addis Ababa market (7.1%), lack of feeder road/infrastructure (7.1%) and both problems mentioned (21.4%). The most important infrastructural constraints that affected the traders business were: lack of road (35.7%), lack of transportation (7.1%), lack of processing machine appropriate cite (7.1%) and road, transport & telephone (42.9%). This result tells us that the main problem the traders faced was not only transportation but also other infrastructural frame works.

The respondents were also asked about adequacy of their working capital, and traders responded that 57.1% of them faced shortage of working capital and seriously required credit for the purpose of purchasing coffee. With all its problems coffee trading has several entry barriers. Out of the sampled traders, 92.9% of them confirmed the presence of entry barriers. The major source of entry barriers were, capital (28.6%), difficulty to compete with licensed traders (14.3%), inability to compete with unlicensed traders (28.6%), and capital as well as inability to compete with unlicensed traders (21.4%).

5. Conclusion and Recommendations

Conclusion

In rural areas, smallholders are often geographically dispersed; roads and communications are poor, and the volume of business is insufficient to encourage private service provision. Inefficient and under developed markets result in low and variable prices thereby reducing the profitability of new technologies for farmers, discouraging business people from investing in processing activities, reducing the incentive of traders to invest in market infrastructure and transporters from investing in improved market and transport services (Mulat and Tadele,2001).

Intervention to reduce uncertainty and other marketing problems and to bring the peasants households into profit maximizing category may be realized through establishment of rural institutions, such as cooperatives (Krisiinaswami and Kulandaiswamy, 2000). Small holder farmers in particular face uncertain production environment and enormous constraints and higher cost in accessing markets. The farmers also exchange with actors who have more market power, due to advantages in resources, access to information (Embden, *et al.* 1997).

To solve marketing problems of smallholders, the role of agricultural marketing 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 or dissatisfaction felt by members, since. Customer satisfaction is the difference between service expectation and perceived service performance.

To create good performing primary cooperatives, it is essential to asses 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 coffee marketing primary cooperatives and member's satisfaction in particular.

This study, therefore, attempts to contribute to better understanding of the performance of coffee marketing cooperatives and members satisfactions of the various services provided by the coffee marketing cooperatives, using Dale district, SNNPRS, as a case study.

For the purpose of assessing performance of primary coffee marketing cooperatives and identification of factors influencing the same, Dale district was purposefully selected. A two-stage random sampling technique was applied. The first stage involves sampling of 5 primary coffee marketing cooperatives from the 15 cooperatives in the district. In the second stage, random sampling of individual member farm households in the peasant administration of which the sampled cooperatives are organized. Fourteen coffee trades were also randomly sampled and assessed to analyze their market behavior.

The required secondary data was collected from relevant data sources. Audit reports of primary coffee marketing cooperatives were used as sources of information to evaluate performance related stakeholders and key informants. Relevant primary data was also collected through formal survey of sampled farmers and traders.

The financial performance of the cooperatives was analyzed using financial ratios. The efficiency ratios, income (profitability) ratios and creditworthiness ratio indicators were used to examine the financial performance of the cooperatives. Statistical software called “SPSS version 12” was used to enter data and exported to software called STATA version 9 to analyze the data for descriptive statistics and to estimate the econometric parameters of probit model for the purpose of identifying factors influencing the satisfaction of members. Marketing margins was also computed as an indicator of the performance of coffee marketing agents at different stages.

Ratios were computed referring to all primary coffee marketing cooperative’s audit reports of two years (2002/3 and 2004/5). The computed efficiency ratio was averagely low i.e. the inventory turnover was about 2 times in 2002/3 and 1 time in 2004/5 a year. 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.

Regarding operating ratio as one efficiency indicator, the average operating ratio decreased from 179% in 2002/3 to 141% in 2004/5. However the performance in both years was very much inefficient based on the bench mark for operating ratio of greater than or equal to 90% and less than or equal to 50% indicate the cooperatives difficulty to making an adequate return and some costs have likely been omitted or underestimated, respectively.

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 coffee cooperatives under investigation in 2004/05 was 1.69 out of which 11 - out of 15.were not profitable which lead to the two years average profitability ratio to be -0.15.

In the study area, the average return on sales in the cooperatives was 0.9 and 0.19 in 2002/3 and 2004/5, respectively. Large number of cooperatives had below 50% return on sale (13 in 2002/3 and 10 in 2004/5). This result reveals that there was an inadequate profit retained in the cooperatives enough to expand their future investment and meet financial obligations and pay patronage dividend for their members.

Among the 15 cooperatives evaluated based on returns on equity, only 2 in the year 2002/3 and 4 in 2004/5 were above 50% pay back on equity. The result shows that on average a majority of cooperatives were inefficient in managing owners' capital.

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 2002/3 (2.06) to 1.27 in 2004/05. Based on the bench mark of liquidity ratio (2.00), 5 cooperatives exhibited lower performance. This implies their ability to satisfy their members with respect to provision of credit and settlement of current debt of the cooperatives was low.

Based on dept 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. The result shows that, In 2002/3, the average dept-net worth ratio was 3.05 and 2.47 in 2004/5.

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

The marketing channel of coffee in the study area was characterized by the participation of different marketing agents such as producers, collectors, primary coffee marketing cooperatives, wholesalers, unions, and exporters. In this study, four coffee marketing channels were identified and discussed in the result and discussion chapter. In all channels except one channel, in which wholesaler replaces the cooperatives coffee marketing cooperatives were purchasing coffee from producers with and with out using collectors and sold their coffee to the union which directly exported to overseas markets.

Traders were also asked to verify the marketing behavior and about the distribution of traders different marketing agents. About half of the sampled traders were found to be wholesalers and processors followed by supplier (14.3%) and local collectors (14.3%). The majority of the traders were performing their marketing activities as owners and managers of the business. 85.7% of them were found to be male and married. The sources start up and working capital was both from own loan and gift. The majority of traders borrowed from development bank for their initial capital and from different government banks for their working capital. The most important marketing problems reported by the traders include too much competition with unlicensed traders and the overall storage of coffee supply

Results showed that coffee marketing cooperative were inefficient in reference to both computed efficiency ratios, income ratios and creditworthiness ratios. In reference to efficiency ratio, inventory turnover and operating ratio was used. Based on both inventory turnover and operating ratios, the coffee marketing cooperatives in the study area, were

inefficient as discussed before. This shows that the management of the cooperatives were either unable to manage their inventory or the expenses were not well controlled. Basically farmers should be owners, user and controllers of their cooperatives. But, in the study area, it was observed that some farmers were using other marketing channels (traders) to sell their coffee. On the other hand, cooperatives in the study area use collectors to purchase coffee from farmers. Generally, the results of the study shows the cooperatives under consideration were inefficient both on their business management and members handling that lead to the dissatisfaction of the members as customers. From the finding it is learned that, it is the time for all the stakeholders to think about cooperatives' efficiency improvement or other alternative to benefit individual coffee farmers in the study area.

Recommendations

Based on the data and results of this study the following points are recommended.

1. In the study area, members of the coffee marketing cooperatives were not regularly selling their produce to their own cooperatives. This is may be because of the fact that the society had developed a negative attitude to wards cooperatives in general, and members of the cooperatives may be loosing sense of ownership in particular. The efficiency ratio analysis shows that, even though there was a progress, most of the coffee cooperatives operated at low inventory turnover and were inefficient based on operating ratio analysis. 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.
2. With respect to profitability (at least at break-even point) and financial risk management discussed in the result and discussion chapter, the coffee marketing cooperatives in the study area were inefficient. Therefore, giving greater emphasis for member satisfaction, the members, the management bodies and the staff members of the cooperatives need to be trained in business and marketing management, possibly it is also better to have got experience sharing with those cooperatives performing better

in or outside the country. Further empirical investigation should also be required about the performance of the Sidama Coffee Cooperatives Union to draw sound recommendations that will help to maximize the owners' satisfaction.

3. As the econometric model result revealed, the satisfaction of members on overall performance and services rendered by the cooperatives was influenced negatively, when it is evaluated against different socio-economic variables; like age and education of the household head and terms of payment of the cooperatives for red cherry. These results show the bad image of the farmers on cooperatives and their complaints on the terms of payment to be on credit in most of the time. To reverse the implication of the result, the concerned stakeholders stated above should have to make a campaign to change the bad image of cooperatives through strong and sustainable cooperative extension and promotion for members and the surrounding societies.
4. With respect to the complaints or the negative attitude towards the terms of payment 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., organizing cooperative banks that enable the cooperatives capable to effect timely product purchase and immediate payment for the cooperative members.
5. Finally, all the problems indicated above, in one way or another related with or could be addressed through collaborative and deliberate action of both the members and government. So, from the members' side, high commitment as a principal stakeholder and sense of ownership is needed. From the government side, creation of a conducive environment through formulation of sound cooperative policy that create competitive cooperatives enough to satisfy their members.

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**PERFORMANCE OF COFFEE MARKETING COOPERATIVES AND
MEMBER' S SATISFACTION IN DALE DISTRICT: Southern
ETHIOPIA**

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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 of 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 coffee marketing cooperatives and thereby to identify factors that impede members' satisfaction. To evaluate the performance of coffee marketing cooperatives in the study area, financial ratios was computed based on annual audit reports of the cooperatives. Here, efficiency ratios, income ratios and creditworthiness ratios were calculated as performance indicators. As a result, almost all the coffee marketing cooperatives in the study area were performing their business 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, terms of payment for red cherry and dry cherry were found to be statistically significant at significance level of 5%, 5% 1% and 5% respectively to influence negatively except the terms of payment for dry cherry which was influenced positively, the satisfaction of members' of the coffee marketing cooperatives in the study area, with reference to the overall performance of the cooperatives as dependent variable.

