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**A STUDY ON THE WORKING CAPITAL MANAGEMENT
OF AGRICULTURAL COOPERATIVE UNIONS IN TIGRAY**

By

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Abstract

In this modern and competitive business world the need of improved, capable and flexible managerial skills to manage the working capital is very crucial. Cooperatives as business of the poor section of the society with the core mission of improving the living standards of the owners, they need strong support and control in improving their management. Hence, an attempt was made in this research work to study the working capital management of the Cooperative Unions in Tigray Regional State, Ethiopia. However, the result of the study shows that the overall performances of Cooperative Unions are not satisfactory. The management of these Unions has by far remained back when compared with other forms of competitive businesses in the market.

The Cooperative Unions' position on liquidity, solvency, and efficiency in the resources management and profitability shows fluctuating trends in the study period, 2004/5 – 2006/7. The compositions and proportions of their current assets and current liabilities indicate that they are not well managed in a way to earn profits. The percentage changes on the income statement and balance sheet items have also showed fluctuating trends, in the years stated. This is also used as a device to test the weakness or strength of the management in controlling the working capital level of their Unions. Of course there are many factors which could be mentioned for the weaknesses registered.

According to the assessment made the main factors for the less profitability of these Unions are related with their internal managerial weaknesses and external influences. Some of the problems mentioned are: lack of skilled personnel including the board members; lack of adequate and timely market information, stiff competition in the market, lack of coordination

among Unions; lack of cost minimization and working capital management, and the government interference.

On the basis of these results, therefore, stakeholders' of Cooperative Unions are recommended to take corrective measures on employing trained and skilled personnel. Moreover, the board members should be trained and even elected based on experiences and some educational backgrounds. Structural improvements which enable Unions to decide in a fast manner with flexibility are also recommended. Cooperative Unions should be audited and reports should be prepared yearly. There should also be a mechanism of providing accurate and reliable information independently.

There should be clear guidelines and other working manuals about their credit policies. Moreover, standards of evaluation should be set so that Unions based on the same industry can be evaluated and judged so as to identify their weaknesses and strengths.

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May God Bless You All!

Acronyms

ACP	—Average Collection Period
ACU	—Adigudom Cooperative Union
ACU	—Ahferom Cooperative Union
CATOR	—Current Assets Turnover Ratio
CU	—Cooperative Unions
DIH	—Days inventory Holdings
DTOR	—Debtors Turnover Ratio
EBIT	—Earnings before Interest and Taxes
GACU	—Getser Adwa Cooperative Union
GPM	—Gross Profit Margin
IMR	—Internal Measure Ratio
ITOR	—Inventory Turnover Ratio
NPM	—Net Profit Margin
NWCR	—Networking Capital Ratio
ROE	—Return on Equity
RONA	—Return on Net Assets /Investment/
SHCU	—Setit Humera Cooperative Union
TATOR	—Total Assets Turnover Ratio

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CHAPTER I—INTRODUCTION

1.1 Background

Ethiopia is predominantly an agricultural country with the vast majority of its population directly involved in the production of crops and livestock. The agricultural sector accounts for nearly 46.7 percent of the GDP and provides employment for 85 percent of the population (CSA, 2006). It also accounts for highest proportion of the export revenue and satisfies significant amount in supplying of raw materials requirements of the country's industries. However, for various reasons Ethiopia's agriculture is characterized by its very low productivity.

Agriculture is the major sector of the economy and the peasant sub-sector is dominant within the agriculture sector. Therefore, intensification and developing the peasant sub-sector is bound to stimulate the agricultural sector. This in turn will activate the rest of the economy, the collective effect of which will be a net increase in the GDP of the country.

The development of the agricultural sector calls for among others, the introduction of modern technologies, education and training of the human resource. However, with the introduction of new production technologies and in the utilization of trained manpower, the financial needs of farmers increase through time and heavy investment cannot be made by the farmers out of their own funds because of their low level of incomes. Thus, here comes the role and significance of government and other development agents' support in providing the required capital for the agricultural sector. The government of Ethiopia is playing the major role to bridge the gap between the owned and required capital. For instance in the financial year 2006 of the total

lending Birr 9,295,462,000 which was reported by the Commercial Bank of Ethiopia, the agriculture sector's share accounted for 17.1 percent and of which the Agricultural Cooperatives' share was 15.6 percent (CSA, 2006).

This shows the government is playing the major role in providing credits in the form of working capital and investment to the farmer through the Commercial Bank of Ethiopia. This provision of loan to Cooperative organizations at primary and Union levels is through the Commercial Bank of Ethiopia. This is due to the fact that the government warrants sustainable production and development in the rural Ethiopia. Different development agents including the government are exerting their efforts in promoting and helping Cooperatives at primary and secondary levels as a means of poverty alleviating devices for the rural poor. In Ethiopia many Unions are being established and supported both financially and technically to strengthen the existing primary level Cooperatives and to create and organize others.

However, the Unions' management may lack the required knowledge and training in managing this working capital. Even these Cooperative Unions may not be in a position to hire the qualified personnel so as to manage properly their capital. Therefore, a thorough investigation of the various aspects of working capital management, the sources and the uses of funds and the conditions which will enable those Unions to stand by themselves as competent entities are of great importance both for the government body, and other decisions makers. Hence, this study was undertaken to analyze the extent to which working capital policy is being practicing and how these Unions manage the components of the working capital in the Tigray Regional state, Ethiopia.

1.2 Statement of the Problem

In Ethiopia, there were 19,147 primary level Cooperatives serving directly and indirectly for about 35 percent of the total population of the country. About 30.8 percent of the primary Cooperatives were engaged directly in agriculture. During the year 2006 there were 112 Cooperative Unions, 93.8 percent were agricultural Cooperative Unions, constituted from 2, 203 members at primary level with a total capital of ETB 154,238,011. (Federal Cooperatives Agency, Annual Report, 2006/7). The regional Cooperative Promotion Office report at the end of 2006 revealed that there were about 1,304 primary level Cooperatives in Tigray Regional State, Ethiopia, with a total capital of Birr 24,980,051. These Cooperatives in the region were serving for about 393,528 members of which 90,729 are females. This is a very huge resource which requires strong management team in all aspects. Therefore, whether or not this resource was utilized properly needs a research. However, only Unions are considered in this research paper.

On their establishment Cooperative Unions have their own mission. The mission of each Union is to be at the summit in providing the best service to each primary level member Cooperative and individual members in its field. To achieve this mission more is expected from the management of the Unions. One and the most important is the existence of an effective and efficient management in working capital. Designing an appropriate working capital management and policy, the procedures of using these sources and resources, and sufficient information on relative importance of the factors which influence the level of working capital for Unions is necessary. Therefore, this study was done expected to answer the following questions; what are the major sources of working capital for Cooperative Unions? How these sources are supplied

and managed? What performance the Unions were achieved during the study period? How they exist in the competing market environment? How the government and other not-for-profit entities support these Unions?

1.3 Purpose of the Study

Many valuable studies have been conducted in the Regional State of Tigray, Ethiopia, in relation to Cooperatives. But as to the researcher's knowledge so far there is no any study conducted on this topic. Hence, this paper may serve as a beginning to fill the gap.

A study of the different factors which may affect the working capital of the Cooperative Unions and assessing the performance is vital. This is because it provides information which will enable to take effective measures to improve the management of the Unions. It will also enable the government and non-government lenders or supporters of the Cooperative Unions to have knowledge as to where, when, and how to supply the working capital requirement for these Unions. The study is also expected to contribute for the policy makers by providing information regarding how Cooperative Unions were performed and on how they are going to stand by themselves in the competitive business environment in their future lives.

1.4 Objectives

The general objective of this study is to investigate how Cooperative Unions in Tigray Regional State are managing their working capital components; and the specific objectives are:

- To assess the selected Unions working capital policy and its adoption.
- To analyze the outcome of working capital management on the growth and expansion of the Unions.

- To evaluate the financial performance of the selected Unions using ratio analysis techniques.
- To identify major problems in relations to their working capital management.
- To assess the sources of funds and their costs for the Cooperative Unions.

1.5 Hypothesis

The major hypotheses used for the purpose of the study are as follows:

- Cooperative Unions do have poor credit management and collection policy.
- Cooperative Unions lack the well trained human resource to manage the resources they have.
- In Cooperative Unions internal source of capital is less than the external source.

1.6 Limitations

The study has not considered the Primary member Cooperatives' view in the management of working capital. Due to time and budget constraints all the variables of the audited Unions' financial statements were not analyzed. The researcher had problems in accessing the data since Unions did not have strong documentation, reporting systems and practices.

The present study covers only from the year 2004/5 to 2006/7. This short period analysis was due to the constraints in collecting authentic data. Another problem of the study was that the respondents from the owners' representatives and the hired employees were not aware of the concepts of working capital management. Hence, it took more briefing time for the researcher and so it may reduce the objectivity of the answers provided.

CHAPTER II—LITERATURE REVIEW

Introduction

As a preliminary and preparatory part of the present research study, the researcher tried to look into a review of literature on the management of working capital in different forms of business firms. Hence, the researcher has tried to assess different materials including the electronics media. The review enabled the researcher to find out the contributions made by other researchers or authors to the Cooperative organizations and other business firms in the field. Therefore, the main objective of this review was to assess how Cooperative firms manage their working capital components. However, one problem that should be mentioned here is that the researcher was not in a position to get research studies or empirical works on the topic, Working Capital Management in Agricultural Cooperative Unions. This might have some drawbacks on the theoretical development of the paper. On the other hand, the researcher believes that this thesis may contribute for the field of study by filling the gap.

2.1 Nature and Scope of Working Capital Management

Working capital is the capital available for conducting the day to day operations of a business entity represented by its net current assets. Working capital normally refers to short-term net assets stock, debtors and cash, less short term creditors. Working capital management is the management of all aspects of current assets and current liabilities, to minimize the risk of insolvency while maximizing the returns on assets. (ACCA, 2007)

Managers in Cooperatives and other business types have the responsibility to manage the levels of working capital in the best interest of members of the firm.

Working capital is an investment which affects cash flows. The cash tied up in working capital is reduced to the extent that stocks are financed by trade creditors. If suppliers give Cooperative Unions time to pay, their cash flows are improved and working capital is reduced.

Investing in working capital has a cost, which can be expressed either as (ACCA, 2007)

- The cost of funding it, or
- The opportunity cost of lost investment opportunity because cash is tied up and unavailable for other uses.

2.1.1 Working capital management

In Cooperatives and all other types of businesses current assets represent more part of the firm's assets and they tend to be of particular importance to small enterprises. Cooperative businesses often fail as a result of failing to control working capital investment and business liquidity, and there is a direct link between sales growth and working capital management. Management of Cooperative Unions and other types of business firms therefore should spend a considerable amount of their time on working capital management.

The two fundamental questions to be answered in the area of working capital management are:

- How much should the firm invest-in working capital?
- How should the investment in working capital be financed?

How to manage working capital investment can be considered in either of two ways:

- At the individual current asset or liability level, or
- In terms of total working capital requirement.

Overall investment in working capital largely concerns trade-off. Here the firm must consider the cost of investing in working capital (largely the financing cost) against the benefits it brings with no investment in working capital there would be no stocks and no debtors, which would probably result in few sales and, therefore, little profit. (ACCA, 2007)

The decision regarding the level of overall investment in working capital is cost /benefit trade-off- liquidity Vs profitability, or cash flows Vs profits.

Liquidity in the context of working capital management means having enough cash or ready access to cash to meet all payment obligations when these fall due. The main sources of liquidity are usually:

- Cash in the bank.
- Short term investments that can be cashed in easily and quickly.
- Cash inflows from normal trading operations (cash sales and payments by debtors for credit sales).
- An overdraft facility or other ready source of extra borrowing.

2.1.2 Financing of Cooperatives

Adequate financing is one of the fundamentals of sound business operations. Land (or natural resources) and labor (including management) are the other two elements essential to production in addition to capital. Cooperative also uses these if an efficient job is to be done by the cooperative - ample capital must be provided and used wisely along with land labor.

Principles of Financing

Cooperatives involve give and take by the members. If a cooperative is to provide services at cost and if members expect to benefit from its operations, then it is apparent that members must also

assume the responsibility of financing their undertaking. Plans for financing must be consistent with the principles of cooperation as well as with legislation and administrative rulings.

Cooperative principles of financing include the following:

1. Member-patrons control the cooperative rather than member-investors. Control is not linked with investment as in a standard corporation. Voting in a local or primary cooperative under Wisconsin law is on a one man one vote basis and not according to how many shares of stock a member owns as is done in Standard Corporation. The purpose of the Cooperative is to provide services at cost rather than to maximize returns on the capital invested in it. Control is; therefore, separate from investment.
2. The use of capital should be rewarded with small dividends when earned. This may not only induce members to invest in their Cooperative but likewise to leave their money in the organization after they no longer need the Cooperative's services. "Limited returns on equity capital "is a commonly accepted principle of Cooperatives.
3. Cooperatives need adequate capital to function efficiently and to endure. They need reserves for depreciation, obsolescence, and unpredictable contingencies. Not only is it important to home and services requiring continued financial top credit ratings with banks and lending agencies.
4. Business should generate new capital. This means that gross margins (the difference between the selling price and the buying price and the buying price) should wide enough to cover all expenses and also provides for net margins (net earnings or savings). These net margins plus additional earnings from dividends, interest, and refunds constitute the source out of which dividends on stock allocated reserves, employee bonuses, provision for an educational fund,

and refunds are made. Since the cooperative needs to generate capital for its future use only part of the refunds will be paid in cash the deferred refunds will provide needed capital. About half of the profits, after taxes, of American business corporations is retained and plowed back in to the business. This is the most important source of capital. It lessens the need to borrow funds keeps control of the funds in the organization, and since only nominal dividends, if any, are paid to members for use of such funds, it can also reduce the cost of capital.

5. Cooperative securities (shares) are compensated for only at their par value (original face value) and not on the basis of their book value. This reduces speculation since their redemption value is constant. For example if the par value of a share of common stock is \$ 25, then the holder will be paid \$25 for it when it is buy backed by the cooperative, even though the book value (the appraised value of all assets divided by the total number of shares outstanding) might be \$ 30 or \$ 23. Only at dissolution, merger, or bankruptcy is the book value of the shares very significant.
6. Cooperatives should have the first option to purchase shares of stock to be sold by members. Generally, such purchase option is stated on the face of the stock certificate.
7. Ways and means of returning capital to members who stop to be patrons should be planned. A practical and fair stock redemption program should be instituted, possibly through the establishment of a redemption fund, so that patrons who no longer have any need for the cooperative and wish to get their money back can do so without a long waiting period or difficulty in finding a buyer for the stock.

Use of Capital

Capital is needed to:

- Pay cost of organizing the cooperative including such items as attorney's fees.
- Provide physical facilities such as land, building, machinery trucks, and equipment.
- Meet expenses of operations-payrolls, maintenance, utilities taxes, insurance, repairs, raw materials, fringes benefits, etc.
- Finance farm production through subsidiary agricultural credit corporations, contract farming arrangements and extension of loans and large accounts receivables.

Of course, capital needs vary greatly depending on whether facilities, trucks, and equipment are leased or owned; whether large or small inventory stocks are carried; and whether finance cooperatives such as Production Credit Associations and Credit Unions are available to finance farm production or whether this is to be done by the cooperative. These are only a few of the considerations that have a bearing upon the need for capital. (Marvin, 1980)

Kinds of capital

From the standpoint of ownership, there are two kinds of capital – equity capital and debt capital. Equity capital is provided by the member owners of the business. In the balance sheet it is referred to as the net worth. It is the equity that the owners have in the business – the dollars left when the total liabilities (money owned to others) are subtracted from the total assets (total worth if the company). Thus, total assets minus total liabilities equals net worth or owner's equity. Debt capital is represented by loans (short and long term such as mortgages), bonds, and certificates of indebtedness with due dates, and any other evidences of credit extended to the business. Mortgage credit is used largely to finance fixed assets such as buildings, expensive equipment,

trucks, and the like. Debt capital from other sources is used mostly to provide working capital for current financial needs. To measure the working capital a company has, just subtract total current liabilities from total current assets.

Current assets consist of cash on hand and in banks; accounts receivable for merchandise sold but not as yet paid; inventory of commodities on hand and ready for sale, processing or manufacture; notes that are collectable within one year; and prepaid expenses such as prepaid rent, prepaid insurance, and similar expenses paid for but applicable to operations for some future period. Current liabilities consist of accounts payable to suppliers, to members, or to others for commodities supplied; accrued expenses such as taxes, payroll, and interest which have accumulated but are unpaid; and notes payable to banks and others within one year.

Cooperative business associations get funds for equity capital from members, nonmember investors, and from successful business operations. This capital is obtained in four ways:

1. Members and investors purchase common and preferred stock outright.
2. Memberships are sold.
3. Deductions or per unit retains are authorized for which capital securities are issued (for example, 1 cent per pound of butterfat, 10 cents per box of fruit, etc., are kept by the cooperative for which certificates of investment are issued).
4. Cooperatives retain the net earnings from business operations rather than distribute them – a chief source of funds over the years for many cooperatives.

Considerable equity capital is obtained from a cooperative's business operations. Deductions are made from payments to member and nonmember patrons of marketing association and earnings

or saving applied to reserves and surplus is example of this. A payment of patronage refunds in capital stock, in certificates of indebtedness, in capital book credits, or in patrons' equity reserve also builds up membership capital in cooperatives.

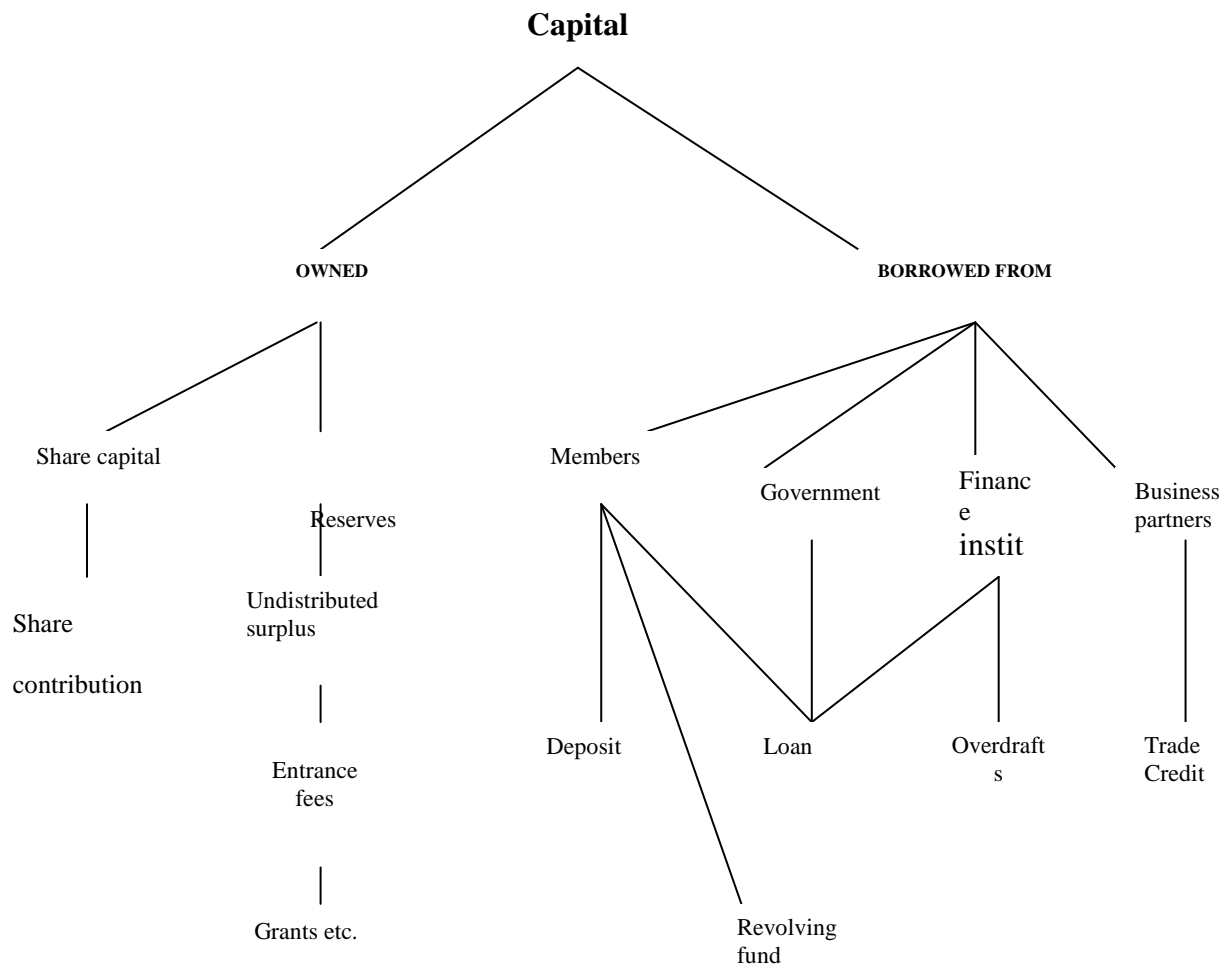
Debt capital is money obtained from commercial banks, from Banks for cooperatives and from governmental agencies such as the Rural Electric administration for electric and telephone cooperatives. Commercial banks and banks for cooperatives grant short term (30, 60, or 90 day's loans), intermediate (3 to 5 year loans) and long-term loans. Loans to cooperatives are also classified as facility loans, if the money is to be used for plant and equipment; operative loans, if the money is to be used primarily for current operating purposes. (Marvin, 1980)

2.1.3 Sources and methods of Cooperative finance

The sources used to finance Cooperatives enterprises have varied a lot in the history of Cooperatives. For example the Rochdale pioneers believed in the accumulation of sufficient share capital. This, they assumed, is used to meet all the capital requirements before actually starting to operate, and financed any further investments mainly by member's savings or by undistributed surplus. On the other hand the early Raiffeisen credit societies had no share-capital at all but they relied on borrowed funds which they secured by pledging the unlimited liability of the members.

Now a days the Cooperatives which may be at primary, Union or federation levels they do have different sources of capital /working capital. Some of the following includes: shares capital, reserves, donations etc. ([http: //www.](http://www.)). Figure 2.1 shows the source of finance of Cooperative Unions.

Figure 2.1: Sources of Finance for Cooperatives



Source: (<http://www.>)

Even this time the sources of finance used by Cooperative societies vary considerably from country to country. Basically a society could use several or all of the means shown in Figure 2.1.

Capital Owned

Capital owned, also called equity or risk capital, is the part of society's financial resources, which

remains in the society and is not repayable at any future date, with the exception of the share contributions repayable on a member's withdrawal or removal. The capital owned comprises share-capital and reserves.

a) Share-Capital

The share-capital is formed by contributions from members when they join the society and by any subsequent payments. The level of the share value is usually fixed at the society's discretion, though in some countries the law provides a certain minimum amount.

b) Reserves

If share-capital is scarce and difficult to obtain, the society has to give special attention to building up reserves. Their importance lies in their not only serving as long-term capital for investment and expansion but in increasing the borrowing power of the society and acting as a safeguard for the protection of the members' liability, i.e. losses can be covered without devaluation of shares or calling on members for additional payments. The capital reserves are mainly accumulated from undistributed surplus. In most countries the law provides that a certain fraction generally 20-25% (In Ethiopia it is 30%) of the annual surplus must be allocated to a statutory reserve fund until it reaches a certain level, for example equal to the share- capital. The general meeting may further vote part or the entire remaining surplus to be allocated to a free reserve fund. Other sources that contribute to the reserve fund can be:

- Any penalties, which may have been collected from members.
- Uncollected share capital, if certain time, e.g. five years, has passed since the withdrawal of the member.
- Uncollected dividends or patronage refund, usually after twelve months

- Grants from the government or members, for instance, in the form of land or other assets.
- Entrance fees- societies which have high Investments often consider the entrance fees as payment for the privilege of admission, after the society has been established, as new members get the benefit of an organization which has been built up largely by the older members sacrificing part or all of their dividends or refunds and carrying the risk.

Capital Borrowed

The capital owned will rarely be sufficient to satisfy the financial requirements of a Cooperative society. In most cases it needs to be supplemented by borrowed capital which does not remain permanently in the society but which has to be repaid at a fixed future date. The general meeting usually determines the amount up to which the society can stipule an absolute maximum borrowing power which the general meeting cannot exceed in its decision. The maximum is usually a multiple of the share-capital or, preferably, the total risk capital. The sources of borrowed capital may be:

a) The members

Borrowing from members has the advantage that the society pays comparatively low rates of interest, without having to provide securities for the capital. At the same time, member who has a higher investment in the society will generally show a greater interest in the society. The society can raise borrowed capital from members by:

- **Accepting deposits.** Although the provision of savings facilities is a function of banking, it is often used by other societies as an additional source of finance.
- **Loans.** The society may approach members for loans usually in connection with a specific project.

- **Revolving funds.** The revolving fund schemes are a special system to obtain medium or long-term funds from members. Although the member's contributions to the revolving fund basically have the character of a loan, they differ from the above mentioned borrowing from individual members as they involve all members and furthermore the contributions do not require cash payments and are made in relation to the volume of the individual members business with the society.
- **Debentures.** Another specialized form of loan is the issue of debentures. Similar to the revolving fund certificates, the debentures are loan certificates with a fixed rate of interest and a fixed repayment date or a maximum currency. They are not accumulated out of retained surplus or levies but sold to individual potential members, thus requiring a cash contribution. They are used more often by secondary societies than by primaries.

b) Outside Sources

A Cooperative society should primarily borrow from institutions which are either part of the Cooperative movement or with which friendly relations already exist, and only in the last resort should it borrow from commercial financing agencies. This does not necessarily mean that credit can be obtained more easily by the former method. Credit will and should be given only on consideration of all relevant economic factors and will inevitably be accompanied by a certain amount of supervision of and influence upon the society's business affairs, but the society can in this case be more confident that this influence will not be used to its disadvantage.

Within the Cooperative sector short and medium-term funds are usually made available by credit societies and other Cooperative banking institutions, while longer-term funds may be provided by

specialized Cooperative mortgage banks, by regional or national investment funds, Cooperative insurance organizations, pension schemes for Cooperative personnel. If these sources are not sufficient or not satisfactory, the co-operative society may have to resort to government or commercial banking institutions or finance agencies. The borrowed funds can take the form of:

- **A loan**, i.e. an advance given to the society for a fixed period on a separate loan account and for a specific purpose,
- **An overdraft**, i.e. a facility provided by a bank to establish a debit balance when necessary on the current account, up to a previously agreed limit which may be subject to periodical revision. The interest is payable on the daily balance. The rate is usually slightly higher than that of a loan, because the bank has to hold a higher liquidity reserve that decreases the profitability. It is customary for the borrower to provide securities up to the agreed maximum limit. Overdrafts should be used only for working capital requirements and not for finance fixed assets, as this will transform the fluctuating overdraft into a permanent debit balance. Under such circumstances the bank may exercise its right to terminate the existing overdraft agreement.
- **A discount credit**, i.e. the bank buys bills of exchange drawn by the society on its members or customers or endorsed by the society at face value, less a discount which equals the amount of interest payable for the currency of the bill. (W. Edward,1996)

2.1.4. Working Capital Policies and sources of capital in Cooperative Unions

Like any business entity Cooperative Unions need resources such as land, labor and capital. Adequate financing is one of the fundamentals of sound business operations. Cooperative Unions in order to have efficient and profitable operation they should have the ample capital.

Working capital policies: Traditionally current assets were seen as fluctuating, originally with a seasonal agricultural pattern. Current assets would then be financed out of short-term credit, which would be paid off when not required, whilst fixed assets would be financed by long-term funds. However in most businesses a proportion of the current assets are fixed over time, thus being expressed as “permanent”. For example, certain base levels of stock are always carried, cash balances never fall below a certain level, and a certain level of ready credit is always extended. A decision, thus, needs to be made whether, and to what extent, current assets are financed with either short-term or long-term sources of finance.

The management the Cooperative Unions may follow the defensive or conservative or the aggressive policy to finance the working capital for their Unions. The defensive/conservative policy involves using more expensive, but less risky long-term finance for most permanent current assets as well as the fixed assets.

The aggressive approach, however, involves using short-term finance for all fluctuating current assets and most permanent current assets too. This is likely to decrease interest costs and increase profitability but at the expense of an increase in the amount of higher- risk finance used by the Union. A risk for rapidly-growing companies, particularly when profit margins are low, is that as they grow, they need larger investments in current assets (and fixed assets), if the increase in assets is financed largely by short-term credit, the risks of liquidity shortages will grow. Financing asset growth with short-term credit is called overtrading.

2.1.5 Working capital ratios and trend analysis

Working capital ratios: The adequacy of working capital management policies in maintaining liquidity can only be determined by a detailed analysis of current resources and requirements

including regular cash flow forecasts. However, a broad indication of liquidity may be obtained by calculating various ratios: (Liquidity, efficiency, profitability and solvency ratios). Any assessment of working capital ratio must take in to account the nature of the business involved.

- The liquidity ratios are measures of short-term liquidity which indicate the extent to which current assets cover current liabilities.
- Efficiency ratios measure the speed at which Cooperative Unions convert their resources or assets in to sales.
- Profitability ratios measure the overall performance of the management in leading the business efficiently and effectively.
- Debt ratios measure the proportion of the resources and their sources.

Ratio Analysis: Financial statements report on both a firm's position at a point in time and its operations over some past period. However, the real value of financial statements lies in the fact that they can be used to help predict future earnings, dividends, and free cash flow. From an investor's standpoint, predicting the future is what financial statement analysis is all about, while from management's standpoint, financial statement analysis is useful both to help anticipate future conditions and, more important, as a starting point for planning actions that will improve the firm's future performance. (Eugene F., 2001)

Short-term solvency ratios as a group are intended to provide information about a firm's liquidity, and these ratios are sometimes called liquidity measures. The primary concern is the firm's ability to pay its bills over the short run without undue stress. (Rose, 2001)

Financial analysis is the process of identifying the financial strengths and weaknesses of the firm

by properly establishing relationships between the items of the balance sheet and the profit and loss account. (I.M. Pandey, 2005)

Trend Analysis: It is important to analyze trends in ratios as well as their absolute levels, for trends give clues as to whether a firm's financial condition is likely to improve or to deteriorate. Common size analysis and percent change analysis are two other techniques that can be used to identify trends in financial statements. Common size analysis is also useful in comparative analysis, and some sources of industry data. A final technique used to help analyze a firm's financial statement is percentage change analysis. In this type analysis, growth rates are calculated for all income statement items and balance sheet accounts. (Eugene F., 2001)

To conclude, the review of the literature part of this study was presented aiming that assessing some concepts in the management of working capital components would help in developing theoretical background in how cooperatives manage their working capital.

CHAPTER III—MATERIALS AND METHODS

3.1. Introduction

According to the 2006 year end report from the Regional Promotion Office of the Tigray National Regional State, there are about 1,304 primary level Cooperatives with a total capital of Birr 24,980,051 .There are also about 22 Cooperative Unions in the regional state. These Cooperatives serve a large number of families. This huge resource needs strong management team equipped with managerial skills and knowledge. This is because this huge resource should be managed scientifically in order to achieve their objectives and missions.

As stated, therefore, whether or not this resource is being utilized properly or not needs a research. Here, in this thesis work due to limitation in time and money only Cooperative Unions are considered.

Designing an appropriate working capital management and policy and information is necessary for the Cooperative Unions. This research work attempted to identify the phenomenon prevailing in the selected Cooperative Unions. To facilitate the process for the assessment primary and secondary data sources were given in this chapter. Moreover, this chapter deals with site selection and description of the study area, data collection procedures, data analysis and the limitations of methodology and procedural weaknesses observed in conducting this research.

3.2. Site Selection & Description of the Study Area

The study was conducted in the Tigray Regional State and the following paragraphs reveals the demographic, agro climatic and institutional information of the region.

Boundaries

Tigray is one of the national regional states of Ethiopia which is located in the North Eastern part of the country between 12° 15' N and 14° 57' N latitude and 36° 27' E and 39° 59' E longitude . It is bordered by the Amhara Regional State to the south and south-west, the Afar Regional State to the east, Eritrea to the north and north-east and the Sudan to the west. The total land area of the regional state is about 53,638 square kilometers consisting of high plateau and mountains. The high plateau and mountain ranges are dissected by numerous streams feeding to the major river of **Tekeze**. The regional state's relative distance from the rest of the country and presently accessible ports creates problems on the transportation of goods into and out of the regional state.

Topography

The altitude of the region varies from about 500 meters above sea level in the North East to nearly 4000 meters above sea level in the South West. Agro-ecologically, it is characterized by highland (Dega), intermediate land (Woina Dega), and lowland (Kola) (TRSSP: 2003). The topography of the region consists of high plateau and mountains with much of the land lying between 1,000 and 3,000 meters altitude. The highest peak mountain is **Tsibet** Mountain in southern zone which is 3,900 meters above sea level while the lowest area is in the **Erob** woreda in the eastern zone. (Development Plan of the National Regional State of Tigray, 2007).

The series of mountain range with their scattered settlements- typical of Northern Ethiopia- provide very impressive sceneries for tourists but pose equally impressive challenges for development planning and the provision of infrastructure.

Population

Tigray has a population of 4.1 million which accounts for about 6 percent of the country's total population. Of the total population of the region, about 49.23% is male and 50.77% female. The region's population has been growing at a rate of about 2.67% and the average population density for the whole region stands at 76.7 persons per square kilometers, with the highest density occurring in the eastern zone (123 persons per square kilometers) and the lowest, in the western zone (19.3 persons per square kilometers).

The people of Tigray are relatively homogenous in terms of ethnicity, religion and language. The majority of the population belongs to one ethnic group- the Tigraway (99.33%). The rest belong to the Kunama (0.07%) and Saba (0.6%) groups.

More than half of the population falling in the age category of less than 19 years, a very significant proportion of the Regional State's population is made up of young people. There are three active laborers per household. More than 83% of the population of the region is dependent on Agriculture as a source of livelihood. (Development Plan of the National Regional State of Tigray, 2007).

Climate

The climate of the region is variable due to the great variation in altitude. Generally there are two types of rainfall patterns in the region- mono modal and bimodal patterns. In the highlands the average temperature is around 22⁰ C while in the lowland area it is above 26⁰. Minimum monthly temperature occurs in the December- February months, ranging between 3 and 21⁰ C, while maximum mean monthly value occur in March to April, ranging between 19 and 43⁰ C. The

main agro climate zones of the Region are *Kolla*, *Woinadega*, and *Dega*. In addition, Very small areas of the region have desert and *Wuroch* (cold) zones.

The region has been suffering from recurring droughts which appear to come in progressively shorter cycles. The impact of these droughts, which may be exacerbated with the general change in the global climate and its variability, will have a strong impact on the future economic development and food security of the regional state. (Development Plan of the National Regional State of Tigray, 2007).

The rainfall pattern is sparse and unevenly distributed. Accordingly, it shows a variation of about 200 mm in the Northeast to nearly 1000 mm in the South West highlands of the region. The peak rainfall time in the region, though erratic, is from June to September.

Farming system

The farming system is family based farming of small pieces of land, producing primarily food from crops and livestock for household consumption, using family labor, and working with the simplest of tools and techniques. However, there are also commercial farms producing different cash crop in the western part of the region. Now a day's integrated effort is being made to partly commercialize the subsistence farming system, which involves subsistence production as well as production for the market of crops, livestock and other biological products. The cultivated land is about one million hectares (ha) out of which 12, 5000 hectares is cultivated by investors. The total households living in the rural areas are estimated to be 732,000, of which 30% are women headed households. The average land holding of the farmers is estimated to be about 1.19 hectares, though it varies from 0.25-0.9 hectares in the highland areas to 2 hectares in the lowland parts of the region (Tigray Regional State Strategic Plan. (2004-2006).

Marketable agricultural Commodities

In addition to the major crops supposed to grow in every agro ecological zone, major market oriented commodities are identified and given below.

- Sesame
- Cotton
- Pulses (Horse bean, Pea, Lentils, haricot bean)
- Spices
- Honey bee production
- Goat production and
- Dairy

Cooperatives

The establishment of primary and secondary agricultural Cooperatives on a voluntary basis and democratic principles is another favorable condition to agricultural development. The objectives of the Cooperatives include participation in output and input markets and promotion of saving and credit services. In the past few years major efforts have been carried out to organize and strengthen Cooperatives in a new form. For instance according to reports by the Regional Cooperative Promotion Office at the end of 2006 there were 22 Agricultural Cooperative Unions in the region established at Wereda level which is significant development indicator.

3.3. Sample Selection

In the Tigray National Regional State there are seven administrative zones. The seven administrative zones have 48 Woreda and one city administration. (Development Plan of the

National Regional State of Tigray, 2007). All the 22 Cooperative Unions cannot be taken for data collection. Hence the criteria used to select the Unions were:

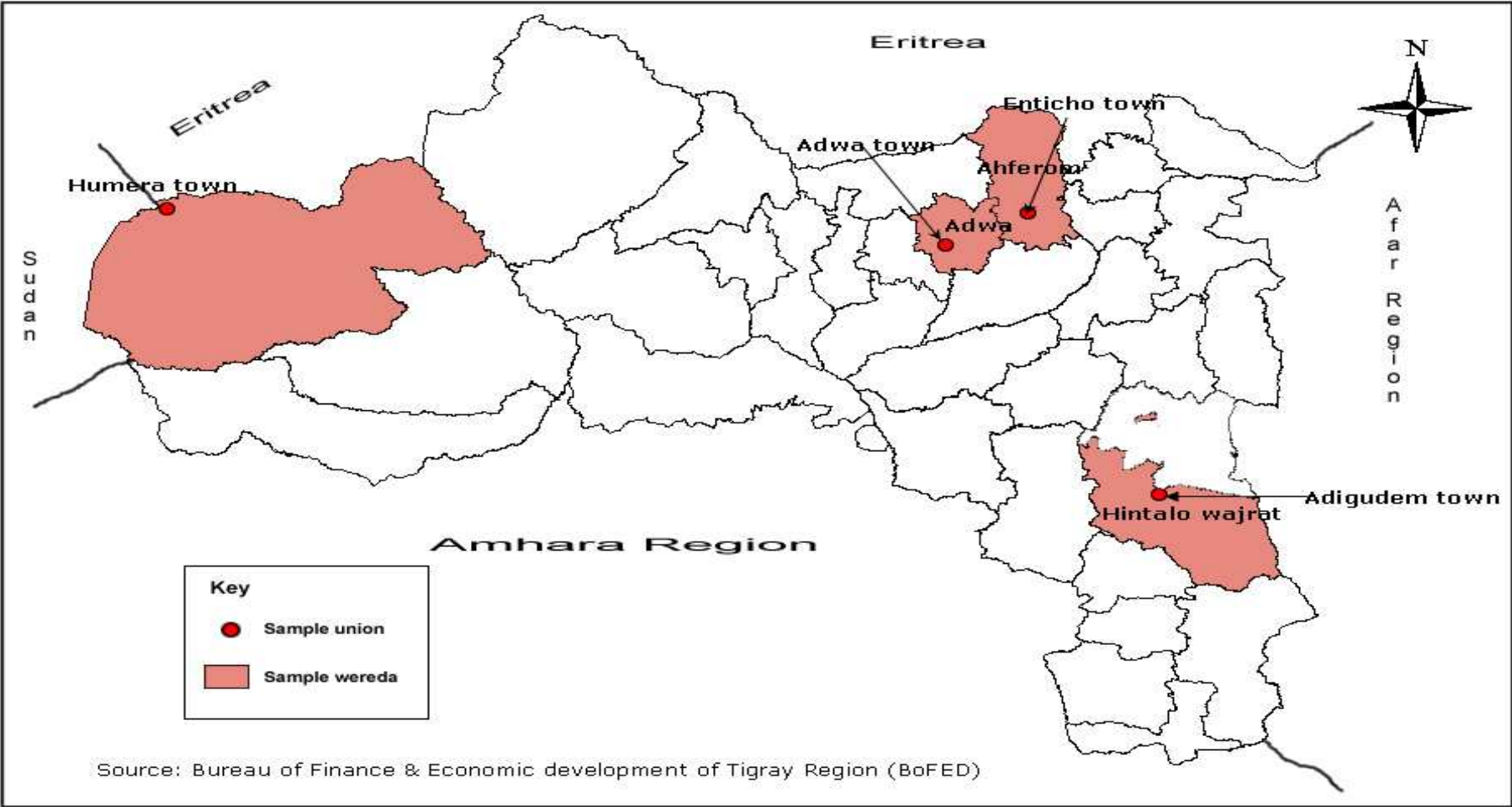
- The Union must be audited at least for three times.
- The Union must have primary level Cooperative members greater than or equal to four
- The Union must be in operation for about 3 years or more.

Of the total 22 Unions 6 fulfill the criteria set. In order to ensure geographical representations 4 Cooperative Unions were selected for the study.

Five paid employees and three board members from each Union involved in administration were selected randomly for an interview. However, it is the time and resource limitations which limit the data to the stated level and it is a clear fact that if more size of the data was used the accuracy would also increase. The location of the study area is shown using the regional map in Figure 3.1.

(Development Plan of the National Regional State of Tigray, 2007)

Figure 3.1 Map of the Regional State of Tigray, Ethiopia



3.4. Data Collection Methods

The data for this research were both from the secondary and primary sources. Primary data were collected by using an interview with the paid employees and board members. The secondary data was collected from the records of the Unions. The secondary data includes bylaws, board and management minutes, audit reports, and three years of financial reports. Information from balance sheets, income statement and other financial reports also forms part of this study.

3.4. Data Analysis

The collected primary data were analyzed by using SPSS software. Both descriptive and quantitative analysis was made in the study. The report contains growth rate, ratio analysis, graphs and bar charts.

3.5. Organization of the Paper

The project paper is organized in to five chapters. Chapter one discuss the back ground of the study, statement of the problem, objective of the study, purpose of the study, hypothesis of the study, and limitations of the study. Chapter two deals with the materials and methods employed in the study. The third chapter deals with the literature review that explains the concepts of working capital and its major components. Chapter four explains the results and discussions. Lastly, chapter five deals with limitations, conclusions and recommendations of the study.

CHAPTER IV—RESULTS AND DISCUSSIONS

4.1. Introduction

Cooperatives are private businesses organized and joined by members to fulfill their economic needs as patrons of the business, with the key control, ownership, and income distribution based on patronage proportions. They are businesses owned and controlled by the members who use its services, finance and operate it for their mutual benefit.

The purpose of Cooperatives is to provide greater benefits to the members. Their benefits may be increasing individuals' income or enhancing the members' ways of living by providing important services /goods which might be difficult to fulfill them individually. Such important services may include obtaining improved markets for their products and providing source of supplies or other services that may not be attainable if members acted alone.

Cooperatives may be organized at primary, Union or Federal level depending on the size and volume of transactions they involve in. In any one of these organization types for the proper functioning and steady growth, Cooperatives need proper financing sources of working capital and its best management.

At their establishment stage or when at take off they may raise resources (assets) and sources (liabilities and capital).In Cooperatives current assets cover the largest portion of their resources.

The management aspect which is mainly concerned with these current assets is known as working capital management. The portion of capital which is needed for day to day operations of the Cooperative

businesses is termed as working capital. Hence, the position of Cooperative Unions in managing their working capital was assessed and the result is discussed hereunder.

4.2. Importance of working capital

Cooperative businesses like any other business entities require the optimal amount of working capital to run their business profitably and thereby satisfy their members' needs. The size of the working capital and its proper management has a direct effect on the growth of the business and its profitability. In other words, working capital management policies are directly related with business profitability, liquidity and financial health. Therefore, managers of any business firm including Cooperatives need to have clear concepts and managerial skills on working capital and its management.

Working capital is the life blood of Cooperative type of businesses. It is essential to maintain the smooth running of a business. No business can run successfully with out an adequate amount of working capital. (Sharma et al, 1996). Maintaining adequate working capital has the following advantages for a Cooperative business firm:

- Solvency of the business by providing uninterrupted operation
- Creating goodwill
- Easy access to loans
- To avail cash discounts
- Regular supply of materials
- Regular payment of commitments

- Exploitation of opportunities
- Ability of facing crisis
- Quick and regular return on investments
- High morale

Particularly in Cooperative Unions working capital should be adequate, or optimal. That means it should be neither excessive nor deficit. This is because excessive working capital may impair profitability and inadequate of it can also threaten the business.

4.3. Sources and Uses of working capital

The assessment made on the sources of capital for the selected Cooperative Unions in the region is presented below:

- Share capital/equity
- Loan from different sources
- Donation from different agencies

According to the assessments result, the proportion and sources of capital for the selected Unions are presented in Figure 4.1. It is observed from the analysis that the largest portion of the working capital comes from the shares capital. Donations and reserves also contributes higher portion. The loan is largely from the Commercial Bank of Ethiopian for which the Cooperatives Promotion Office sign on behalf of the government as a collateral. The borrowed amount from the bank in the form of working capital is used by the Cooperative Unions and their affiliated members for different objectives which are discussed in the following paragraphs

To meet the financial requirements

Cooperatives share capital collected from members by selling to them shares at par value is not enough to run the business at their full capacity. For instance, the percentage of share capital to the total liability of the selected Cooperative Unions for three consecutive years is shown in Table 4.1.

Table 4.1: Percentage of share capital compared to liabilities. (Amount in ETB)

Name the of Union	Activity Year							
	2005		2006		2007		Mean	
	Capital	Liability	Capital	Liability	Capital	Liability	Capital	Liability
Ahferom	100	0	55.7	44.3	88.5	11.5	81.4	18.6
Getser Adwa	54.74	45.26	9.1	90.9	27.2	72.8	30.35	69.65
Adigudom	96.5	3.46	57.5	42.5	95.73	4.27	83.2	16.8
Setite Humera	17.4	82.6	-1.43	101.43	-0.44	100.56	5.00	94.90

Source: Calculated from the Selected Cooperative Unions Financial Reports, 2004/5-2006/7

It is inferred that one of the largest sources of capital /working capital in Cooperative Unions is loan from banks and other creditors that help in fulfilling the gap that they have.

Protect from presale of outputs before harvesting

Farmers under the Cooperative Unions and their affiliated members do have low economic capacity to cover all the expenses necessary for their farming activities. This has been particularly serious in cash crop areas like the Setit Humera. In order to alleviate these problems farmers were selling their outputs to traders at lower prices regardless of the price after harvesting. Therefore,

the loans that the agencies provide them in the form of working capital plays a great role in helping them in protecting from loss for their member farmers.

Increase Negotiation power

In the past years because of low economic level, most farmers in Tigray Regional State, Ethiopia, were having the habit of selling their agricultural outputs immediately after harvest to traders or consumers

at low prices to solve their current problems. This is mostly done without assessing and forecasting future market potential and leading to less return. Now a day after joining the Cooperatives at primary or Union levels the situations are changing due to the bank loan granted in the form of working capital.

According to the assessment outcome, Cooperative Unions do have some information sources for their marketing of the outputs. The significant market information source is the marketing department in the Wereda Promotion Offices. Even though it has its own limitations such as lack of the qualified personnel, speed in the exchange and dissemination of the information, structural problems, facilities and others it contributes a lot in serving Cooperative Unions by providing the required market information. Farmer members, instead of selling the products to merchant, with low price, they can negotiate with their Cooperatives either to sell their yields and get patronage dividend from future profit of the Unions or to make an agreement for future selling price by receiving a down payment in order to solve their current problems. This negotiation potential is created because Cooperative Unions can take money in the form of loans from the Commercial Bank of Ethiopia and grant credit to their members so that farmers can use it for their consumptions.

Increase productivity

Cooperative members through their Cooperative Unions and their affiliates are not only seeking loans as part of their working capital for current problem solving but also to purchase selected seeds, chemicals, agricultural input and other inputs to increase the productivity of the farm lands.

To conclude, the sources of working capital for the Cooperative Unions selected for this study purpose are; shares capital collected from members, loan from the Commercial Bank of Ethiopia and donations from government and non-government agencies and reserve funds which is retained in the Unions after the distribution of patronage dividends.

4.4. Working Capital Management in the Selected Cooperative Unions

;Financial Statements Analysis

Financial statements are the end results of business operations summary information. They help to assess the financial wellbeing of the overall Cooperatives business activities. The information reported in financial statements is important for management decisions in Cooperative business. Managers, members, and the stakeholders, of the Cooperatives benefit more from the financial reports when they are summarized and reported in scientific manners. Hence, financial reports do have benefits for the various users. These data help managers in preparing financial analysis which in turn helps in identifying problems, in initiating timely corrective measures and in identifying potential opportunities and threats for their Cooperatives.

Using these financial documents from the past years, one can tell their future trends. Moreover, financial measures can be used to compare current performance to its historical achievements in

evaluating similar Cooperative businesses. To sum up, financial statements help in making financial analysis of Cooperative entities.

Financial analysis is the process of identifying the financial strengths and weakness of the Cooperative business by establishing certain relationships among the items of the documents or reports. Ratio analysis is a powerful tool of financial analysis. Based on this tool, the financial performance, particularly in relation to their working capital management, of the Aheferom Union, Getser Adwa Union, Adigudom Union and the Setit Humera Union for the three consecutive years are presented as follows.

4.4.1. Ratio Analysis

Ratio analysis is a widely used tool of financial analysis. It is defined as the systematic use of ratios to interpret the financial statements so that the strength and weakness of a firm as well as its historical performance and current financial condition can be determined. The term ratio refers to the numerical or quantitative or mathematical relationship between two items/variables, for example inventories to sales revenue.

4.4.1.1 Liquidity Ratios

Liquidity is a measure of the Cooperative's ability to pay its financial obligations in time without disrupting the normal operations of the Cooperative. It is the relationship between the current assets and current liabilities. Liquidity is a sensitive barometer of month to month operations. The ratios under liquidity try to answer the following questions:

- What are the trends in:
 - Current and quick ratios from year to year?

- Working capital to annual sales, especially compared to receivables and inventories in relation to sales volume?
 - Did working capital increase or decrease in the previous years?
 - What factors caused any changes in working capital? and
 - How much working capital should Cooperatives have to run their business profitably?

The common measures of liquidity are: Current ratio, Quick ratio, Cash ratio Net working capital and Networking capital ratio. The outcomes of ratios analysis for the Unions selected for this study in the region are summarized in Table 4.2.

Note that in this study all the years are financial or accounting years for the Cooperative Unions. However, since the Unions are not audited timely according to the financial year the financial statements considered in this study were not prepared and reported at the same year end.

Table 4.2: Liquidity Ratios of the Selected Cooperative Unions

Cooperative Union	Year	Ratio Type				
		Current ratio	Quick ratio	Cash ratio	NWC in Birr	Networking capital
Ahferom	2005	0	0	0	172533.8	0.96
	2006	1.4	1.03	0.32	223228.1	0.18
	2007	4.22	1.35	1.02	331914.1	0.37
	Mean	1.87	0.79	0.44	242558.67	0.5
Getser Adwa	2005	1.92	1.43	1	63160.83	0.42
	2006	1.09	1	0.45	142237.55	0.08
	2007	1.35	1.21	0.48	259332.74	0.26
	Mean	1.45	1.21	0.65	154910.37	0.25
Adigudom	2005	28.3	7.74	7.73	144162.87	0.95
	2006	1.67	1.52	1.52	148496.44	0.28
	2007	14.49	12.73	8.42	212436.28	0.58
	Mean	14.82	7.33	5.89	168365.2	0.6
Setit Humera	2004	1.18	1.11	0.89	313936.63	0.15
	2005	0.97	0.81	0.04	-749676	-0.03
	2006/7	0.97	0.8	0.13	-386114.1	-0.03
	Mean	1.04	0.91	0.35	-273951.2	0.03

Source: Calculated from the Selected Cooperative Unions Financial Reports, 2005-2007

Current Ratio

The current ratio measures the adequacy of current assets to meet the Cooperatives short-term liabilities. As a conventional rule in business companies, a current ratio of 2:1 or more is considered as satisfactory for most business to maintain credit. The result of very high current ratio is to have an improved liquidity, greater safety of funds of short term creditors thereby reduced risk to creditors but a scarifies of profitable assets

As is presented in Table 4.2, it was only in the Adigudom Union, the current ratio is greater than the standard for the two years (2005 and 2007). This is because it had no liability from the Commercial Bank of Ethiopia. Even in the year 2006 it had no such liabilities from institutions but it had other liabilities such as payables to the Wereda Rural Development Office and the accounts payable for members' participation.

This ratio is below the norm in all the three Unions (Aheferom, Getser Adwa, and Setit Humera) in all the consecutive years. It is more serious in Setit Humera Union which was 1.18, 0.97, and 0.97 in the years 2004, 2005, 2006/07 respectively. The mean average was 1.04. The main reason for the low current ratio in this Union was because of high borrowing amount used for the purchase of sesame and sorghum during the harvesting period from the Commercial Bank of Ethiopia. This in turn created high amount of interest payables.

The average current ratio of the selected Unions, except for the Adigudom Union, is below the standard. However, as stated above, except for Setit Humera in all the Unions it recorded greater than one. Hence, the current ratio in the three Unions shows that there is more than one Birr in current assets for every one Birr in current liabilities. According to the assessment result, there are no opportunities that they missed because of lack of credit. However, management of the

Unions should focus on the future benefits and opportunities of their business and follow the compositions and proportions of their current assets and short – term liabilities in order to run their businesses profitably.

Quick Ratio

Quick ratio indicates the extent to which Unions could pay current debt without relying on future sales. It includes only the highly liquid assets that are readily convertible into cash without loss of value such as cash and marketable securities. A quick ratio value of 1:1 is considered as a standard conventionally. The quick (acid-test) ratio is similar to the current ratio except that it excludes inventory, which is generally the least liquid current assets, and prepaid expenses. It measures liquidity by considering only quick assets.

As shown in Table 4.2, the management of the Cooperative Unions in relation to the liquid assets is not satisfactory. Except for the Adigudom Cooperative Union, the average mean of the Unions' quick ratio is below the norm. This is so because Cooperative Unions were having irregular payment, doubtful and long duration outstanding debtors. The quick ratio of the Adigudom Cooperative Union is 7.74:1; 1.52:1, and 12.73:1 for the years 2005, 2006 and 2007 respectively. In all the years it is above the range. This means there was excess liquid assets such as cash and debtors than the current liabilities.

The quick ratio of Aheferom Cooperatives Union in 2005 is below the norm because it has no liabilities. This mean there was excess cash by then. However, for the year 2006 and 2007 the quick ratio was within the range.

The quick ratio of the Getser Adwa Cooperative Union for all the three years was almost within the standard which is 1.43: 1; 1:1, and 1.21:1 in 2005, 2006 and 2007 respectively. From this it is

inferred that liquid assets were managed well in this Union in comparison with the other Unions. The quick ratio of Setit Humera Cooperative Union for the three consecutive years was 1.1:1; 0.81:1 and 0.8:1 respectively. This shows there was shortage of liquid assets to meet its obligations for two years. The loan of this Cooperative Union is relatively high in all the included years.

Cash ratio

Cash ratio measures the ability of Cooperative Unions to settle their liabilities out of their reserved cash when the demand for the settlements of obligations is raised. In calculating the cash ratio trade investments and marketable securities are also included because they are equivalent to cash. Since there is nothing to be worried about the lack of cash if a business firm has reserve borrowing power Cooperative Unions should not handle more idle cash in their hands or at bank.

As depicted in Table 4.2, the Aheferom Cooperative Union shows high cash ratio because it carries relatively large amount of cash in all the three consecutive years. The average of the three years is 44 percent. The cash ratio for Getser Adawa was 100, 45 and 48 percent respectively for the year 2005, 2006 and 2007. The mean average was about 65 percent. This ratio was high for the Adigudom Cooperative Union, namely 7.74; 1.52 and 12.73 for the years 2005, 2006 and 2007 respectively. The average mean of the cash ratio for the Adigudom Cooperative Union was 7.33 (73.3 percent).

The cash ratio was relatively small for the Setit Humera Cooperative Union during the entire period of the study. As shown in the Table 4.2, it was 89 percent for the year 2004 but it has decreased to 4 and 13 percent respectively for the years 2005 and 2006/07. The mean average was 35 percent. All the Unions taken for the study do have reserved borrowing power. This ratio

analysis shows that all the selected Unions were not managing properly their cash balance.

Net working capital

Net working capital is the difference between total assets and total liabilities of a given firm. It also indicates the extent to which short term-debt is exceeded by short-term assets. This relationship gauges how able the business is to pay current debts using only its current assets.

As presented in Table 4.2, the net working capital is positive for the Unions selected for the study except for the Setit Humera Cooperative Union because these Unions had more current assets than current liabilities. This Table 4.2 shows that the Unions' short-term debt is exceeded by short term assets in the three Unions. However, for the Setit Humera Union except for the year 2004 all the other years the networking capital indicated negative amount due to huge amount of loan which also resulted in huge amount of interest payable.

Net working capital ratio

Net working capital ratio measures the Cooperative Unions' potential for funds. It is considered that, between two firms, the one having the larger net working capital has the greater ability to meet its current obligations. This is not necessary so; the measure of liquidity is a relationship rather than the difference between current assets and current liabilities. Hence, instead of net working capital the net working capital ratio is better measure of firms' potential for funds.

Table 4.2 reveals that the average net working capital ratio of the three Unions is comparatively low. Further it could be inferred that the average mean of the net working capital ratio was 0.5 0.25; 0.6 and 0.03 for the Aheferom Cooperatives Union, Getser Adwa Cooperatives Union, Adigudom Cooperatives Union and Setit Humera Cooperatives Union respectively. The Setit Humera Cooperatives Union shows negative result during the year 2005/6 and 2006/7. This low

or negative value indicated that the reserve fund in the Cooperative Union was less in amount. That is the main reason that the Cooperative Unions are taking huge amount of loan from banks and other agencies year after year.

To conclude, the liquidity ratios of the Cooperative Unions are fluctuating during the study period. Some liquidity ratios are by far below the standard. The Setit Humera Cooperatives Union which is below the norm and the Adigudom Cooperatives Union which is extremely above the norm indicated that the existence of liquidity problems in the Unions. These fluctuating ratios indicate that Cooperative Unions do not have sufficient reserve fund of their own. This in turn exposed them to take huge amount of borrowing which resulted in huge interest payable as in the case of Setit Humera Union. In other words the impact of this borrowing is decreasing liquidity ratios and creating liquidity problems for the Cooperative Unions. Therefore, Cooperative Unions should increase their capital to minimize the dependency on loans. An inventory price fluctuation is also another factor for the fluctuating liquidity ratios.

4.4.1.2 Capital Structure Ratios

Capital structure ratios help Cooperative Unions in measuring the Cooperative's financial risk and their ability in using debt to the members' advantage. Since member farmers are in low economic level, they do have problems in raising funds of their own for their Cooperatives. Debt is, therefore, obvious for Cooperatives to run their operations. However, the debt which is used to finance assets aiming to gear out the capital of the Cooperative Unions should be managed properly. For this purpose many ratios can be used. But in this study to understand the selected Union' management capacity only the Debt ratio and the Debt – Equity ratio and the Interest Coverage ratio were employed and results are presented in Table 4.3.

Table 4.3: Debt Management Ratios of the Selected Cooperative Unions

Cooperative Union	Year	Ratio Type		Interest Coverage
		Debit	Debit -Equity	
Ahferom	2005	0	0	0
	2006	0.44	0.08	117
	2007	0.12	0.13	1.07
	Mean	0.19	0.07	39.36
Getser Adwa	2005	0.45	0.83	11.4
	2006	0.91	10.02	0
	2007	0.73	2.68	7.7
	Mean	0.7	4.51	6.37
Adigudom	2005	0.03	0.04	0
	2006	0.42	0.74	0
	2007	0.04	0.04	0
	Mean	0.17	0.27	0
Setit Humera	2004	0.83	4.73	11
	2005	1.01	70.75	0
	2006/7	0.1	-226.45	1.2
	Mean	0.65	-50.32	4.07

Source: Calculated from the Selected Cooperative Unions Financial Reports, 2005-2007

Debt ratio

Debt ratio measures the proportion of the interest bearing and non-interest bearing external finance to that of the internal source. Debt ratio measures the percentage of total asset financed by debt or simply the percentage of total funds provided by creditors.

According to the outcome of the analysis made on the debt ratio, the Aheferm Cooperatives Union recorded 0, 44 and 12 percent respectively in the year 2005, 2006 and 2007. In the Gester Adawa Cooperatives Union for the stated years it is 45, 91, and 73 percent while in the Adigudom Cooperative Union, it is 3, 42, and 4 percent in the consecutive years.

This ratio is a bit higher in the Setit Humera Cooperative Union which is 83, 101, and 10 percent for years 2004, 2005 and 2006/07 respectively. This ratio shows how much percentage of lenders has financed the Cooperative Unions. Even though the figures are fluctuating for all the Cooperative Unions in the consecutive years stated, the external claim on the net assets of the Unions were high. This is applicable for the Setit Humera Cooperative Union and for the Gester Adwa Cooperative Union. As shown in Table 4.3, the ratio is relatively lower for Adigudom Cooperative Union and the Aheferom Union because they took lower borrowings from the Commercial Bank of Ethiopia.

This result points out that the Cooperative Unions have no other means or capacity to run their business unless they get the loan from different financial sources. The debt ratio in the Setit Humera Union for the years 2004 and 2005 is very high which is about 83 percent and 101 percent respectively. This means for the year 2004 there is Birr 0.83 in debts for every Birr in total net assets. And there is Birr 1.01 in debt for every Birr in total net assets for the year 2005. The ratios are very high because the amount of loan in the years stated was very high and there was also a loss in the year 2005.

Cooperative Unions, therefore, should manage and use properly their debt in order to decrease their interest expense and if they do not properly manage their debt, they will not be profitable even in their future. This is because lenders are contributing more than owners.

Debt –Equity Ratio

Debt-equity ratio measures the margin of safety for creditors. It compares the amount invested in the business by creditors with that of invest by members. Debt-Equity ratio expresses the relationship between the amounts of a firm’s total assets financed by creditor (debt) and owners (equity). Thus, this ratio reflects the relative claims of creditors and owners’ against the assets of the firm.

As given away in Table 4.3, the debt equity ratio of the Aheferom Cooperative Unions for the years 2005, 2006 and 2007 is, 0.0; 0.08 and; 0.13 respectively. That means lenders are contributing 0.0, 8, and 0.13 times in the years stated respectively to the total capital employed.

In the Gester Adwa Cooperative Union for the years stated the debt – equity ratio is high viz: .83 10.02 and 2.68 respectively. On the other side, the figure is low for the Adigudom Union which is 0.04, 0.74 and 0.04 for the consecutive years stated. This means, the contribution of lenders is lower in this Union except Getser Adwa Cooperative Union.

Debt-equity ratio of the Setit Humera Cooperative Union shows 4.73 in 2004; 70.75 in 2005 and 226.45 in 2006/7. This show the lenders have contributed more funds than owner members. Especially in the years 2006/07 the debt – equity ratio shows that the lenders’ contribution is 226.45 times of the member owners’ shares .The reason for the negative value in this year is because of the negative balance of owners’ equity due to net loss registered in the same year. The higher debt-equity ratio of the Unions’ indicted higher creditors’ claims on the assets, possibly indicating the Unions are

extending their debt beyond their ability to pay. However, the low figures for the two Unions indicate that they are managing their assets too conservatively.

The debt equity ratio for the Cooperative Unions selected for the study fails to indicate the Union's ability to meet their interest obligations. Therefore, the interest coverage or the times – interest – earned ratio is used to test the Cooperative Unions debt servicing capacity.

Interest Coverage ratio

Interest Coverage Ratio is used to test the Cooperative Union's debt – servicing ability. A lower ratio indicates excessive use of debt, or inefficient operations. A higher ratio is desirable but too high a ratio indicates that the Union is very conservative in using debt, and that is not using credit to the best advantage of owner members.

As revealed in Table 4.3, the time – interest coverage ratio is fluctuating from year to year. This ratio is high for Aheferom Cooperative Union especially for the two years viz: 0, 117 and 1.07 for the years 2005, 2006 and 2007 respectively. The times – interest ratio is very low for Adigudom Cooperative Union. This is because the Union has no borrowings from banks, which compute interest. For Setit Humera Cooperative Union in 2005 its interest coverage ratio is computed as zero. However, it has bank liability which has high interest expense. Therefore, the times- interest coverage ratio indicates that the firm was unable to pay its interest in the year due to the loss it incurred. Even in 206/07 the liability from the bank was too high 6,000, 000 Birr and the interest payable to the bank in the same year was 1,225,068 Birr and to the finance offices for the 2,336,253 Birr loan. However, the Setit Humera Cooperative Union was able to pay only 12 percent of the interest expenses. In other words, for the year 2006/07 only 12 percent of the interest can be covered by the earnings before interest and

taxes (EBIT). The Aheferom Cooperative Union was paid its interest expense better in the years 2005 and 2006 but its capacity declines in the year 2007. Generally, except for the Adigudom Union, which has no other liability which forces it to pay interest, the interest coverage ratio shows fluctuations at a decreasing rate for the other Cooperative Unions. This indicates that the Cooperative Unions are not properly managing their debts from different sources. Due to this, they have accumulated high interest expenses for the years to come. They were not in a position to settle their loan with its interest according to their plan.

4.4.1.3 Resources Management Ratios

Funds of creditors and member owners are invested in various assets in Cooperative Unions to generate sales and profits in addition to the services they render. It is a clear fact that the better the management of assets of the Cooperative Unions, the larger the amount of sales. The resource management ratios or activity ratios are used to evaluate the efficiency of the management of the Unions in utilizing the assets. Using some common activity or turnover ratios the management of the Cooperative Unions are evaluated and the details is presented Table 4.4.

Table 4.4: Resource Management Ratios of the Selected Unions

Cooperative Union	Year	Ratio Type				
		Inventory turnover (ITOR)	Days Inventory Holding (DIH)	Debtors turn over (DTOR)	Average collection period (ACP)	Total Assets turnover (TATOR)
Ahferom	2005	1.77	206	0.5	731	0.74
	2006	9.86	37	2.37	154	2.43
	2007	2.06	177	8.73	42	1.39
	Mean	4.57	140	3.87	309	1.52
Getser Adwa	2005	22.67	16	7.7	47	3.43
	2006	32.94	11	1.79	204	1.8
	2007	8.18	45	1.12	326	1.21
	Mean	21.26	24	3.53	192	2.14
Adigudom	2005	1.71	214	998.65	1	0.47
	2006	2.12	172	2204.21	0	0.41
	2007	25.05	15	5.19	70	3.09
	Mean	9.63	133	1069.35	23	1.32
Setit Humera	2004	77.66	5	8.24	44	3.06
	2005	0.57	644	0.01	65860	0.01
	2006/7	2.83	129	0.63	579	0.88
	Mean	27.02	259	2.96	22160	1.32

Source: Calculated from the Selected Cooperative Unions Financial Reports, 2004/5-2006/7

Inventory turnover ratio (ITOR)

Inventory turnover ratio indicates the efficiency of the Cooperative Unions and their affiliated members in producing and selling their agricultural yields and other outputs/inputs. The ITOR indicates how fast inventory is sold. A high ratio is good from the viewpoint of liquidity. A low ratio would signify that inventory does not sell fast and stays on the shelf or in the warehouse for a long time.

As depicted in Table 4.4, the inventory turnover ratio of the Aheferom Cooperatives Union varies from year to year. It is 1.77, 9.86 and 2.06 times for the years 2005, 2006 and 2007 respectively. The inventory turnover ratio of Getser Adwa Cooperatives Union is 22.67, 32.98 and 8.18 times for the years stated. This ratio for the Adigudom Cooperatives Union shows increment from year to year viz: 1.71, 2.12 and 25.05 for the years 2005, and 2007 respectively. On the other hand, the inventory turnover ratio of the Setit Humera Cooperatives Union shows fluctuations. It shows 77.66, 0.57 and 2.83 times for the years 2004, 2005 and 2006/7 respectively.

The Aheferom Cooperatives Union was fast in converting its inventories into sales in 2006 (9.86 times) and also the Getser Adwa Cooperatives Union in the same year (32.94 times). As stated above, the Adigudom Cooperative Union showed, an increasing trend in converting its inventories into sales and was fast in the year 2007 (25.05 times). The Setit Humera Cooperatives Union was fastly converting its inventories into sales in 2004 (77.66 times) but showed fluctuations then after.

A low inventory turnover ratio implies the Cooperative Unions' excessive inventory levels than warranted by sales activities. It also shows that they were holding slow moving inventories. The high inventory turnover ratios indicate good inventory management, and direct sales of the inventories to purchasers and the members.

For example, in the year 2004, the inventory turnover ratio of Setit Humera was 77.66 times. This shows that the Union sold its inventories directly to the purchasers for better prices according to the agreement. But in the year 2005, the ratio was low which was 0.57 times. This indicates that the Union did not get purchasers on time after they collect the inventories from the affiliated members. This is due to lack of market that the Union did not sell in time by the price decided by the management body. The sale was made too late and even it was sold at loss. The Setit Humera Cooperative Union sold its inventories on agreed contract price with their purchasers in 2004. Mostly purchasers made a down payment to the Cooperative Union for the purchase made at the time the agreement is made. The remaining balance is paid when inventories are cleared from the stores of the Union. This system is made due to the reasons that the purchasers of the main inventory item, sesame, are foreign exporters and the Cooperative Union and its affiliated members have short – term loan which should be settled currently from the Commercial Bank of Ethiopia.

A high level of sluggish sesame inventory in 2005 and 2006/07 for the Sitit Humera Cooperative Union amounts to unnecessary tied up of funds reduced its profit and increased its costs. It also affects its net working capital which is negative value and liquidity position.

In the Adigudom and Aheferom Cooperative Unions, the inventories are consumable commodities. They are mostly sold to member Cooperatives and non – member farmers directly. That was the reason why the inventory turn over ratio showed not much fluctuation.

The Adigudom Cooperative Union and the Aheferom Cooperative Union do have better but fluctuating inventory turnover ratios. However, their inventories are too small consumable commodities and their replacements are costly.

Day's Inventory Holdings (DIH)

Day's inventory holdings indicate the number of days, which takes for Cooperative Unions to convert their inventories into sales. The higher the day's inventory holdings the more number of days the Cooperatives Union waits to convert its inventories into sales and the more it incurs direct and indirect expenses to speed up the turnover.

As shown in Table 4.4, the days inventory holdings except for the Adigudom Cooperative Union, which shows increment for the three consecutive years. The figure is high in all the Cooperative Unions. The inventories turnover, as stated, in 2005 in the Setit Humera Union was low and for this reason the days in which inventories are held in store was 644 days. Due to this, the Union incurred more borrowing interest expense which is 1,198,356 Birr. Even in the year 2006/07 the day's inventory holdings are 129 days which shows that the inventories are not sold in time and liabilities are not settled in the date agreed up on. This resulted in high interest expense for the short – term loan granted by the bank, amounts 2,362, 966 Birr.

Generally, therefore, except for the Getser Adwa Cooperative Union which shows better days in which inventories are hold in stores, the days which take to convert the inventories into sales are relatively high in all the Cooperative Unions which implies high working capital level of the Unions.

Debtor turnover Ratio (DATOR)

Debtor turnover ratio indicates the number of times debtors turnover into cash each year. Generally, the higher the value of this ratio, the more efficient is the management of credit in Cooperative Unions. Accounts receivable turnover ratio measures the liquidity of firm's account receivable. That is, it indicates how money times or how rapidly account receivable are converted in to cash during a year. In short it answers the question what is the speed of conversion of account receivable in to cash?

As indicated in Table 4.4, the debtors' turnover ratio of the Aheferom Cooperative Union shows increment in all the three consecutive years. On the other hand, this ratio shows decrement in the years stated for the Getser Adwa Cooperative Union. It shows fluctuations for the Adigudom Cooperative Union with high ratio and for the Setit Humera Union with low figures. Cooperative Unions sell their inventories on credit to increase their sales. Farmers are at low economic level to purchase items they need on cash basis. These are the main reason why Cooperative Unions sell their inventories on credit basis to the affiliated members. These Debtors are expected to be converted into cash over a short period. Hence, they are reported under the current asset section of the balance sheet. In this regard, the Adigudom Cooperative Union shows high debtor turnover ratio. But it is not an indication of efficiency. Because the inventory of the Union is mostly consumable goods and they are mostly sold to members on cash basis.

Average Collection Period (ACP)

Average collection period measures the liquidity of debtors since it indicates the speed of their collection. Short collection period implies the prompt payments by debtors. In other words average collection period represents the average length of time a firm must wait to receive cash after making a sale. That is, it indicates how many days a firm takes to convert receivables in to cash or number of day's sales are tied up in account receivable.

The average collection period computed for the Aheferom Cooperative Union (730.89, 154 and 41.82 days for the three consecutive years) shows improvements. This period also shows increment for the Adigudom Cooperative Union and remarkable change for the Setit Humera Cooperative Union which is 44.31, 65859.66 and 578.64 days in the years 2004, 2005 and 2006/7 respectively.

This average collection period should be compared with the credit policy and the credit terms of the

Cooperative Unions. But the Cooperative Unions selected for this study does not have such written credit terms and credit policy. The time changes depending on the market situation and the seasonal economic conditions of member farmers. That means the Unions are not constantly sold inventories. In other words, there is no constant sales rate. Moreover, there are no standards set for the industry in the region. Thus, the average collection period computed for the Cooperative Unions may not directly measure the Cooperatives management efficiency in recovering their credit sales. Even the too low average collection period so computed may signify the Union's very restrictive credit and collection efforts in those years. In contrast, the high periods may show the liberal and inefficient credit and collection performance. In all the cases, the working capital of the Cooperative Unions was highly affected. As stated above it resulted in the liquidity problems and thereby affects their profitability.

Total Assets Turnover Ratio (TATOR)

This ratio shows the firm's ability in generating sales from all the financial resources committed to total assets. Total assets turnover measure's the management efficiency in managing its total assets to generate sales. An answer for the question "how much sales dollars is generated per dollar of investment in assets?" is the main purpose of total assets turnover ratio. A high ratio suggests greater efficiency in using assets to produce sale.

Assets in Cooperative Unions are employed to generate sales. Therefore, the Cooperative Unions should manage their assets efficiently to maximize sales and profits. Based on this, the analysis made for the years 2005 to 2007 in the Unions selected for this research study is presented below:

During the years 2005 to 2007, the total assets turnover for the Aheferom Cooperative Union shows fluctuations in the study period (0.74, 2.4 and 1.39 times respectively). Fluctuation has also been noticed in the Setit Humera Cooperative Union which is 3.06, 0.101 and 0.88 times in the specified

years. The main reason for the fluctuations in these two Cooperative Unions is that there was lack of market for the inventories they held by the price decided by the management. The selling price set by the board and the market price were not matched. Therefore, the inventory increased the balance of the current assets and decreased the sales amount thereby the profit for the Unions, too. In all the selected Unions, selling of inventories is fluctuating from year to year.

As shown in the Table 4.4, the total assets turnover for the years stated was showing decrements in the Getser Adwa Cooperative Union with 3.43, 1.80 and 1.21 times. On the other side these ratios showed increments with fewer differences for the Adigudom Cooperative Union which is 0.47, 0.41 and 3.00, times.

This ratio is indicating the Cooperatives ability in generating sales from all financial resources committed to total assets. For example, ratio of 3.06 times indicates that the Union is producing 3.06 of sales for one Birr of capital employed in the total assets.

4.4.1.4 Profitability Ratios

Profitability is the net result of a large number of policies and decisions. Thus, profitability ratios give final answers about how the Unions are being managed. In other words, profitability ratios are used to evaluate the overall management effectiveness and specifically indicate how effectively a firm's management generates profits on sales, total assets, and owners' equity.

Cooperatives should earn profits to survive and grow over a period of time. Profits are essential even for Cooperatives but it would be wrong to assume that every action initiated by the management of these business firms should be aimed at maximizing profits. Cooperatives are organizations of the

weak section of the society and their main objective is to enhance the welfare of this weak section of the society. They also have strong competitions from other business entities. Hence, for their survival and continuity as business entities and to achieve their objectives they should earn profits.

The working capital management of the Cooperative Unions does have a direct influence on the profitability of the Unions. In order to see the impact of the working capital management on the profitability of these Cooperative Unions, profitability ratios are used in their evaluation. Hence, the evaluation of the over all performance of the management in these Cooperatives in managing the resources and operations is presented in Table 4.5.

Table 4.5: Profitability Ratios of the Selected Cooperative Unions

Cooperative Union	Year	Ratio Type			
		Net Profit Margin (NPM)	Operating Expense	Return on net Assets (RONA)	Return on equity (ROE)
Ahferom	2005	-0.06	1.1	-0.04	-0.04
	2006	0.08	0.92	0.12	0.02
	2007	-0.05	1.06	-0.04	-0.04
	Mean	-0.01	1.03	0.01	-0.02
Getser Adwa	2005	0.07	0.93	0.19	0.36
	2006	0.03	0.97	0.06	0.62
	2007	0.11	0.93	0.13	0.47
	Mean	0.07	0.94	0.13	0.48
Adigudom	2005	0.1	1.46	0.05	0.05
	2006	0.09	0.97	0.03	0.05
	2007	-0.01	1.02	-0.01	-0.01
	Mean	0.06	1.15	0.02	0.33
Setit Humera	2004	0.11	0.89	0.34	1.96
	2005	-3.58	5.93	-0.03	-2.18
	2006/7	0.03	0.94	0	-6.16
	Mean	-1.15	2.58	0.1	-2.13

Source: Calculated from the Selected Cooperative Unions Financial Reports, 2004/5-2006/7

Net Profit Margin (NPM)

Net profit margin ratio indicates the efficiency and performance of the Cooperatives Unions' management in generating net income to the members. In other words, it measures the percentage of each sales Birr remaining after deducting all expenses. In other words, net profit margin measures the percentage of each sales remaining after deducting all expenses.

As depicted in Table 4.5, the Net profit margin of the Aheferom Cooperative Union shows 6 percent, 8 percent and 5 percent respectively for the years 2005, 2006 and 2007. In the Getser Adwa Cooperative Union the net profit margins of the years have a positive value. However, the contribution registered to the profit of the Union is too low which is 0.07, 0.03 and 0.11 respectively for the years 2005, 2006 and 2007. This is because the Union's cost of goods sold and other operating expense were high.

The interpretation and the analysis are also similar for the Adigudom Cooperative Union. It shows low contribution to the profit. Even for the year 2007 it shows loss of 1 percent in sales of 100 percent of inventories.

The net profit margin ratio for the Setit Humera Cooperative Union shows 0.11 cents profit for every one Birr sales of inventory in 2004. It converted into a loss of 3.58 Birr for every one Birr sales in 2005 and contributed 0.03 cents for every one Birr sales in the year 2006/07. Generally, the Cooperative Unions are operating at loss or contributing very low to profits. This is due to cost of sales and other operating expenses are high and managed poorly.

Operating expenses ratio

This ratio explains the changes in the profit margin (EBIT to sales). This ratio indicates the average aggregate variations in expense , where some of the expenses may be increasing while others may be

declining. The operating expense ratio is an important ratio which explains the change in the profit margin that is earnings before interest and taxes (EBIT) to sales.

During the selected years, the operating profit ratio of the Aheferom Cooperatives Union shows positive values viz: 1.10, 0.92 and 1.06 respectively. The positive value was also seen in the Getse Adwa Cooperative Unions for the stated years 0.93, 0.97 and 0.93. For the Adigudom Cooperative Union the figures were bit higher: 1.46, 0.97 and 1.02 in the years 2005, 2006, and 2007 respectively. Similarly, in the Setit Humera Union the amount of the ratio is 0.89, 5.93 and 0.94 during the selected years.

In the year 2005, the Setit Humera Cooperative Union had high amount of cost of goods sold and expenses. This is because during this year there were high purchase costs and other related expenses. Hence, the Unions operating expense ratio indicates that 598 percent of sales have been consumed by the cost of goods sold and operating expenses. Because of this reason the Cooperative could not pay its bank loan. However, in the year 2004, the operating expense ratio shows that the cost of goods sold and operating expenses have consumed only 89 percent of sales. This implies that 11 percent of the sales were left to cover interest expenses, dividends and others. The result shows similar picture for rest of the years of all the three Unions. These variations in this ratio are due to different reasons such as: changes in the sales price, changes in the demand for the inventories, and increase in cost or expenses.

Return on Net Assets (RONA)

Return on net assets measures the overall effectiveness of the management of the Union in generating profits from the total investment in total assets. This ratio shows how Cooperatives are efficiently using their resources in generating sales. This ratio measures the overall effectiveness of management of Cooperative Unions in generating profits from its total investment in assets.

As shown in Table 4.5, the RONA for the Aheferom Cooperative Union for the years 2005, 2006 and 2007 shows lower positive values, which indicate inefficiency of the management in managing their resources. In 2005, in Aheferom Cooperative Union one Birr of net asset generates - 0.01 cents to EBIT which is loss. However, for the year 2006 one Birr of the net asset of the Union generates 0.12 cents to the EBIT.

For Getser Adwa Cooperative Union, the RONA was showing small positive values for all the years but with a fluctuating trend. In the Adigudom Cooperative Union this ratio shows very small positive values (0.05 and 0.03) for the years 2005 and 2006. This indicates that the policy of the Union is conservative.

For Setit Humera Cooperative Union, the RONA was 0.34 in the year 2004. This means that there was 0.34 cents return on the sales of one Birr value of inventory. However, in the year 2005, this ratio declined to negative, 0.03, which means that there was loss of 0.03 cents in the one Birr sales. This is because of the high costs of sales and expenses incurred in the year. In the year to 2006/07, the contribution was the same but with positive value of 0.03.

Return on Equity (ROE)

Return on equity measures the rate of return realized by a firm's owners' on their investments and serves as an indicator for the performance of the management. A return on share holders' equity ratio is used to see how Cooperative Unions are profitably using the owner member investment.

The ROE of the Aheferom Union is fluctuating in the years 2005 to 2007. It also changes in negative and positive signs indicating the losses and gains turn over. The ROE of the Getser Adwa Union showed positive but fluctuating values viz; 0.36, 0.62, and 0.47 for the selected years. This ratio shows

positive value for the years 2005 and 2006 for the Adigudom Union. However, the result was changed to a negative value of 0.01 in the year 2007.

The Return on equity of the Setit Humera Cooperative Union in 2004 shows positive value which is 1.96. This means for every Birr in equity the Union generated 1.96 Birr profit. In 2005 and 2006/07 the figure is changed and shows negative value of 2.18 and 6.16 respectively. This is so because the capital of the Union has shown negative value due to the huge loss of the Cooperative incurred in the year 2005.

The equity capital of the Cooperative Unions include member owners' investment/ shares, reserve fund, donations, excess cash found in auditing and the gain /loss of the year .Based on this concept, the ROE of the Cooperative Unions was computed. Generally, the Unions are poor in the management of the owners' resources. Because, this ratio reflects the extent to which the objective of the Union is accomplished. One of the major objectives is enhancing the welfare of owners by maximizing their services and profits. And the low ratios indicate more conservative financing policy of the Cooperative Unions.

4.4.2 Trend Analysis

As stated before, Cooperatives are established to enhance the living standard of their owner members through the creation of collective bargaining power in the business area. Because of the low economic conditions of their members, their resources also are limited. However, the government and other non-government organizations are giving significant support to the Cooperatives. The government particularly provides guarantee for Cooperatives to get loans from the Commercial Bank of Ethiopia. The problem in the sources of finance of these Cooperatives is, therefore, alleviated in this way. Hence, they can use this opportunity to expand their operations. Some are using this chance, and huge loan is

employed in the business. However, this needs detail assessment as to whether the Cooperative Unions are using the resource to achieve their objectives or not. This huge investment in working capital needs a sort of evaluation. In other words, whether Cooperative Unions' financial management in general and their working capital in particular are increasing or decreasing year after year needs an assessment. One of the techniques used to identify the Cooperatives financial condition is the percentage change analysis. In this analysis the four Unions' trends are presented graphically with interpretations.

The analysis is made from the percentage changes of the years 2005 to 2006 and from year 2006 to 2007 for the three Cooperative Unions and 2004 to 2005 and 2005 to 2006/7 for the Setit Humera Union. This is to show the increase or decrease trends in the financial statements.

4.4.2.1 Analysis of Income statement

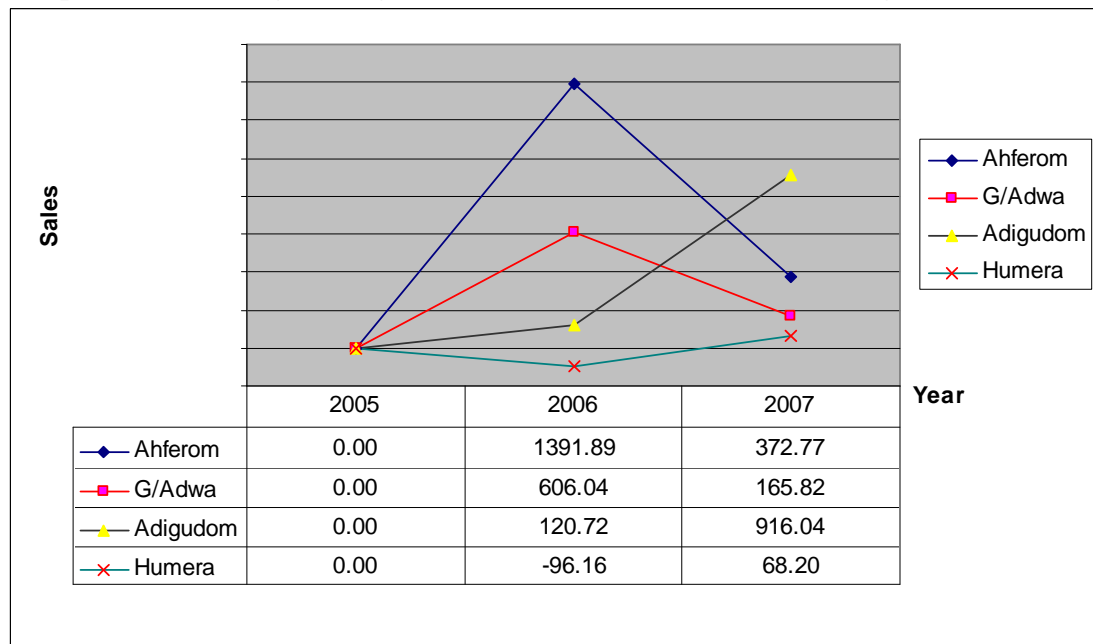
Any business firm communicates financial information to the users through the financial reports or statements; this is because financial statements contain summarized information of the firm's financial affairs organized systematically.

The basis for financial planning, analysis and decision making is the financial information which is contained in the financial statements .Hence, the major objectives of preparing financial statements is to assist in decision making. The two basic financial statements prepared for the purpose of external reporting are: the income statement and the balance sheet. In this part, therefore, using these statements Cooperatives Unions' direction changes in financial position over the study period is discussed.

It is important to analyze trends in ratios as well as their absolute levels, for trends give clues as to whether a firm's financial condition is likely to improve or to deteriorate. Common size analysis and percentage changes analysis are two common techniques that can be used to identify trends in financial statements. In percentage changes analysis growth rates are calculated for all the items of the income

statement and the balance sheet accounts. Here in this trend analysis, three years data from the selected Cooperative Unions' financial reports were taken and the year 2004/5 is considered as the base year and the results are discussed hereunder using graphs.

Graph 4.1: Percentage Changes on Sales on the Selected Unions in Tigray



Source: Derived from the Selected Cooperative Unions Financial Reports, 2004/5-2006/7

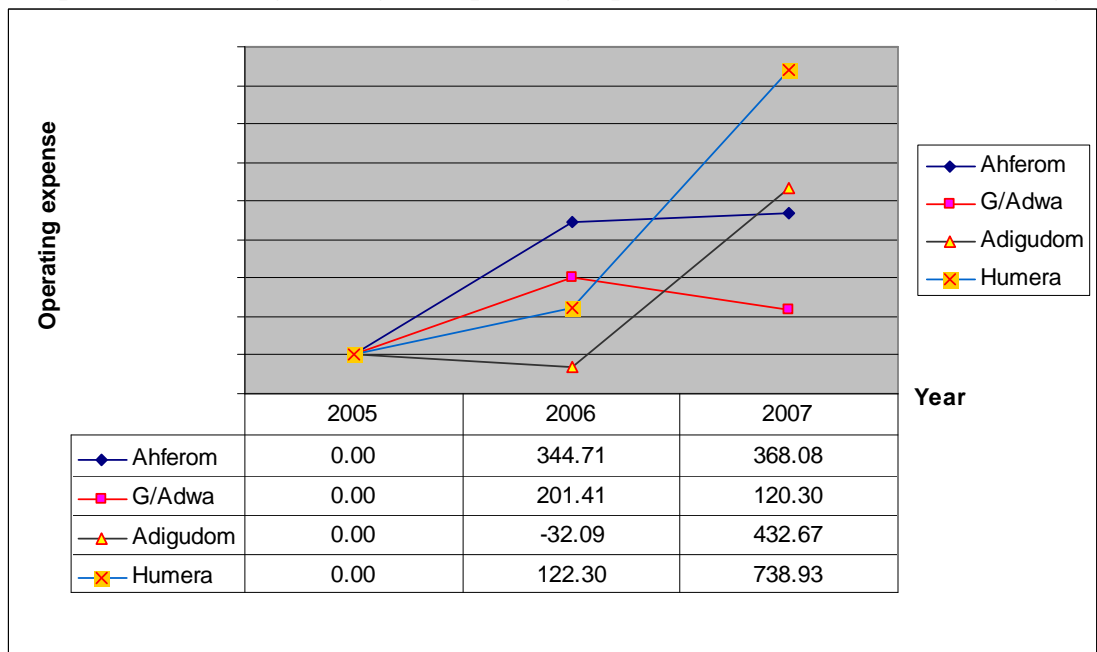
Note that figures in the graphs indicate percentage changes on the selected items of the income statement and the balance sheet considering the 2004/2005 financial year as a base year.

As depicted in Graph 4.1, the percentage changes on sales of the Aheferom Cooperatives Union increased in 2006 as compared to the 2005. This is because its operation has increased in 2006. In other words, there was good availability of markets for its inventories. However, in the year 2007, the percentage of changes on sales declined. The major reasons for this decline were lack of market for the stocks, and selling price reductions for their stocks.

The percentage of changes on sales for the Getser Adwa Cooperatives Union and Adigudom Cooperatives Union showed similar trends in 2006, which has increased. However, in the year 2007, the Adigudom CU showed increments but the Getser Adwa Cooperative Union inferred decreasing trend in the year 2006-2007, because there was lack of market.

In the year 2005/6 the Setit Humera Cooperatives Union showed declining rate as compared to the 2005/2004 financial year. This is because there was less market demand for the major cash crop yield namely sesame in the stated year. However, the rate showed progress in the year 2006/2007 because the demand for its inventory was increased in the market.

Graph 4.2: Percentage Change on Operating expenses on the Selected Unions in Tigray



Source: Derived from the Selected Cooperative Unions Financial Reports, 2004/5 -2006/7

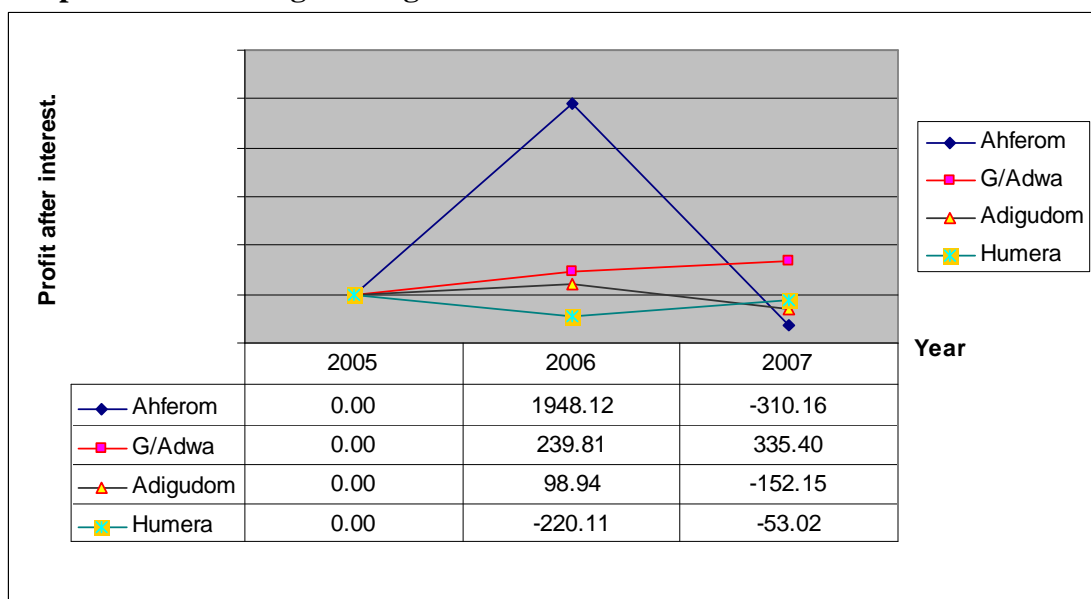
As depicted in Graph 4.2, the percentage changes on operating expenses on Aheferom Cooperatives Union showed increments year after year. This is because the operating expenses including interest expenses were increasing in the years during the study period.

In 2006 as compared to the 2004, the operating expense was increased for the Getser Adwa Cooperatives Union. This is because all expense types except the interest expense had increased. However, the percentage changes showed decreasing trend in the year 2007 as compared to the 2006 year. This is because some operational expenses showed decreases.

For the Adigudom Cooperatives Union the percentage changes on the operating expense showed decreasing trend in the year 2006 as compared to the year 2005. This is because there was no liability from the Commercial Bank of Ethiopia on which interest expense was incurred. Moreover, the Union was found not expanding its operations in the year 2005-2006 and there was less incurred on expenses. However, in the year 2007, the percentage change showed an increasing trend. This is because all the operating expense items were increased in the year 2007.

In 2005/6 as compared to the 2004/5 the operating expense of the Setit Humera Cooperatives Union reviled decreasing trend. However, in the year 2006/7 it showed increasing rate due to the huge amount of bank interest charges which was Birr 1,985,629 and increase in depreciation expenses on fixed assets. Other expenses such as transport, sales tax and freight – out also showed increase.

Graph 4.3: Percentage Change on Profit after Interest on the Selected Union in Tigray.



Source: Derived from the Selected Cooperative Unions Financial Reports 2004/5-2006/7

As showed in Graph 4.3, in the year 2006, the Aheferom Cooperarive Union showed an increasing trend. Because of high cost of goods sold and operating expenses in the year 2007, the Union faced loss. In the year 2005/6 the Union’s total expenses showed decreasing rates and hence its profit after tax and interest was high. However, in the year 2006/7 due to increases on interest expenses and other operating costs, the percentage change on the profit after interest and tax was declined.

The Getser Adwa Cooperatives Union showed similar trends in the percentage changes on the profit after interest and taxes. This is because it showed similar increasing trend on its cost of sales and total operating expenses. The Adigudom Cooperative Union showed fluctuating percentage changes on the profit after interest and tax. In 2006, the value was increasing at a positive rate as compared to the 2005. However, in the year 2007 due to increases in cost of sales and operating expenses the percentage changes on profit after interest and taxes showed declined trend.

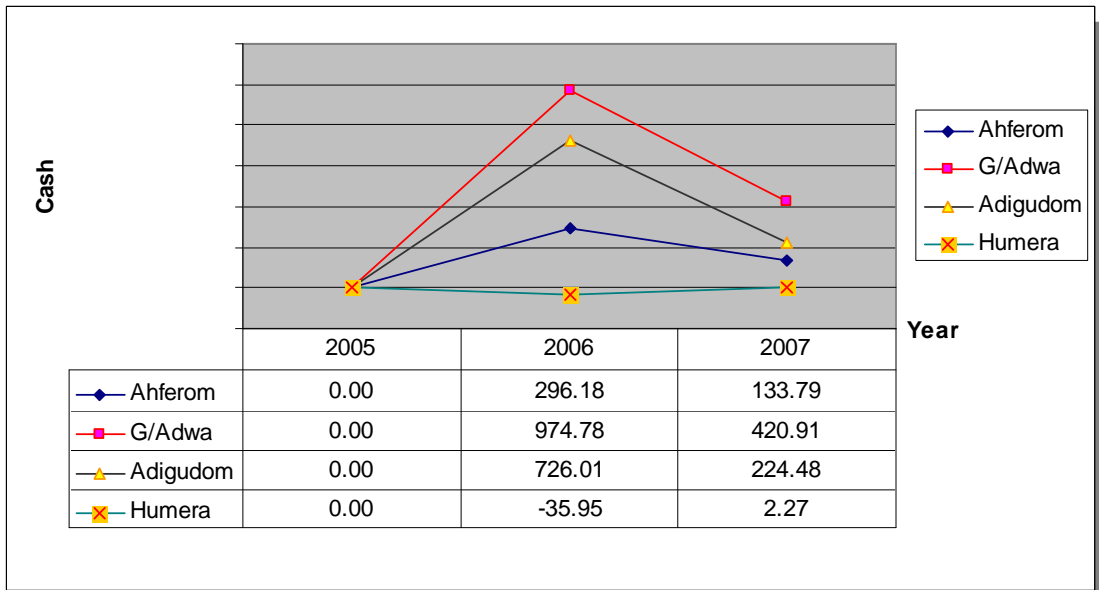
The Setit Humera Cooperatives Union depicted decreasing percentage changes on the net income after interest and tax in the year 2005/6 as compared to the year 2004/5. This is because the high increases showed on its operating expenses in the year due to the high interest expense and the principal due but not paid. In this year the cost of goods sold for this Union showed decreases but the effect was more influential on the operating expenses and hence it adversely affected the net income of the year. However, in the year 2006/7, the percentage changes on the profit after interest and taxes showed increasing trend though the cost of goods sold and the operating expenses showed increments, too. This is because there were high sales for the inventories the Union held during the year.

To conclude, therefore, the Cooperative Unions selected in this study during the study period showed fluctuating net profit. This is because the management of these Unions was not in a position to minimize their costs and increase sales volume.

4.4.2.2 Analysis of Balance Sheet

The main components of the working capital are: cash, accounts receivables, inventories and are commonly named as current assets, and current liabilities such as accrued expenses ,bills payable, interest payable, short-term payable and salary payable. Percentage changes of these items are analyzed and presented in the form of Graphs.

Graph 4.4: Percentage Changes on Cash on the Selected Unions in Tigray

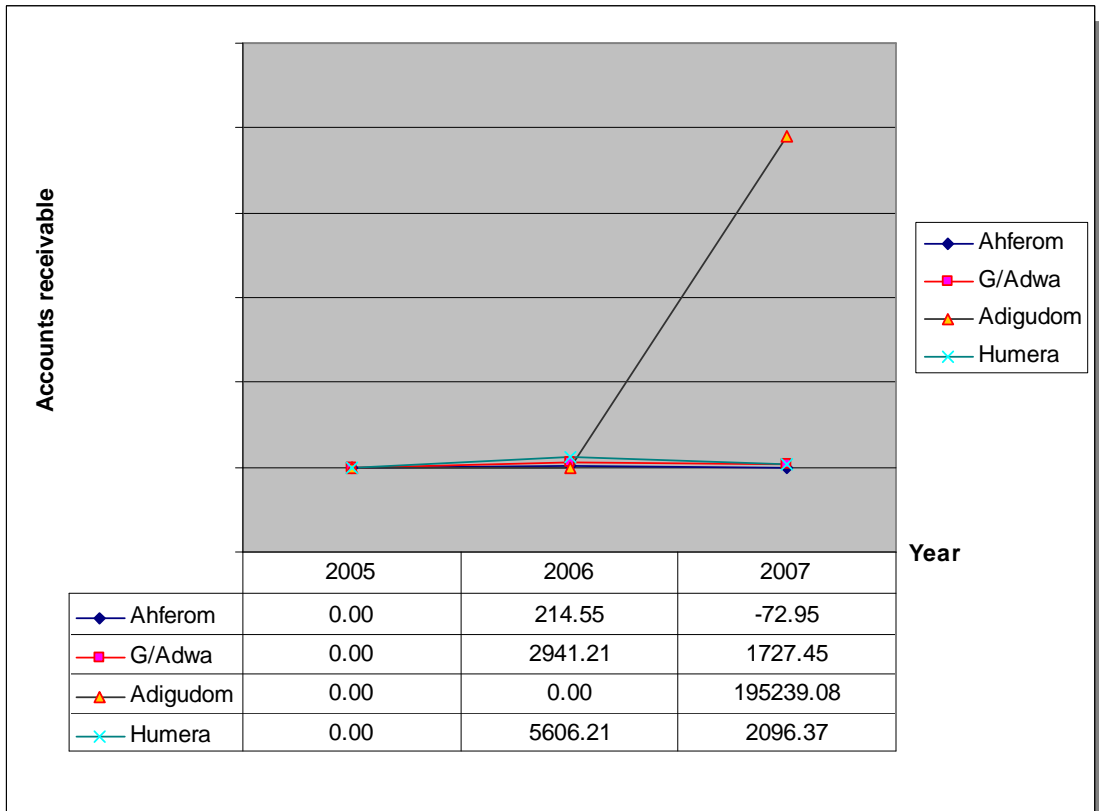


Source: Derived from the selected Unions Financial Reports, 2004/5 – 2006/7

As indicated in Graph 4.4, the percentage changes on cash showed similar trends for the Ahferom, Getser Adwa and Adigudom Cooperatives Union. It shows an increasing trend in the year 2005 to 2006. However, it decreased in the year 2006 from 2004/5. This is because in these Union’s inventories were sold at low turnover and members’ were not paid their liabilities on time.

In Setit Humera Cooperatives Union, in the year 2005, there was huge purchase of different types of agricultural and consumable commodities. These transactions resulted in a declining trend on cash of the Union when compared to the year 2004. However, in the year 2006/7 because the inventory level has decreased the trend showed increment, which changed from negative to positive values.

Graph 4.5: Percentage Changes on Accounts receivable on the Selected Unions in Tigray

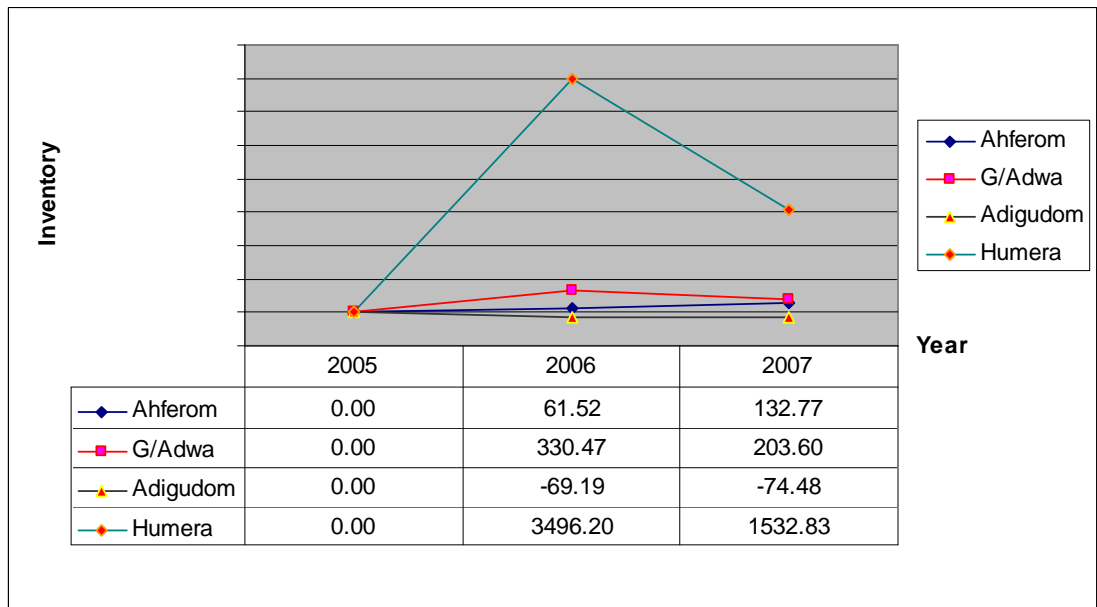


Source: Derived from the selected Unions Financial Reports, 2004/5-2006/7

As shown in Graph 4.5, the accounts receivable percentage change for the Adigudom Cooperatives Union indicated an increasing trend for the year 2006. In the year 2007, it showed highly increasing rate. This is because there was much credit sales in the year 2005 and 2006.

For the years 2005 and 2006, the percentage changes on accounts receivables of the three Unions showed similar trend. All increased in the year 2005 from 2004 and declined at a decreasing rate in the year 2006 from 2005. This is because purchases of inventory and credit sales of the existing inventories were lower.

Graph 4.6: Percentage Changes on Inventory on the Selected Unions in Tigray



Source: Derived from the selected Unions Financial Reports, 2004/5 – 2006/7

It is inferred from Graph 4.6 that the percentage change on inventory of the Aheferom Cooperatives Union showed increment constantly year after year during the study period. This is because the volume of sales was changing positively, and inventories were supplied regularly

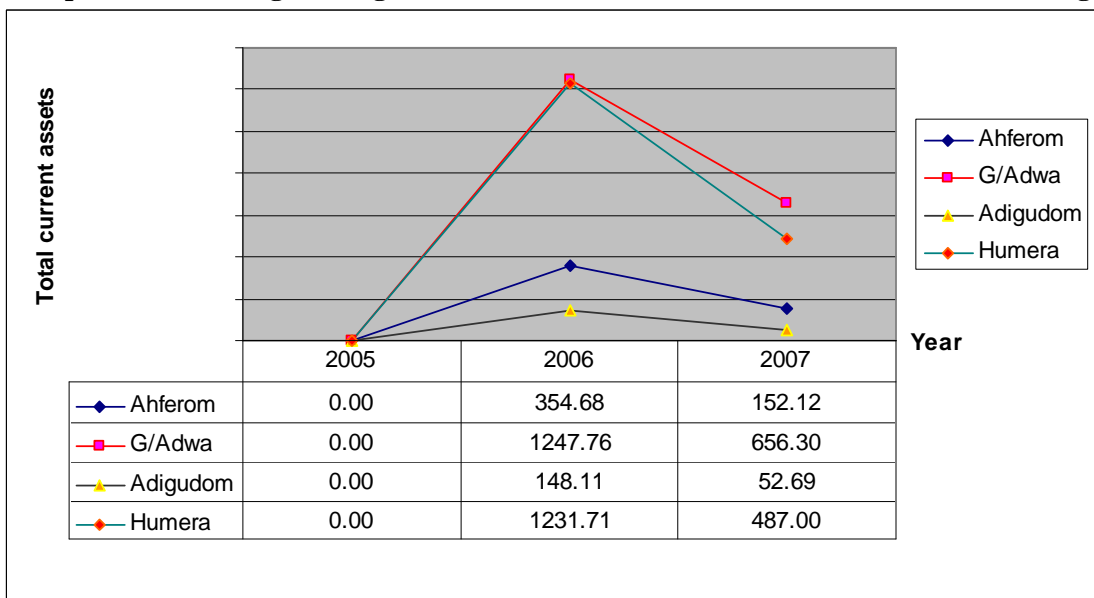
In the year 2006, the percentage changes on inventories of the Getser Adwa Cooperatives Union showed increases compared to the 2005 year. But, in the year 2007 it decreased at a decreasing rate. This is because the sale of inventories and timely collection efforts of the management was weak.

The percentage change on inventories for the Adigudom and Ahferom Cooperatives Union showed similar trends. It increased in the year 2006 compared to 2004/5 and there after decreased. This is because the inventories were converted into sales relatively at a faster speed.

The percentage changes on inventories of the Setit Humera Cooperatives Union showed higher increase in the year 2006/5 than the year 2005/4. This is because a sale was lower in 2006/5 and there

was high inventory level in stores. In the year 2006/7, because sales transaction was improved the level of inventory was decreased. This resulted in decreases on the percentage changes on inventory, as shown in Graph 4.6

Graph 4.7: Percentage Changes on Total Current Assets on the Selected Unions in Tigray.



Source: Derived from the selected Unions Financial Reports, 2004/5 -2006/7

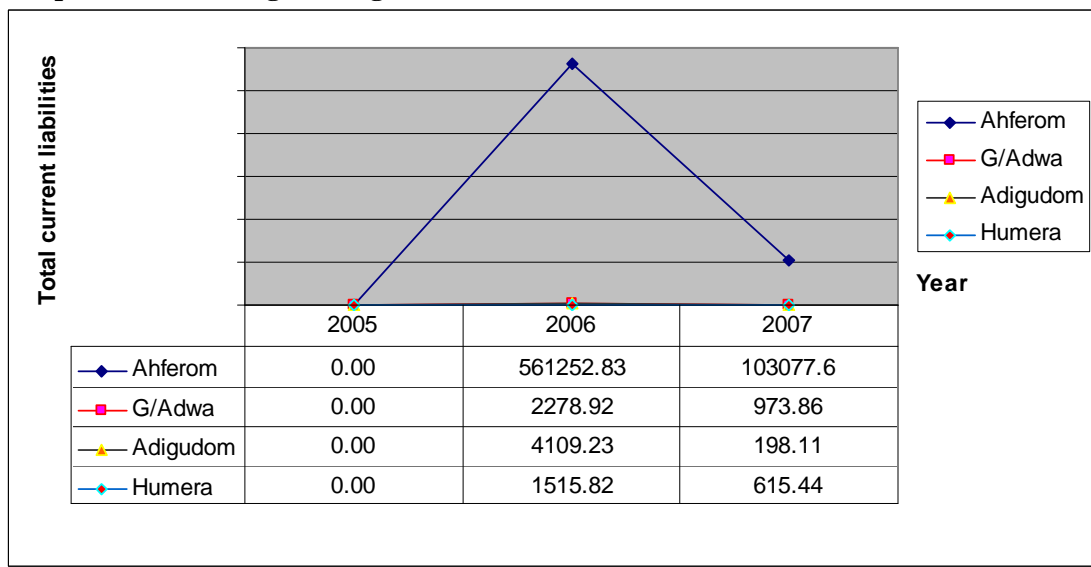
As depicted in Graph 4.7, in the year 2006, the total current assets showed increments for the Ahferom because of increases in inventory. However, because of the effects of cash and accounts receivable the total current assets of the Union decreased in the year 2007. Hence, the percentage change on the current assets of the Union showed declining trend.

The percentage changes on total current assets for the Getser Adwa and Setit Humera Cooperatives Union showed similar mould. It increased in the year 2006 and then decreased in 2006/7 financial year. This is because of low inventory levels and less sales during the year.

The percentage changes on current assets of the Adigudom Cooperatives Union showed increasing trend in the year 2006 compared to 2005. This is because there was idle cash and the accounts

receivable of the Union also remains constant. However, the trend showed decreasing rate in the year 2007 because of low levels of the components of working capital.

Graph 4.8: Percentage Changes on Total Current Liabilities on the Selected Unions in Tigray



Source: Derived from the selected Unions Financial Reports, 2004/5 – 2006/7

Note! Because the result is concentrated on the axis for the three Unions separate graphs for the three Cooperative Unions are presented in the appendix part for clarity.

Graph 4.8 depicts that the percentage changes on total current liabilities of the Getser Adwa Cooperatives Union increased in the year 2006 as compared to the 2005 financial year. It is because the Union got loans from the food security office of the Wereda and there were some accrued expenses. These liabilities of 2006 were settled in 2007. Moreover, there were no increases in other forms of credits in the year 2007. This resulted in a decreasing pattern of percentage changes on the total current liability of the Union. The same results were observed for the Adigudom Cooperative Union and the interpretation goes similar.

In the year 2005/6 compared to 2005/4 the percentage changes on total current liabilities of the Setit Humera Cooperative Union showed increments. This is so because the Union was unable to pay its short – term loan and the interest to the Commercial Bank of Ethiopia. But, the regional government settled the loan to the bank with its interest and the short – term loan was converted by the government in to long-term loan to be settled within three years by the member Cooperatives to the government. However, in the year 2007/6 the Union was profitable and it settled the year’s interest expense and the short – term loan. Due to this the percentage changes on the total current liability showed declined trend.

To sum up, the percentage changes on the major components of the working capital showed fluctuating trends for the selected Unions during the study periods. This is because the management of the Unions lacks scientific way of maintaining the optimal level of these components.

4.5 Sources of Funds and their costs for the Cooperative Unions

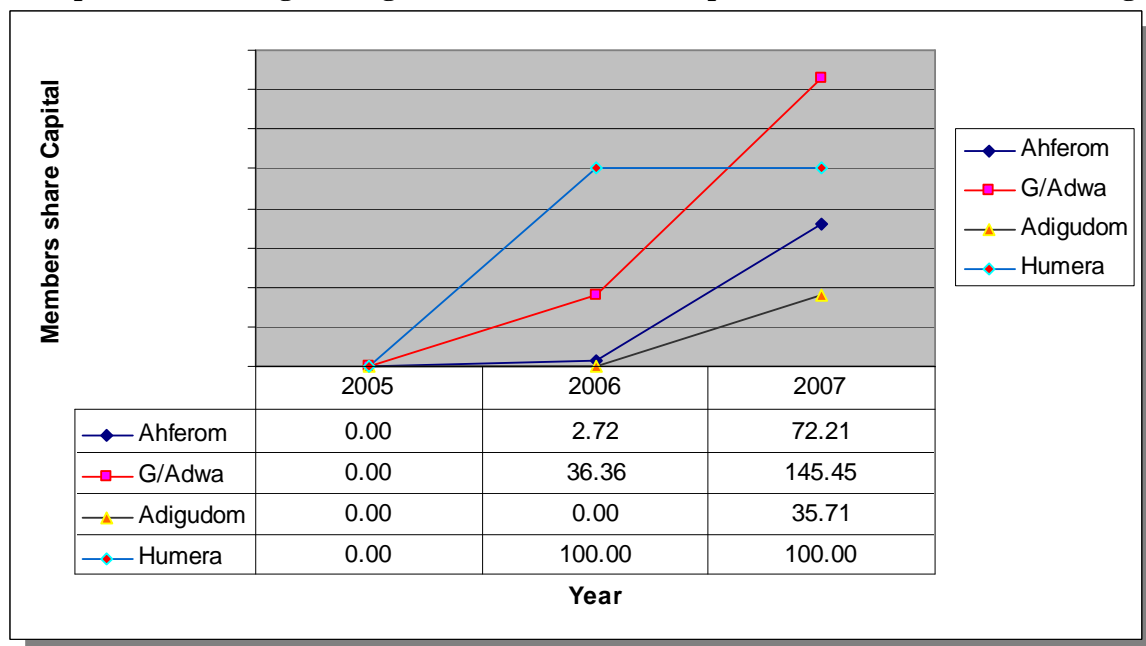
Cooperative Unions are established to solve some specific problems on which solutions are not found by the primary level Cooperatives because of financial and managerial problems. Their vision is to see members of the Cooperatives becoming free from food insecurity and make them economically strong in the society. The main mission of the Unions is technology transmission and creating collective bargaining power among the members through the creation of well organized and managed Cooperative structure. In order to achieve their mission and vision, they clearly set their objectives, strategies, tactics and even functions on their bylaws. So as to reach to their final end, therefore, these Unions need sources of funds. Since there is no totally free source of finance costs will be associated with these sources. To see these relationships, therefore, an assessment was made by this study and the outcome is presented as follows.

Sources, uses and Cost of working capital (finance)

It is inferred from the data and Figure 4.1 that the major sources of the working capital are: shares capital, loans from bank /individuals and donations and reserves. The assessment result on the sources of working capital and other finance are presented in Figure 4.1 which includes the following major items:

Shares Capital: So far in the Unions selected for the study, the share capital accounted for the largest source followed by loans from banks and donations respectively. The percentage change on share capital from the members of the Cooperative Unions showed an increment year after year as presented in Graph 4.9. This is due to the issuance of new shares for old members and new members who are joining the Unions.

Graph 4.9: Percentage Change on Members' Share Capital on the Selected Unions in Tigray

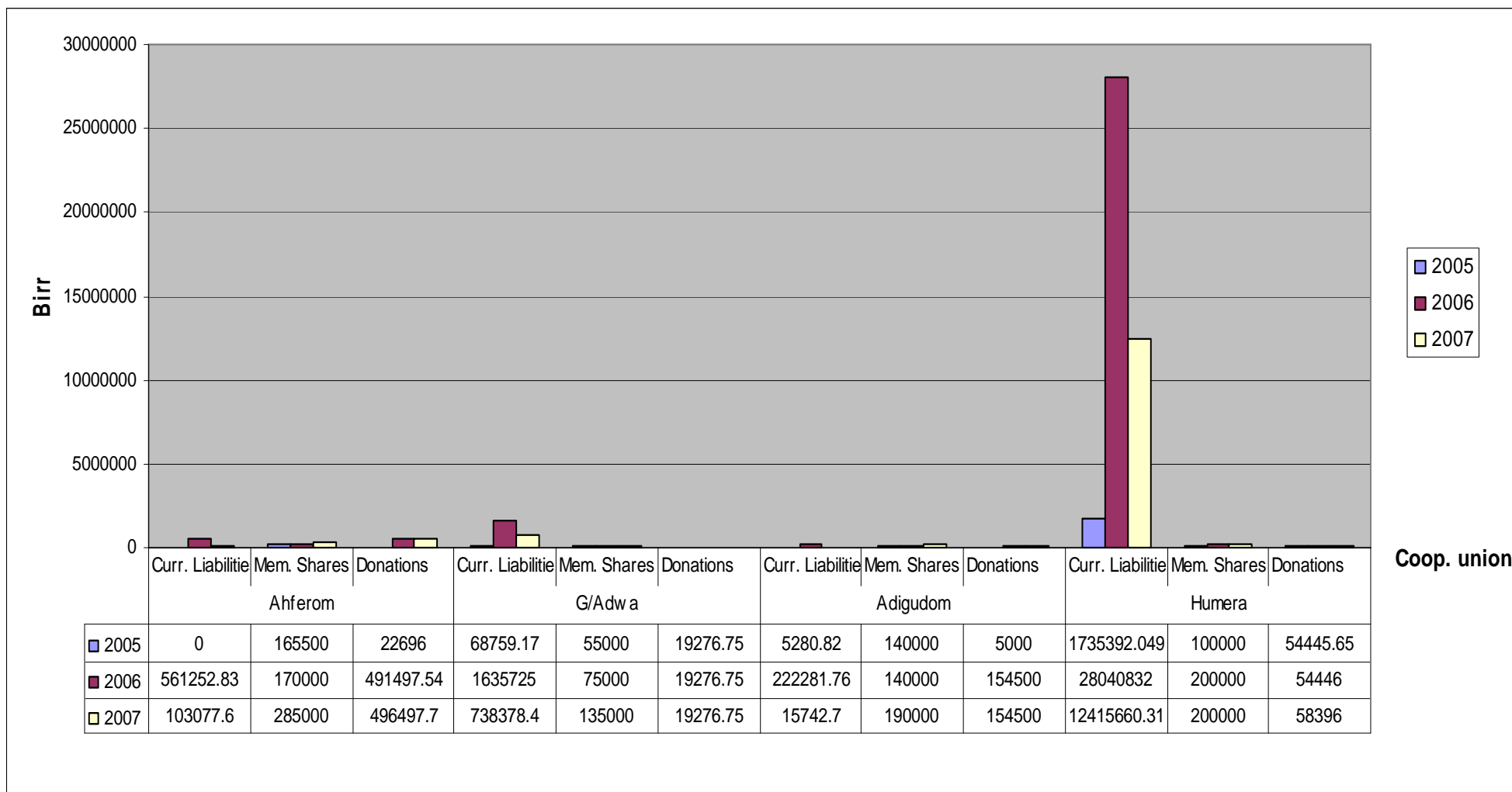


Source: Derived from the selected Unions Financial Reports, 2004/5-2006/7.

For Cooperative Unions, this is the best source of fund and it also adds value of confidence among members. It develops a sense of ownership in the Union for the member owners. Currently Cooperative Unions are financially supported using different programs by the government and other agencies. This is done purposefully because they are at their infant stages. However, when these subsidize is reduced, Cooperatives will face problems. In order to avoid such problems, therefore, they should be able to handle same needs through their own capital. Even though this is a future issue, it needs to be planned for. This capital, however, has an opportunity cost but lesser than the loans interest cost.

Donations and reserves: Donations and reserves are also some sources of the working capital of the Cooperative Unions. Such donations are mostly from non-government organizations for the purposes of strengthening the Cooperative Unions financially. Some of the donations for the Cooperative Unions are also coming from the Wereda Rural Development Offices and the Wereda Administration Offices. The capital reserves are mainly accumulated from undistributed surplus. In most countries the law provides that a certain fraction generally 20-25% (In Ethiopia it is 30%) of the annual surplus must be allocated to a statutory reserve fund until it reaches a certain level, for example equal to the share-capital. The general meeting may further vote part or the entire remaining surplus to be allocated to a free reserve fund. Other sources that contribute to the reserve fund are: penalties, uncollected share capital, uncollected dividends or patronage refund, usually after twelve months and Grants from the government or members, e.g. in the form of land or other assets. As shown in Graph 4.9, donations and reserves did account not significant amount during the years considered in this study.

Figure 4.1 Sources of Working Capital for the Selected Unions



Source: Derived from the Selected Cooperative Unions Financial Reports, 2004/5-2006/7.

Bank loan: The bank loan includes short-term loan and long-term loan. The short-term loan is granted for seasonal operating needs like crop production, or purchase of inventories such as chemicals, fertilizers, improved seeds, consumable commodities and the like for resale. However, the long-term loan is used for purchase of equipment and other long-term assets or investments. In granting these type of loans, the bank requires many information from the Cooperatives/Unions such as the provision of audited financial statements of three years, collateral, management skills, an annual plan incorporating budget of the coming year, a written request that outlines the amount the Union wishes to borrow; the purpose of borrowing, how it is intended to be paid, and how often one can make payments. The government through the Regional Cooperative Promotion Office stands surely for Cooperatives/Unions. Therefore, without collateral and some of the other requirements they can get loans from the Commercial Bank of Ethiopia.

Uses of the Loans for the Unions

Practically, the loan which they are taking from this bank has many advantages to the Cooperatives. On the basis of the assessment made, some of the uses of the loans are summarized hereunder.

Procurement: - Primary level Cooperatives using this loan for the purchase of produces from member farmers based on the current market value and handed over for better market to the Unions at profit through their agreement of both parties. This is also important when the items such as agricultural chemicals and fertilizers are to be purchased from abroad by using foreign currencies. It is not easily affordable by Cooperatives' own capital unless the government

supports them. The demand for this loan is more significant for Cooperatives found particularly in cash crop producing areas like the Setit Humera. Their products are mostly exportable items which need huge finance during the harvesting time. This is the main reason Cooperative Unions use high amount of loan in their operations.

Increasing profitability: - In this regard, the income statement percentage change analysis made for the three years showed fluctuating outcomes or profitability. Even in some of the years the Unions were operating at loss. However, it does not mean that individual member farmers are losing their incomes and the Cooperatives or the Unions are not achieving their main objectives. Though the profitability shows fluctuations individual member farmers are benefiting more from the loan and other government supports. Many reasons could be mentioned for the Cooperative Unions' fluctuations in their profitability.

In recent years Cooperative Unions do not have financial source problems for their working capital or long-term investments or capital budgeting. This is because as mentioned earlier, the government is giving guarantee to them to take loans from the Commercial Bank of Ethiopia. They do have also some other even less cost sources like donations and short-term loans from other agencies which are government or non- government based. However, as stated above, regarding ratio analysis and graphs on the percentage change analysis, the over all effect has been observed as ups and downs of their profitability. The main factors for the less profitability of the Cooperative Unions are related with their internal managerial problems and the external influences. The assessment result in relation to the challenges of the Cooperative Unions is presented in the following section.

4.6 Main Challenges of Cooperative Unions in Managing their Working Capital and Profitability

The government of Ethiopia is supporting Cooperative Unions in different aspects like technically, financially and training of their personnel. However, there are still some major problems that hinder Cooperative Unions from maximizing their profitability year after year. Some of the common problems are:

Lack of skilled personnel: - It is a clear fact that Cooperatives are business oriented firms owned and controlled by the people who use their services/products. Individuals who are elected as board members of those organizations are expected to:

- Understand and practice certain managerial finance concepts such as cost/ benefit analysis and product line separation and tracking
- Use cash flow planning model in understanding capital investment decisions
- Evaluate sources of borrowing or capital generation and to evaluate each on future cash inflows
- Identify those investments or capital uses that do not contribute positively to earnings
- Evaluate the accuracy and relevancy of any information provided by their hired managers and accountants
- Control and make informed decisions on the use of their limited capital

Generally, planning is a vital and critical part of the board's responsibility. Board members, as top decision makers next to the general assembly, must decide between alternatives by evaluating the opportunities and threats.

Keeping funds for operating expenses in the form of working capital and investing on proposals that will generate more capital and deferring investment decision to some future date and borrowing money are all major issues for organizations with limited capital sources. It is also important for the board to understand assumptions that are needed to make the plan because small changes in price, volume of expense can also have an impact in how much capital may be available for investments. These all are the major responsibilities of the board of directors who are elected by members.

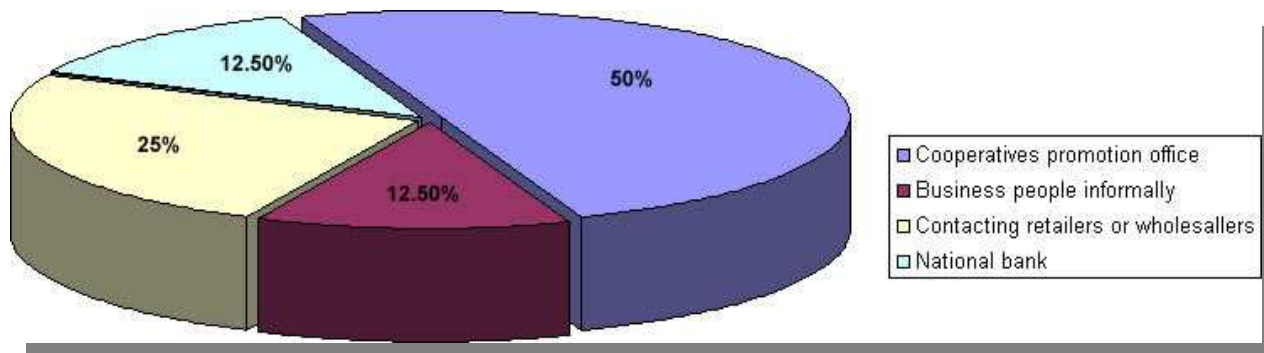
However, the elected Board members themselves are mostly farmers with less experience and without the required managerial skills and knowledge. The assessment made on the selected Cooperative Unions reveals that all the board members do not have the required skills and knowledge to manage and lead the Cooperative Unions. They all are found at low educational status mostly not completed the primary level (below grade six). Even the hired managers, accountants and other personnel are found not as the Cooperatives' competitive environment demands. Of the hired employees involved in the assessment, no degree holder was found. All the managers are diploma holders and the accountant for Adigudom Union is grade 10 while for the other Unions are diploma holders.

To sum up, the farmer board members have low capacity or managerial skills to manage the Unions and achieve their objectives. Due to this reason, Cooperative Unions faced problems such as planning, financing, borrowers' selection, pricing problems, fixing investment priority and selection of projects.

Lack of market Information: The government is supporting Cooperative Unions in providing foreign and domestic market information. According to the assessment result, Unions do not have

marketing offices in the market centers of the country or outside. Mainly, market information for the Unions is from the Cooperative Promotion Offices. They also get the required market information from business people informally. The sources of market related information for the selected Unions presented using Figure 4.2.

Figure 4.2: Sources of Market Related Information

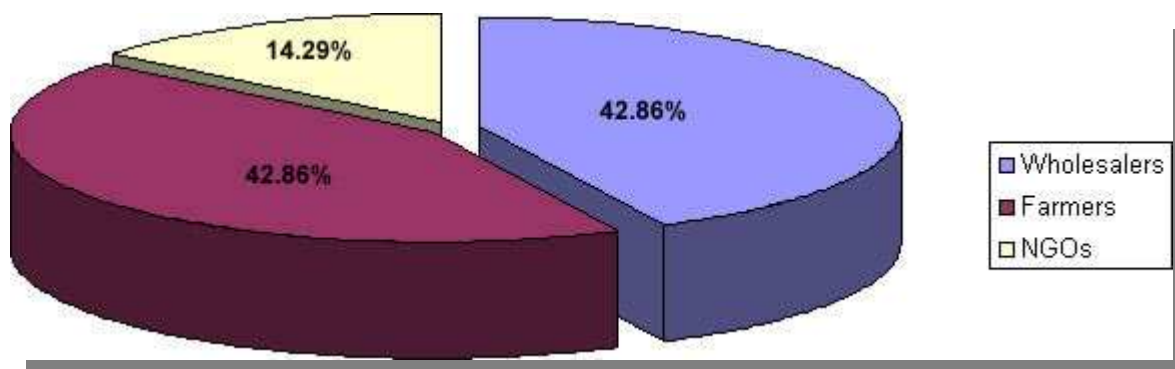


Source: Field survey – October 2007

As shown in Figure 4.2, the Promotion Office of the government body largely provides market related information. However, personnel in this unit do not have the required marketing skill and Cooperative managers feel that they are not serving them to the levels of their satisfactions. Even the exchange of information is slow and they feel that they can not compete with other business entities in reacting and fast decision making to this market activity. Hence, it is considered as bottleneck for maximizing profits of the Unions at a continuous growing rate.

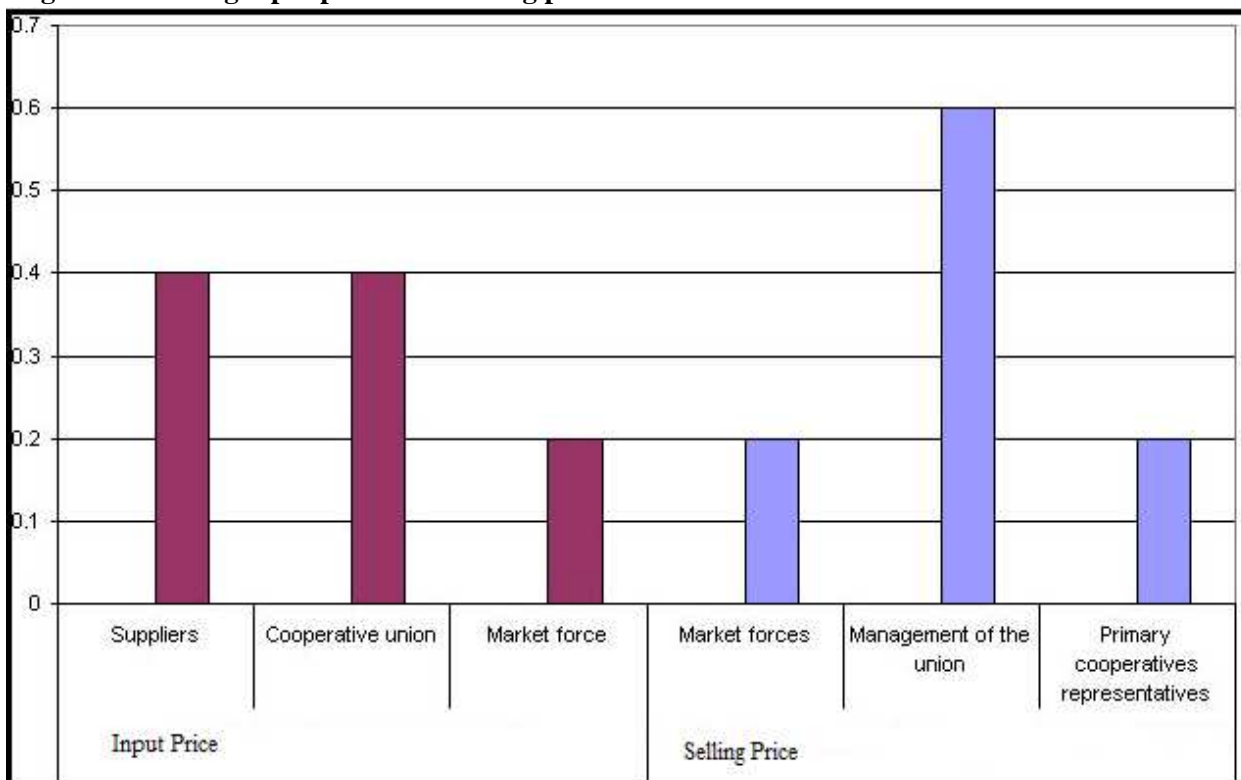
Stiff Competition: - Cooperative Unions, as stated above, do have structural and managerial problems. On the other hand, there are other forms of business organizations with better managerial skills and fast decision making organization structures. All these entities are playing their roles in the free market. From the assessment made regarding the suppliers of inputs and their role in price setting were summarized and presented in Figure 4.3.

Figure 4.3: Major Suppliers of Inputs for Cooperative Unions



Source: Field survey – October 2007

Figure 4.4: Fixing input prices and selling prices



Source: Field survey-October 2007

It could be inferred from Figure 4.4 that suppliers such as wholesaler do have significant role in supplying and setting the input prices to the Unions. These organizations could also be suppliers

of other business entities. Hence, they see the market and they may try to regulate the market in setting the input prices. On the other side, majority of the selling prices for the inventories of the Unions (60 percent) are mainly set by the board of the Unions. About 80 percent of the Unions considered in this study faced bad price reductions. The reasons could be sometimes the Cooperatives Promotion Office could have ordered some items for purchases and sales, market price fluctuations, misappropriate orders, lack of inadequate information. The decision process to alleviate such problems takes longer time for the hired management team and they should convince the board for decision. The overall effect of these mixed problems is, therefore, contributing to the fluctuating trend in the profitability of the Unions.

Lack of cooperation among Cooperatives: It is found that the principle cooperation among Cooperatives is not working practically in the Unions selected for this study. They used to purchase the same types of inputs, and other consumable items which are other business organizations purchase and supply to the market. This led to the market saturation and price decreases which resulted in lack of customers for their inventories. Because other business firms can immediately decide to sell their inventories at the market price while Cooperatives have to wait for the board and the purchase committee decisions. These Unions do not use the economies of scale concept in purchases of agricultural input and consumable commodities. Members of the Union are attracted to purchase from the market than from their Cooperatives. By pooling products they do not negotiate better prices and do not provide larger markets for members. They also could not add value by further processing member products which increase the product price and demand.

Problem of cost: - From the study it is also found that the selected Cooperatives are not focusing on minimizing the cost of goods sold and other operating expenses. They are simply deciding selling prices considering their costs incurred in the operations. This means they did not consider the cost minimization concepts in order to help for the pricing decision. The analysis results are the supportive evidences.

External Interference- Some times in order to create market stability or aiming that farmers should be protected from loss, costs of the inputs like fertilizers, improved seeds and chemicals, are decide by the Wereda Administrators. In this case since the purchase was made without assessing the market demand, the resulting problems created some cost burdens for the Unions. It affects the government budget during repayment of arrears of Cooperatives to the Commercial Bank of Ethiopia.

Generally, for the selected Cooperative Unions in Tigray regional state, Ethiopia, the following factors were found their major challenges in their operations; lack of skilled man power, lack of accurate and reliable market information services, lack of cooperation among the Cooperative Unions, cost minimization problems and to some extent external interference. These major challenges may led the Cooperative Union to register less performances in their profitability and market share.

CHAPTER V—CONCLUSIONS AND RECOMMENDATIONS

5.1. Conclusion

Cooperatives are business oriented organizations voluntarily organized, democratically managed and controlled by their members. They play a very significant role in the overall development of developing countries like Ethiopia. They improve the living standards of the poor by providing proper education and training. They also help to develop the spirit of cooperation among the members. Based on this basic concepts and beliefs the government of Ethiopia has been initiating and establishing a number of Cooperatives at primary and secondary /Union/ levels in both the rural and urban areas of the country .The government plays its role not only in the initiation of establishing these firms but also in providing them technical, financial, training and education supports. The financial support and loan which are mostly provided to these organizations are part of their working capital.

No business can run successfully without an adequate amount of working capital. However, it must be noted that working capital is a means to run the business smoothly and profitably; but it is not an end. Thus, the concept and the management of working capital have its own importance in Cooperatives. A study of changes in the uses and sources of working capital is necessary to evaluate the efficiency in which the working capital is employed in Cooperatives. This involves the need of working capital analysis. The analysis of working capital can be conducted through a number of devices. However, for this research purpose the ratio analysis and the percentage change methods /techniques are employed. To see the weakness or strengths of the Cooperative

Unions in the management of their working capital, the ratio analysis method is used. Moreover, an interview schedule was prepared to support the assessment in the management of these units.

This study has tried to closely examine the working capital performances of four agricultural Cooperative Unions in the Regional State (Tigray, Ethiopia) by ratio and trend analysis to assess the business performance carried in three consecutive years. Based on the analysis findings and outcomes the author has critically commented on the management of the Unions and their challenges. Different findings for all the four Unions are separately discussed in brief and the common results are discussed together as follows:

The liquidity ratios for the years covered in the study differs from Union to Union. The current ratio of all the Unions selected for this study except for the Setit Humera Cooperative Union is within the norm. However, except for the Adigudom Cooperative Union the quick ratio of the three Unions is below the norm. The net working capital shows positive figure for the three Unions in all the years except for Setit Humera Union. This result is also true for the net working capital ratio. Generally, the liquidity ratio shows fluctuations for the three Cooperative Unions. However, for the Setit Humera Union it is below the norm. These show that the Cooperative Unions are not in a position to meet their financial obligations within the period and proved their less credit worthiness. This may result in losing the reputations of the Cooperative Unions and they shall not be able to get good credit facilities from their suppliers.

Due to this situation the Setit Humera Cooperatives Union in 2005 was not able to pay its short-term loan and interest on it. It was also forced to accrue additional interest expense. The Cooperative Union could not pay its day-to-day expenses of its operations. This created inefficiencies, increased interest expenses, and highly reduced its profitability (huge loss in the

year). Due to unavailability of liquid funds, the Unions are not efficiently utilizing their fixed assets, and the return on investments showed decline/fluctuations with the fluctuations of the liquidity ratios.

The activity ratios of those Cooperative Unions do not show similar trends of changes. Some ratios show increases and the others decreases. For example, in the years stated the inventory turn over ratio of the Aheferom Cooperatives Union, and the Getser Adwa Cooperatives Unions showed fluctuations. But, the ITOR of the Adigudom Union shows an increasing trend during the years stated while the Setit Humera Cooperatives Union indicates decreases. This trend is also true for the day's inventory holdings for all the Cooperative Unions. On the other side, the DTOR of the Aheferom Cooperatives Union and the Adigudom Cooperative Union showed increments. But, for the Getser Adwa and Setit Humera Cooperatives Union this ratio goes to the decreasing side year after year.

To sum up, in terms of the activity ratios, all the Unions except the Setit Humera Cooperatives Union are at satisfactory levels. However, these ratios depicted that the Setit Humera Cooperatives Union was poor in its assets management. Because the management of the assets is poor the sales volume recorded is also poor. The rates at which assets are converted in to sales indicate lower speed .This is especially true in 2005. This in turn resulted in huge loss during the year for the Setit Humera Cooperative Union. In this year the ITOR for this Union was below one. This means the Union was generating profits below one Birr for one Birr capital employed in the net assets.

The debt management ratio of Aheferom Cooperatives Union shows an average 19 percent of the total net asset financed from external sources and the larger amount (81 percent) from internal

sources for the three consecutive years. Adigudom Cooperatives Union shows the lowest external source of finance in the years stated which was 6 percent on average. On the other hand, the mean average of the external source of finance for the Getser Adwa and Setit Humera Cooperatives Union for the three consecutive years was 70 percent and 65 percent respectively. For Setit Humera because of the huge amount of bank loan and accrued interest expense, this ratio was 101 percent in the year 2005.

The debt –equity ratio of the Unions on average showed 4 percent, 45.1 percent 27 percent and 100.6 percent for the Aheferom ,GetserAdwa, Adigudom and Setit Humera Cooperative Unions respectively. Again this figure was higher in Setit Humera Union due to the high loan in the years 2005 and 2006/07. In the year 2005, the debt-equity ratio of the Union was negative because the capital showed negative balance due to the loss incurred. The regional government after settling the loan with the bank, it has made a special arrangement with the Cooperative Union which would enable it to repay the loan in three years (2006-2008). This shows that the Union is highly debt-burdened and, therefore, in difficulty of raising funds from other creditors and the member owners in the future. The owners' equity relatively showed the lesser leverage ratios on the other three Cooperative Unions are not because of the management of these Unions is more concerned and aware of the effects. Rather it is the weakness of the management that it does not use the opportunity that is given by the government to magnify owners' equity.

The interest coverage ratio of the Unions showed better figure except for the Setit Humera Cooperatives Union. Especially this ratio was below zero in the year 2005 when the Union faced a loss. As stated above, this ratio showed on average positive value for the other Unions indicating that their ability to pay their interest expense when it became due in the stated year.

The average mean of the net profit margin of all the Cooperative Unions was very less and even negative. This ratio is -1 percent, 7 percent, 6 percent and -15 percent in average for the three years for the Aheferom, Getser Adwa, Adigudom and Setit Humera Cooperative Unions respectively. The operating ratios and the return on investment ratios showed similar trends like the net profit margins.

The profitability ratios are the overall measures of the efficiency and effectiveness of the management of the Cooperative Unions. Of course profit may not be the ultimate out put of Cooperative businesses.

However, in order to sustain their life as a business concern, Cooperatives should have sufficient amount of profit. Creditors want to get interest and repayment of the principal regularly and the owner members also want to get returns on their investment. However, because of the weak management of their working capital, these firms were not profitable in the years included in this study.

The percentage change of the items of the income statement and the balance sheet for the three consecutive years shows fluctuations. This is because of the weak management shown on the components of the working capital: cash, debtors, inventories and current liabilities.

The Cooperative Unions' boards of directors lack the required managerial skills, training and education to plan, lead and control the resources of the Cooperative Unions. This is because they are member owners and farmers with low educational levels. They lack clear knowledge about planning, budgeting, and assessment of sources of resources .Moreover; they have fewer concepts about cost minimization, credit policy, working capital management.

The selected Cooperative Unions are organized with low capital. This is because of that they are established with member farmers who are from the economically lower section of the society so that they could not raise funds of their own.

Cooperative Unions under study lack skilled manpower .They also face some interference. There are also coordination problems among Cooperatives. They lack local and international marketing information some times in some Cooperative Unions there is an interest conflict within the management body. These all are due to the organizational and structural problems of the Cooperative Unions

Cooperative Unions selected for this study are not audited yearly and regularly. Even they do not prepare a year end financial reports. They are audited by the Regional Promotion Office auditors' mostly every two years. This has resulted in a problem of not identifying the yearly performance of the Cooperative Unions.

5.2. Recommendations

To improve the production and productivity of the agricultural sector and thereby to enhance the living standard of the poor farmers/rural households, the government of Ethiopia has been supporting Cooperatives at primary and Union levels. The support ranges from the provision of regulatory services to the supporting to import agricultural inputs such as fertilizers, chemicals, equipments etc. Cooperative Unions are also allowed loans from the government owned bank- Commercial Bank of Ethiopia, by taking the collateral responsibility through the Cooperative Promotion Office. This financial source is mainly used as working capital for these Cooperative Unions which is in the form of short -term loans.

In spite the supports from the government and other agencies, however, the overall performances of the Cooperative Unions' is not up to the expectation or tend to fluctuate. The measurable performance seems to cause pendulums between lower figures of negative and positive values. This is mainly attributed to less productivity of land, lack of dependable market information and low demand for the products. Besides strong competition with other business organizations, market price fluctuations, lack of trained management team are also some important factors.

Therefore, by taking into account the above analytical analysis and the findings, the author recommends the following points that should be considered by all the stakeholders of the Cooperative Unions in the region to achieve the objectives of Cooperative Unions.

Cooperatives board members should be responsible for the planning, leading and monitoring the overall activities of their entities. They should be involved in determining how the Unions spend money and how they make money. It is also important that the board members should understand the assumptions that should be considered to make the plans. The board members are assigned to make top decisions about the Unions' affairs on behalf of the owner members. However, they do not have sufficient managerial skills, educational background, and experiences so that they are not able to cope up with the Stiff competition with other business organizations. Therefore, the board of directors needs training on management of the working capital and marketing. Hence, it is strongly recommended that the Board of Directors need to be trained continually.

Cooperative promoters that are responsible in the provision of the technical supports to the Cooperative Unions are lacking the required skill. The managers of the Cooperative Unions, too, lack these professional skills and the experiences. This is of course more serious in primary Cooperatives. On top of this, the managers of the Unions are held responsible to the promotion

offices while they are working with the board members of the Cooperatives. These weaknesses are reflected in the weak/fluctuating performances of the Unions. Hence, it is recommended to revise the structure of the existing system and to upgrade the professional skills of these personnel or to hire skilled or experienced employees and provide them with transparent working guidelines meant for the growing demand of the Cooperative Unions.

The Commercial Bank of Ethiopia with the guarantee of the government is providing huge loan services for the Cooperative Unions. The Cooperative Unions also get financial support, as part of their working capital from different donors. However, linkages with experts of these agencies to share the experiences in managing these resources appeared to be weak. Therefore, the government should try to create the link between the management of the Cooperative Unions and the experts of those agencies to train the management in properly utilizing the resource obtain in the form of loans or donations.

Cooperative Unions should get timely, accurate and reliable market information through different communication net works to assess the local and foreign market. It is of crucial importance to Cooperatives to make their business profitable. Hence, the Cooperative Unions should be organized independently and restructured with the required skills and devices to promote themselves in the communication field. However, the government should create the bridge to meet the demands of the Cooperative Unions together.

Working capital management is concerned with the management of current assets and current liabilities. It is keeping the trade-off between profitability and risk /liquidity. If Cooperative Unions do not have adequate working capital, they may become less liquid able to meet current obligations and thus invite the risk of bankruptcy. This was manifested in 2005 by the Setit

Humera Cooperatives Union. On the other hand, if the current assets of the Cooperative Unions are too large, their profitability is adversely affected. This effect was observed in three Cooperative Unions other than the Setit Humera Cooperative Union, involved in this study. Hence, optimality is suggested as a solution. In order to have this optimal level of working capital concept, the management team as a whole should get consecutive training. There should be, moreover, experience sharing among Cooperative Unions through out the country to enhance their capability.

Cooperative Unions in Tigray Regional State, Ethiopia, are audited through the regional promotion office auditors authorized by a proclamation. However, they are not audited annually. They are mostly audited every two years .They do not have financial reports at the end of every year. Working capital management involves largely principles, strategic decisions and their risk-return approach. However, this appears to be missing in these Cooperative Unions. Therefore, it is recommended that supports be given to the Unions regarding the preparation of financial reports, timely audit services and the planning of budgets.

Cooperative Unions should be clear about their credit policy in order to plan their receivables, inventories and maintain the optimal level of cash for different purposes. Hence, they should have clear documents which serve as guidelines in providing credit services to increase sales and profitability.

Cooperative Unions are low capital organizations. Hence, the management should have flexible but transparent systems of working guidelines which enhance the Unions' capital increments.

Cooperative Unions are engaged in the same activities with the same objectives and similar purposes. There should be standards of ratios to measure their performances which enable analysts and researchers in the area to evaluate the strengths and weaknesses of the Unions.

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APPENDIX —I

INTERVIEW SCHEDULE FOR ADMINISTRATORS OF THE UNIONS

Date _____

Code _____

1) Geographical Information

a. Zone _____

b. Wereda _____

c. Town _____

2) Cooperative Union details

a. Name _____

b. Date of establishment _____

c. Number of: Founding members _____

: Current members' _____

3) Respondent's back ground information

a. Sex _____

b. Position in the Union _____

c. Education level _____

d. Number of service time in the Union _____

4) Who took the initiation to establish the Cooperative Union?

- a. Founding Primary members.
- b. Promotion office
- c. Government body
- d. NGOs
- e. Others, specify _____

5) Does the Union have the following personnel? Please put (✓) mark

Finance head	Yes <input type="checkbox"/>	No <input type="checkbox"/>
Accountant	Yes <input type="checkbox"/>	No <input type="checkbox"/>
Cashier	Yes <input type="checkbox"/>	No <input type="checkbox"/>
Purchaser	Yes <input type="checkbox"/>	No <input type="checkbox"/>
Store keeper/head	Yes <input type="checkbox"/>	No <input type="checkbox"/>

6) If the answer for the listed positions in question 2 is yes, how are they appointed?

- a. _____
- b. _____
- c. _____
- d. _____

7) Do the board members have the knowledge on the working capital concept?

- a) Yes b) No

8) Do the hired teams have the knowledge on the working capital concept?

- a) Yes b) No
-
-

9) If the answers for Q7 and or Q8 are No, what are the efforts done to make them aware?

a. _____

b. _____

c. _____

d. _____

10) Do the administrators of the Union such as the board and hired managers receive training on the working capital management?

a) Yes b) No

11) If the answer for question 7 is yes, who provided them the training?

a. The promotion office

b. Academic institutions (public or private).

c. NGOs

d. Others, specify _____

12) How often did they receive the training on the working capital management?

a. _____

b. _____

c. _____

13) Does the Union use a formal accounting system?

a) Yes b) No

14) If Q13 is yes what type of recording system does it use?

a. Double entry system

b. Single entry



15) If Q13 is yes how frequently are accounts closed?

- a. Monthly
- b. Quarterly
- c. Biannually
- d. Annually
- e. Other, specify

16) How frequently is the Union audited?

- a. Yearly
- b. Every two years
- c. Every three years
- d. Other, specify

17) Does the Union prepare a budget every year?

- a) Yes
- b) No

18) Have the Union included working capital in its annual budget?

- a) Yes
- b) No

19) Who prepare the planning activity of working capital requirement?

- a. Board
- b. Manager
- c. Finance head
- d. Other, specify

20) From where does the Union get its fund for its working capital? (Select applicable (by putting (✓) mark)

- a. Shares
 - b. Loans from banks
 - c. Donations
 - d. Credit Unions /Cooperatives
 - e. Accrued expense
 - f. Advances
-
-

21) Did the Union receive credit after its establishment?

a) Yes b) No

22) Is the amount borrowed so far enough to run the business?

a) Yes b) No

23) Has the Union ever been denied access to credit due to criteria set by the credit institutions at any time?

a) Yes b) No

24) If the answer for question 23 is yes, what are the criteria set by the lender institution which could not be fulfill by Union?

a. _____

b. _____

c. _____

d. _____

25) What is the average credit period allowed to the Union by the suppliers for credit purchases?

26) What is the average period of credit sales allowed to customers by the Union?

27) Is there any profitable activities /business opportunities that you could not undertake due to lack of credit in the form of working capital?

a) Yes b) No

28) If the answer for question 27 is yes, what are the main activities the Union losses due to lack of working capital?

a. _____

b. _____

c. _____



29) Does the Union have a market agency?

- a) Yes b) No

30) If the answer for Question 29 is “No”, how does the Union get market related information? Please specify it.

- a. _____
b. _____
c. _____
d. _____

31) Who are the major suppliers of the inputs of the Cooperative Union?

- | | |
|-----------------|-------------------------------------|
| a. Wholesalers. | d. Government |
| b. Retailers | e. NGOs |
| c. Farmers | f. Others, please specify |

32) Who set the input prices to the Union?

- | | |
|----------------------|-------------------|
| a. Suppliers | c. Market force |
| b. Cooperative Union | d. Other, specify |

33) Who determine the selling price for the products or out puts of the Union?

- a. The market forces
 - b. The purchaser(s)
 - c. The government
 - d. The management of the Union
 - e. The primary Cooperatives representatives
-
-

34) Have the Union ever met a bad price reduction for its outputs?

a) Yes b) No

35) If the answer for Q34 is yes, how many times? _____

36) If the answer for Q34 is yes, in what conditions?

a. _____

b. _____

c. _____

37) If the answer for Question 34 is “yes,” what coping mechanism does the Cooperative use?

- a. Sell at lower price to customers
- b. Store in warehouses.
- c. Sell to the national /regional Cooperative agency.
- d. Distribute to members freely
- e. Distribute to members at reasonable price higher than the price charged to customers.
- f. Other, please specify it _____

38) Are the Union’s outputs most profitable and competent in the market?

a) Yes b) No

39) If the answer for Question 38 is No, what might be the reasons? (You can choose more than two answers but rank them according to their priority) Put (✓)

Reason	Remark
Less market access	
Less bargaining power	
Lack of market information	
Due to seasonal drought	
Lack of essential inputs	
Lack of skilled manpower	
Lack of Market training	
Lack of financial access	
Lack of Knowledge	
Law Quality of the product	

40) Do the primary Cooperatives and other members supply the required quality of outputs to the Union?

a) Yes b) No

41) Do the primary Cooperative and other members supply the Union the required quantity of outputs to the Union?

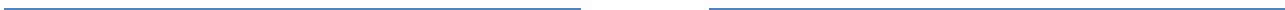
a) Yes b) No

42) If the answer for Question 40 is No, why? Please specify the reasons?

a. _____

b. _____

c. _____



43) If the answer for Q41 is no, please specify the reasons.

- a. _____
- b. _____
- c. _____
- d. _____

44) Is there any excess accumulation of agricultural commodities in the Union's ware house?

- a) Yes b) No

45) Is there any possibility of purchasing an item while it is in store?

- a) Yes b) No

46) If the answer for question 45 is yes, what are the main reasons?

- a. _____
- b. _____
- c. _____
- d. _____

47) Do you think the guarding system against the theft is adequate?

- a) Yes b) No

48) If the answer for question 47 is No, please state the problems?

- a. _____
- b. _____
- c. _____
- d. _____

49) Do you have the system of reporting obsolete, damaged and slow moving items to the responsible body timely?

a) Yes b) No

50) If Q49 is yes is there any measure taken on the report of obsolete, damaged and slow moving items?

a) Yes b) No

51) If the answer for question 50 is No, would you please state why?

a. _____

b. _____

c. _____

d. _____

52) Is there issuance of inventories with oral directions?

a) Yes b) No

53) Is there the possibility of document manipulation after approval by stores personnel?

a) Yes b) No

54) Is there a surprise count -system of cash and checking the cash balance in the Union?

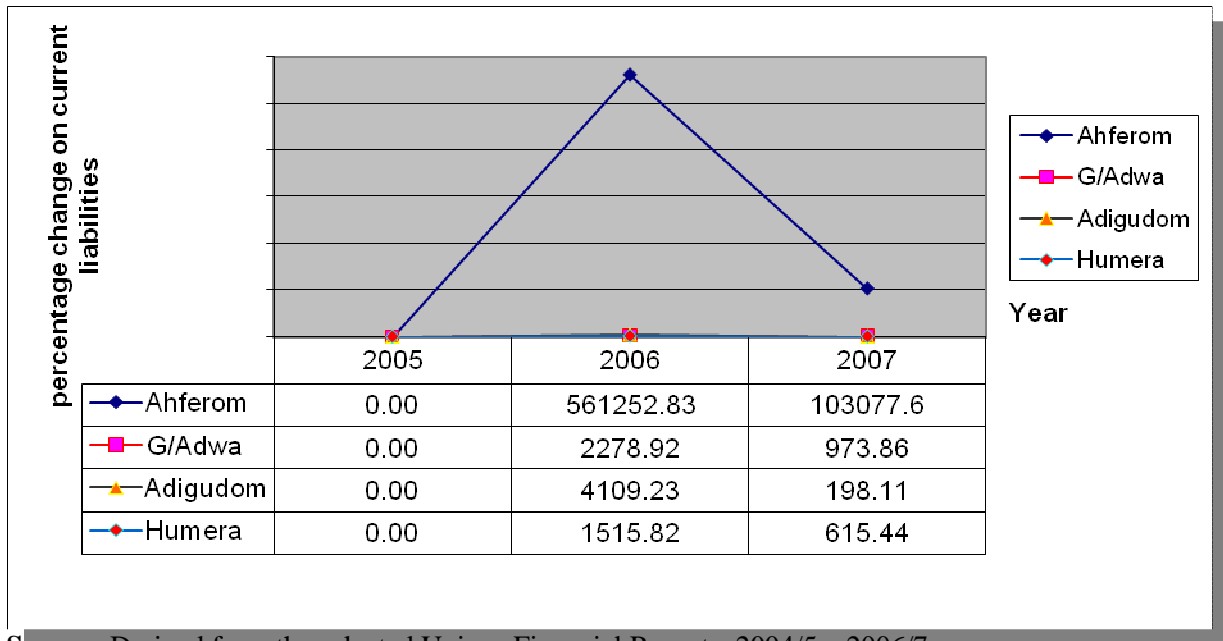
a) Yes b) No

Thank you for your cooperation and time devotion!

APPENDIX —II

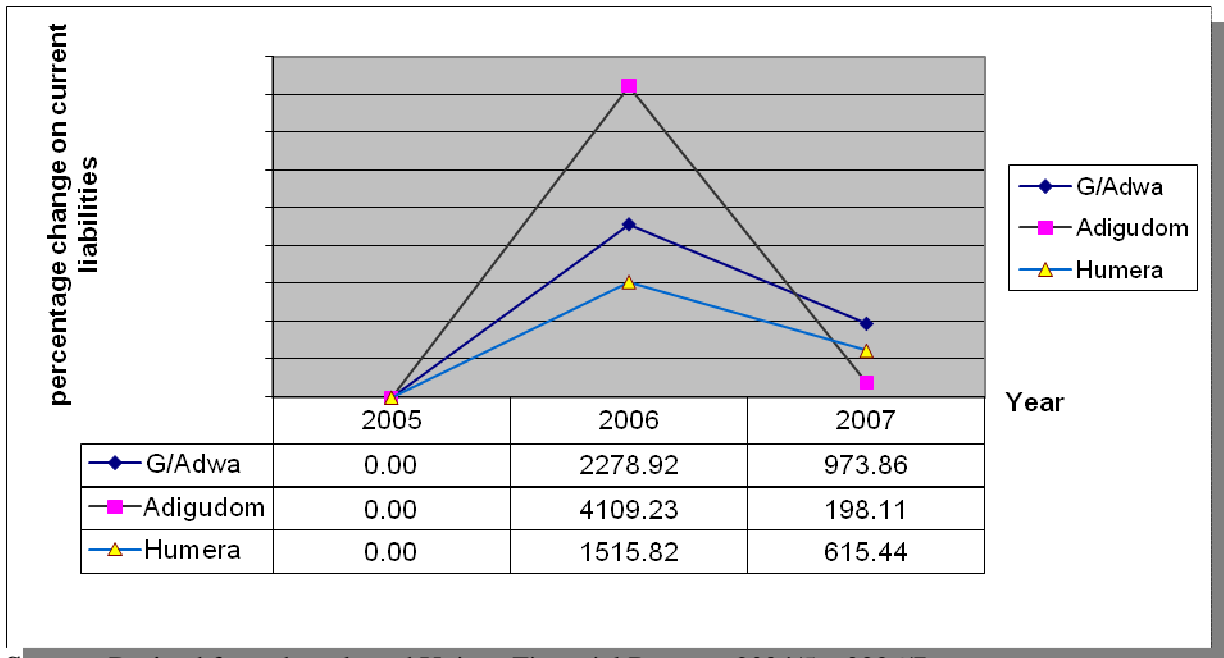
PERCENTAGE CHANGES ON TOTAL CURRENT LIABILITIES ON THE SELECTED UNIONS IN TIGRAY

A.



Source: Derived from the selected Unions Financial Reports, 2004/5 – 2006/7

B.



Source: Derived from the selected Unions Financial Reports, 2004/5 – 2006/7

APPENDIX—III

FINANCIAL RATIO FORMULAE

1) Liquidity ratios:

- i. Current ratio = $\frac{\text{current Assets}}{\text{Current Liabilities}}$
- ii. Quick ratio = $\frac{\text{current assets} - (\text{Inventories} + \text{Prepaid expenditures})}{\text{Current Liabilities}}$
- iii. Cash ratio = $\frac{\text{Cash} + \text{Marketable securities}}{\text{Current Liabilities}}$
- iv. NWC = current Assets - Current Liabilities
- v. NWC ratio = $\frac{\text{NWC}}{\text{Net asset}}$

2) Activity /efficiency ratios:

- i. Inventories turnover ratio = $\frac{\text{Cost goods sold}}{\text{Average Inventories held}}$
 - ii. DIH = $\frac{\text{Average Inventories held}}{\text{Cost of goods sold}} * 360 \text{ days}$
 - iii. DTOR = $\frac{\text{Net credit sales}}{\text{Average debtors}}$
 - iv. ACP = $\frac{\text{Ending debtors}}{\text{Average daily sales}}$
-

v. $TATOR = \frac{\text{Net Sales}}{\text{Total assets}}$

3) Solvency / Leverage ratios:

i. $\text{Debt -equity} = \frac{\text{Total debt}}{\text{Total equity}}$

ii. $\text{Debt ratio} = \frac{\text{Total debt}}{\text{Total debt} + \text{Net worth}}$

iii. $\text{Interest coverage ratio} = \frac{\text{EBIT}}{\text{Interest}}$

4) Profitability ratios:

i. $\text{Net profit margin} = \frac{\text{Net income}}{\text{Net sales}}$

ii. $\text{Return on equity} = \frac{\text{Net income}}{\text{Owners' Equity}}$

iii. $\text{Return on Net assets} = \frac{\text{Net income}}{\text{Total assets}}$

iv. $\text{Operating Expense ratio} = \frac{\text{Operating Expense}}{\text{Sales}}$

APPENDIX—IV

SUMMAR OF FINANCIAL STATEMENTS FOR SELECTED UNIONS

A. Profit and Loss Statements Summary

Adigudom Union			
Description	For the year /period /ended		
	12-Jul-05	22-Dec-06	05-Sep-07
Revenue-sales	69505.75	153413.2	706204.2
Cost of goods sold	88566.1	140708.1	653333.6
Gross profit	7939.65	12705.02	52870.6
Operating expenses	12729.29	8644.35	67805
Operating income/loss	-4789.64	4060.668	-14934.5
Other income /loss	12000	10283.87	11174
Net income /loss	7210.36	14344.54	-3760.5

Aheferom Union

<i>Description</i>	<i>For the year /period /ended</i>		
	02-Oct-05	03 Opct 06	12-Oct-07
Revenue-sales	127625	1,904,029.99	603375.82
Cost of goods sold	112741.9	1624947.44	507517.57
Gross profit	14883.1	279082.55	95858.245
Operating expenses	27878.85	125314.98	146240.57
Operating income/loss	19905.6	155327.57	-50382.325
Other income /loss	5022.5	1560	17679.46
Net income /loss	-7973.25	147354.32	-32702.865

Getser Adwa Union

Description	For the year /period /ended		
	31-Jul-05	18-Oct-06	10-Oct-07
	Revenue-sales	4524774.4	3194653
Cost of goods sold	376786.8	2948182	1011836
Gross profit	75687.63	246471.1	190942.1
Operating expenses	48852.28	138672.8	120693.2
Operating income/loss	29575.35	107798.3	128770.5
Other income /loss	2740	-7299.34	58521.57
Net income /loss	29575.35	100499	128770.05

Humera Union

Description	For the year /period /ended		
	17-Apr-04	13-Jul-05	25-Dec-07
	Revenue-sales	6275398.5	240,941.00
Cost of goods sold	5501288.17	1302111	9411914.66
Gross profit	774111.33	-1061170	1143571.64
Operating expenses	128595.1	-126222	2839309.81
Operating income/loss	645516.23	-1187392	-
Other income /loss	72997.65	324373	1695738.17 2033313.27
Net income /loss	718513.9	-863019	337575.1

B. Balance sheet summary

Adigudom Union			
Current Assets:	On /As of		
	12-Jul-05	22-Oct-06	05-Sep-07
Cash	40834.4	337294.92	132501
A/R	34.8	34.8	67971.957
Inventory	108574.49	33448.518	27705.99
Total current Assets	149443.69	370778.2	228178.978
Total Fixed Assets (net)	3000	152470	140114.5
Total Assets (net)	152443.69	523248.2	368293.478
Liabilities- Current	5280.82	222281.7586	15742.68
Capital: Shares	140,000	140,000	190,000
Donations	5000	154500	154,500
Reserves	-		
Social service	2163.105	6466.4694	5338.34
Excess		0.01	2712.462
Total Capital	147163.108	300966.5	349918.48
Total liability & Capital	152443.69	523248.2	368293.478

Aheferom Union

Current Assets:	On /As of		
	02-Oct-05	03-Oct-06	12-Oct-07
Cash	44752	177297.5	104624.1
A/R	1.24	401926.585	34562.35
Inventory	12779.8	205257.295	295805.21
Total current Assets	172533.8	784480.93	434991.7
Total Fixed Assets (net)	7689	482475.64	461086.9
Total Assets (net)	180222.8	1266956.57	896078.6
Liabilities- Current	-	561252.83	103,078
Capital: Shares	165,500	170,000	285,000
Donations	22696	491497.54	496497.5
Reserves		14735.4	11503.34
Social service		14735.4	-
Excess /loss	-7973.25	-	0.19
Expansion works	180222.8	14735.4	793001.1
Total Capital	180222.8	705703.74	896078.6
Total liability & Capital		1266956.57	

Getser Adwa Union

Current Assets:	On /As of		
	31-Jul-05	18-Oct-06	10-Oct-07
Cash	68723.58	738630	357991.07
A/R	29389.68	893802.998	537081.525
Inventory	33806.75	145529.6	102638.543
Total current Assets	131920	1777962.545	997711.138
Total Fixed Assets (net)	19987.61	20986.46	16052.24
Total Assets (net)	151907.6	1798949	1013763.378
Liabilities- Current	68759.17	1635724.954	738,378
Capital: Shares	55,000	75,000	135,000
Donations	19276.75	19276.75	19276.75
Reserves	2960.235	33109.92	71750.075
Social service	1478.617	4996.081	-
Excess /loss	-	-	-
Expansion works	4435.852	30841.2	39855.138
Total capital	83148.45	163224	275385.012
Total liability & Capital	151907.6	1798949	1013763.378

Humera Union

Current Assets:	On /As of		
	17-Apr-04	13-Jul-05	25-Dec-07
Cash	1541405	987265	1576442.47
A/R	380942.48	21737388	8373309.71
Inventory	126981.44	4566503	2073394.09
Total current Assets	2049328.68	27291156	12023146.23
Total Fixed Assets (net)	52753.51	353323	337687.35
Total Assets (net)	2102082	27644479	12360833.58
Liabilities- Current	1735392.049	28040832	12,415,660
Capital: Shares	100,000	200,000	200,000
Donations	54445.65	54446	58396
Reserves	35370	212220	212220
Retained income			337575.1
Social service	35370		
Gain/ loss		-863019	-863019
Excess	24.17		1.17
Expansion works	141480.321		
Total capital	366690.1	396353	-54826.73
Total liability & Capital	2102082	27644479	1,236,833.58

