# A STUDY ON WORKING CAPITAL MANAGEMENT

***OF***

## SALT TRADING CORPORATION LIMITED

***BY:***

**SAROJ KOIRALA**

**Post Graduate Campus**

**Biratnagar**

**T.U Registration Number 29767-94**

***A THESIS SUBMITTED TO:***

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*In partial fulfillment of the requirement for the degree of*
*Master of Business Studies (M.B.S)*

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Tel:977-21-526327

# Tribhuvan University

## Post Graduate Campus

**Department of Management**
**Biratnagar, Nepal**

**Date:- ..................................**

## RECOMMENDATION

This is to certify that the thesis

*Submitted by:*

**SAROJ KOIRALA**

**Entitled**

"A Study on working Capital Management of Salt Trading Corporation Limited"

*has been prepared as approved by this department in the prescribed format of Faculty of Management. This thesis is forwarded for examination.*

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| ________________________ | ________________________ |
| **Hiranya Pd. Gautam** | **(Dr. Madhav Bd. Shrestha)** |
| Thesis supervisor | Head of Research Department |

________________________
Campus Chief

Date:-2065/12/

Tel:977-21-526327

# Tribhuvan University

# Post Graduate Campus

**Department of Management**
**Biratnagar, Nepal**

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Date:- ...................................

## VIVA-VOCE SHEET

***We have conducted the viva - voce examination of the thesis presented by:***

## SAROJ KOIRALA

***Entitled***

"A Study on working Capital Management of Salt Trading Corporation Limited"

*and found the Thesis to be the original work of the student written in accordance with the prescribed format. We recommend the thesis to be accepted as partial fulfillment of the requirement for*

*Master's Degree in Business Studies (MBS).*

## <u>VIVA-VOCE EXAMINATION COMMITTEE</u>

Chairperson, Research Committee: .............................................................

Member (Thesis Supervisor) : .................................................................
**Hiranya Pd. Gautam**

Member (External Expert) : .................................................................

**Date:- .................................**

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**Biratnagar**
**2009**

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**Saroj Koirala**

# ABBREVIATION

| | | |
|---|---|---|
| STCL | = | Salt Trading Corporation Limited. |
| B.S. | = | Bikram sambat |
| Ltd. | = | Limited |
| F/Y | = | Fiscal Year |
| C/A | = | Current Assets |
| C/L | = | Current liabilities |
| W/C | = | Working capital |
| d | = | Deviation |
| 'r' | = | Correlation coefficient |
| P.E | = | Probable error |
| G/P | = | Gross profit |
| N | = | Number of items |
| X | = | Value of $1^{st}$ item |
| Y | = | Value of $2^{nd}$ item |
| i.e. | = | That is |
| P/L | = | Profit & Loss |
| B/S | = | Balance sheet |
| T/A | = | Total Assets |
| % | = | Percentage in 100 |
| C/B | = | Cash & Bank |
| Ave | = | Average |
| NPAT | = | Net profit after tax |
| NWC | = | Net working capital |
| S.D. | = | Standard Deviation |

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# CHAPTER-I

# INTRODUCTION

## 1 Background of the study

The underdeveloped land locked mountainous country Nepal lies on lap of highest mountain range of the Himalayas having very low cultivated lands, high growth rate of population and limited resource of the world with low per capita income of U.S. $253. The various factors which are responsible for the slow development of the nation such as major obstruction land locked position, poor resource endowment, institution weakness and lack of appropriate economic policies due to political instability events.

The economic survey of 2004-2005 published by HMG, Ministry of Finance, the economic growth rate of the world was. 5.1% in 2004 and 4.3% in 2005. The newly industrialized economies of Asian remarkably improve to 6.5%. At present 10th plan is running. But due to poor performance negative return, lack of efficiency, inefficient in management, government has emphasized on privation, so that public enterprises could be competitive, efficient and profitable. By the help of private companies the government will reduce it's investment in public sector, which are incurring continuously at loss. So a total of 24 public enterprises have been privatized under different modalities in three phases. More enterprises are in the pipeline for privatization in the government policy and programs.[1]

Public enterprises is an institution operating a service of an economic character on behalf of the government, but as an independent legal entity, largely autonomous in its management, though responsible to the public through government and parliament and subject to some direction by the government. According to Laxmi Naraya, "Public enterprises are autonomous bodies which are owned and managed by the government and which provide goods and services for a price. The

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[1] Ministry of Finance. *"Economic Survey Report 2004/2005"*, P.N. 14-15 ......

ownership with the government should be 51% or more to make entity public enterprises."

## 1.1 Manufacturing and Trading Views

Manufacturing means any industries that make products from raw materials by the use of manual labor or machinery and that is usually carried out systematically with a division of labor. In a more limited sense manufacturing denotes the fabrication or assembly of components into finished productive enterprises or organization that produces or supplies goods, services or source of income.

The research sector is trading companies, trading signifies a market and a means by which the exchange of goods and services take place as a result of buyers and sellers being in contact with each other, either directly or through mediating agents or institutions. Thus, the trading means the flow of goods and services from producer to consumers. The role of manufacturing industries and trading companies is marginal for the economic growth of the nation. The developing nation will remain associated with various forms of backwardness, unless they tackle the problems of economic backwardness, unless they trickle the problems of economic backwardness through industrialization.[2] In other words, industrialization helps to create a country's economic infrastructure, and gives a path of diversification into a new area of activity. One of the merits of industrialization is that it makes it possible for countries to satisfy their own requirement to a greater degree.[3] It is the major instrument of progress, modernization and social changes in development countries.[4] Maximum utilization of human, capital and other natural resources of the country could take benefit from the formation of industries. Increasing the job opportunities, it will increase the income of the people. It also facilitates the agricultural development by

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[2] Eckstein Alexander. *"China's Economic Development"*. (Michigan: The University of Michigan press. 1976.p.p. 62-63)

[3] United Nations. *"Industrialization for New Development Needs"*, (New York 1674) p.1

[4] Ibid

reducing the pressure on land and creating demand for agricultural raw materials. The reason for emphasizing industrialization is that industrial development would absorb rural under employed persons to these field of production, where higher productivity is possible without reducing agricultural outputs.

Trading companies play a vital role for the development of the manufacturing industries. It supplies the necessary items like raw materials, human resources, advance technology and many more things to industries. And distribute product items to the required consumers in the appropriate markets.

Recently, Nepal has also been affected indirectly by economic crisis. Nepal prepares its budget consulting with the IMF (International Monitory Fund), World Bank, Asian Development Bank and many other donor counties for the necessary loans, grants and assistance, this reflects Nepal's economy is not satisfactory due to the lack of sound economic bases business sectors.

Trade policy, 1992 is established to enhance the contributions of trade sector to national economy by promoting internal and international trade with the increased participation of private sector through the creation of an open and liberal atmosphere. Emphasis will be given on modernizing management and technology, on promoting market, and attracting direct foreign investment in order to identify and develop new products, as well as to raise the production and quality of the traditional products.

Taxation system will be simplified by introducing necessary change in order to foster competition in trade. For the economic development, there should be smooth transparency and increase in the revenue collection on the Services, Sales, Export and import business. In such a process, Value Added Tax (VAT) Act 2052 was introduced. This act includes Sales Tax Act 2023, Hotel Tax Act 2018, Contract Tax Act 2023 and Entertainment Tax Act 2017. This Act is good for the entire straight and fair businessmen who have maintained all types or records.

Usually VAT Act 2052 affects more on trading business than on the manufacturing company.

## 1.1.2 <u>Historical Background of Salt Trading Corporation</u>

Salt Trading Corporation Limited is one of the organization which was established in 1963 A.D (2020 B.S.) with 14 individuals under the Nepal company act with the joint efforts of HMG/Nepal and the private sector to ensure proper supply and distribution of essential consumer items throughout the country. It is one of the p0ioneer trading organizations occupying 41years of history working in multiple capacities of rendering better services and providing quality goods to the public. Its first task was to make edible salt promptly available. But the distribution system during the passage of time disordered and became unreliable. However, attempts were made to reduce irregularity through the organized supply and delivery systems. The organization gradually improved its ability not only meet the demand but also to maintain quality. Later, the corporation started to provide iodized salt to prevent goiter when the organization assigned the responsibility of implementing the Nepal-India goiter control project in 1972.

The success in supply management led to the addition of essential commodities such as sugar, food grains, and processed eatables into its distribution network. Profits from trading activities were invested in the production of basic necessities to boost self-sufficiency, accelerate economic growth, and gain public and private support, currently, the Salt Trading Corporation directly employs about 287 individuals. STCH has equity in many pioneering and leading industries in the kingdom.

## <u>Family group of Salt Trading Corporation Ltd</u>.

- Salt Trading Corporation LTD, Kalimati, Kathmandu
- Khadya Udhyog Ltd, Industrial Area, Hetauda.

- Sagarmatha Insurance Company Ltd, Kathmandu.
- Nepal vegetables Ghee Industry Ltd, Industrial Area, Hetauda.
- Gorkhali Rubber Udhyog Ltd, AnbookKhaireni, Gorkha.
- National Finance Company Ltd, Basantapur, Kathmandu.
- Hitkari Guthi, Kalimati, Kathmandu.
- Suwarna Pharmaceuticals Ltd, Kathmandu
- EXIM International, Kathmandu.
- Nepal Coal Limited, Birgunj.

**Major items of current Trade of STCL**

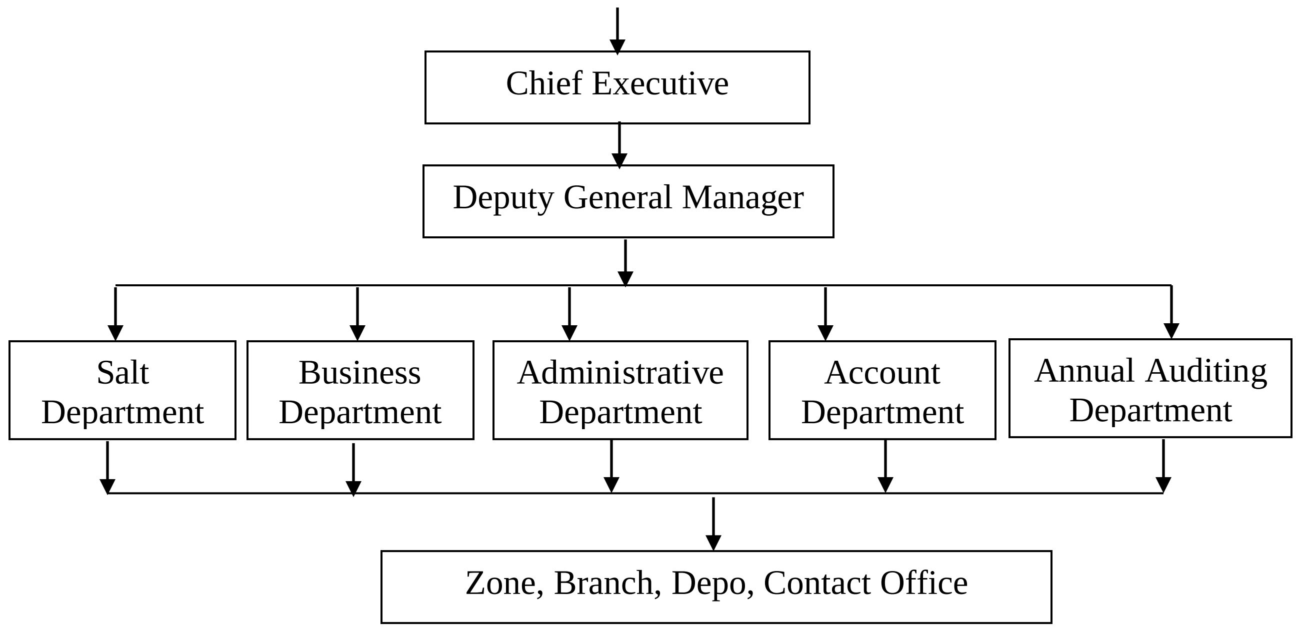
Salt, Wheat, oilseeds, cement, sugar, lentils, milk, coffee, tea, grams, coal, rice, maize, oil, fertilizers, fresh processed fruits.

The performance of any organization fully depends upon the objectives of that organization. The main objectives of the company are to import and distribute salt and other consumable goods within the kingdom of Nepal, to perform the work of an agent on behalf of national and international companies and to establish the industry with the introduction of liberal economic polity the organization is committed to boosting exports to bring about a more favorable change in the balance of trade. The organization also conducts triangular trade indicated to the task of promoting more exports in various item including salt. Other items are for the benefit of exports and import alike.

Thirty seven years of dedication and services to the nation and her people has to day made salt Trading Corporation Limited a major catalyst in bringing about the desired economic changes and growth in Nepal? Therefore, the present study ahs special reference to salt, particularly, the focuses area.

Organizational Structure

Board of Directors




**Salt Trading Limited Organization Chart**

**Fig No. 1**

### 1.1.3 Conceptual Framework of Working Capital & its Practices in Nepal

Working capital management refers to the administration if all aspects of current assets namely cash marketable securities, stock and current liabilities. Working capital is the lifeblood of the organization. To sustain the belief of the people and customer, the organization should always get ready to meet the obligations. Need of working capital is directly related to firms growth. The level of CA can be, measured by relating current assets to Fixed Assets. Assuming a constant level of fixed assets a higher CA/FA ratio means an aggressive current assets policy assuming other factor to be constant. A conservative policy implies greater liquidity or lower risk, while an aggressive policy indicates higher risk and poor liquidity. Higher risk gives higher return, while lower risk gives lower return. Of the firm's level of CA is very high it has excessive liquidity, its return on assets will be low as funds tied up in idle cash and stock earn nothing and higher level of debtors reduces profitability. Thus, the cost of liquidity increases with the level of CA.

Working capital management practices in Nepalese manufacturing enterprises provide totally a different picture. The past trend of many manufacturing & trading companies had given emphasis in fixed asset. So they are facing financial problem all the time. The government policy to concentrate more in fixed assets has overlooked the financing of working capital. So in order to create the culture of risk bearing ability through commercial prudence and professionalism, the aspect of working capital should be treated in the same way as fixed capital. While deciding the structure of the manufacturing & trading companies, recently short term financial decision has never received much attention in the literature of finance. Because of earlier emphasis of financial management was more long-term financial decision, which led to growth and development of many useful theories concerning these decisions as compared to short-term financial decision.[5]

In most Nepalese enterprises the management of working capital has been misunderstood as the "Management of Money" and the managers are found over conscious about the working of money rather than its efficient utilization.[6] At the same time they never think of the source of working capital and usually depend on HMG for some of PES have used depreciation fund and utilized surpluses to overcome the scarcity of working capital. Thus the existing problems are in the management of working capital rather than in any other area.

Working capital is lifeblood of enterprises. The inefficient management of working capital will lead to loss of profits in the short-run, but it will lead to down

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[5] Radhe Shyam Pradhan *"Management of Working Capital"* (New Delhi, National Book Organization, 1986)

[6] Dr K. Acharya, *"The management of working capital in PES of Nepal"* (Nepalese Dev, Studies, 1988)

fall of the enterprises in the long run. A deeper understanding of the importance of working capital and its satisfactory provision can lead not only to material saving as well as economic use of capital but can also assert in furthering the ultimate aim of business.

So, maintaining the optimal level of working capital is crux problem as it's strongly related to the trade off between risk and return. The aspect of determine appropriate proportion of working capital in the structure of total assets comes under the preview of working capital policy. The unnecessary blocking of working capital, administrative negligence in day-to-day operation and serious liquidity problem are the maim causes to failure of any companies of Nepal. Most of Nepalese companies are operating in loss through they are following aggressive approach of working capital management.

## 1.2 Statement of Problem

Generally working capital refers the current assets of the organization, but it is also defined as the difference between current assets and current liabilities. Many organizations are keeping more current assets in their organization. From the various studies it is found that organization is not able to manage the proper level of working capital and efficient utilization of it. They are not ale to find out what level of working capital is suitable for their company.

There is not a standard level of working capital for organization, some organization needs high level of working capital and some may run with low level of working capital. The firm doesn't know which level of current assets and current liabilities composition is appropriate. Investment in current assets should be just adequate. Excessive investment in current assets should be avoided because it impairs the firm's profitability, as idle investment earns nothing. On the other hand inadequate amount of working capital can threaten solvency of the firm because of its inability to meet its current obligation. The investment decision should be made on any type of current assets by considering their role in corporation and determining, which is more beneficial to the corporation. The problem toward which this study is directed is to asses the size, efficiency, liquidity and profitability of working capital in STCL. In the management of working capital, the most posing questions are:

- How much working capital is to be maintained?
- What type of financing to use?

**Following are research problems of this study:**

- ☞ Is there a proper investment in each type of working capital?
- ☞ Is there sound liquidity position of STCL?
- ☞ Is the overall profitability of firm satisfactory?

## 1.3 Objective of the Study

Working capital generally refers the current assets and net working capital refers the difference between current assets and current liabilities. The balanced working capital is most important for every organization. The excess and inadequate working capital is very harmful. The success and failure of organization depends upon the amount of working capital. The working capital management refers to maintaining a balanced working capital. The main objective of this study is to examine the overall working capital management of STCL. To achieve these basic objectives, the following specific objective has been considered in the study:

- ☞ To calculate the liquidity, profitability, & turn over ratio of the company.
- ☞ To find out the need to control investment in each type of current assets over the study period.
- ☞ To analyze the effect of working capital on liquidity and profitability.
- ☞ To suggest and recommend for the improvement in working capital management of trading company.

## 1.4 Need of the Study

Working capital is regarded as the lifeblood for any enterprise because it is needed for sustaining in day-to-day operation. If the business cannot maintain a satisfactory level or working capital, it is likely to become insolvent and may even push into bankruptcy so the goal of working capital management is to manage the firm's current liabilities in such a way that a satisfactory level of working capital is maintained. It is important for these reasons:

- ☞ A large proportion of the financial manager's time is allocated to working capital management.
- ☞ More than half of the total assets are typically invested in current assets.
- ☞ The relation between sales growth and the need to invest in current assets.
- ☞ The relation between sales growth and the need to invest in current assets is directly close.

This study wills diagnosis the relationship of working capital management to the efficiency of the STCL enterprise as a whole. It will also be helpful for new management of the efficiency as well as profitability with proper management of working capital and its components viz. cash, inventory and receivables.

## 1.5 Limitation of the Study

The study attempts to compare the working capital management of STCL. There are some limitations, which weaken the generalization e.g. inadequate coverage of industries, time period taken, reliability of statistical tools used and other variation. This study will be limited by following factors:

- ☞ This study is limited to working capital management of STCL
- ☞ Due to limited time all the concern areas might not be covered in the study.

- ☞ Basically, the data and financial statement provided is secondary in nature.
- ☞ The study period is limited to 6 fiscal years from 2059 to 2064
- ☞ The data could be available up to 2064 only, thus there may be a chance of failing to address the current situation of STCL.

## 1.6 Organization of the Study:

The whole study is divided into five main chapters:

The first chapter presents a brief introduction of the study. Firstly, the background information given and then it is narrowed in the form of focus of the study. A statement of problem is presented shortly and the objectives of the study are set up. The need and importance of the study is presented in the heading of significance of the study.

The second chapter deals with the review of different books, reports, dissertation and journal - articles related to the topic of the study.

The Third chapter is about research methodology. The chapter presents the whole procedure of this research work i.e. research design, source of data, population and sample, method of data analysis (financial tools and statistical tools).

In the fourth chapter, the available data are presented and analyzed on the basis of document perceived from related companies. The study analysis is using financing as well as statistical tools and techniques in order to fulfill the need of the study. The findings of the study are presented in the last of this chapter.

The last of fifth chapter presents the brief summary of whole research report and its conclusion. The chapter also supplies some useful suggestions to the concerned parties as recommendation.

# CHAPTER-II

# Review of Literature

## 2.1 Concept of working capital

A firm needs various types of assets in order to carry out its operation. Some assets are required to meet the needs of regular production and some others are required especially to meet day- to -day expenses and short-term obligation.

The assets such as cash, marketable securities, accounts receivables and inventories which are known as current assets are required to be mainted at a certain level depending upon the volume of production and sales. The cash and marketable securities are respectively considered as purely liquid and near liquid assets where as the accounts receivable and inventories are not. However, they can be liquidated as and when necessary with a period of less than one year. The capital invested on these assets is known as working capital. In short, the working capital is the sources of financing current assets and it includes short as well as long term financing. "Working capital refers to a firm investment in short-term securities, account receivable and inventories.[7]

There are two major concepts of working capital net working capital and gross working capital when accountants use the term of working capital, they are generally referred to net working capital, when is the dollar difference between current assets and current liabilities. This is one measure of the extent to which is the firm protected from liquidity problems. From a management viewpoint, it however makes little sense to take about trying to actively manage a net difference between current assets and current liabilities, particularly when that difference is continuously changing.

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[7] Hampton John J; as quoted by Dongol R.M. Parajuli K.P. *"Accounts of financial analysis and planning"*.

Financial analysis, on the other hand, means current assets when they speak working capital. Therefore their focus is on gross working capital.

Since it makes sense for the financial manager to be involved with providing the current of current assets for the firm at all time, we will adopt the concept of gross working capital. As the discussion of working capital management unfolds, our will be to consider the administration of the firm's current assets- cash and marketable securities, receivables, and inventory and the financing (current liabilities) needed to support current assets.

### 2.1.1 <u>Gross concept of working capital</u>

The gross concept of working capital refers to total current assets. Current assets are those assets, which in ordinary course of business can be converted into cash within short period of normally one accounting year. Current assets include:-

(a) Cash in hand
(b) Cash at bank
(c) Bills receivable
(d) Sundry debtors (Less provision for bad debts)
(e) Inventories or Stock as
  * Ram materials
  * Work in process
  * Stores and Spares
  * Finished goods
(f) Temporary investment of surplus funds
(g) Prepaid Expenses
(h) Accrued income

Supporters of this concept argue that the real working operation of public enterprise solely rely on current assets. Moreover, there is a logical reasoning that explains if fixed assets imply fixed capital, than current assets imply on working capital. As working capital is evaluated in terms of utilization of current assets, it is naturally on current assets only. Current liabilities are not entered into picture while judging the turnover of current assets. But reformer of this concepts states that this is a concept incomplete in itself. The management of working capital gives erroneous result if public enterprises do not consider current liabilities. Again, if they rely on this concept, the true financial position of the enterprise does not disclose.

### 2.1.2 <u>Net concept of working capital</u>

Net working capital is commonly defined as the difference between current assets and current liabilities "The term net working capital can be defined in two ways.

(a) The most common definition of net working capital is the difference between current assets and current liabilities.

(b) And Alliterative definition of working capital is that portion of firm's current assets, which is financed with long-term funds. Current liabilities are those liabilities which are intended to be paid in the ordinary course of business with in a short period of normally one accounting year out of current assets or the income of the business.

**Current liabilities include:**

(1) Bills payable

(2) Sundry creditors/Accounts payable

(3) Accrued outstanding expenses

(4) Short-term lone, Advances and deposit

(5) Dividend payable

(6) Bank overdraft

The gross concept is a financial or going concern concept where as net working capital concept is as accounting concept of working capital.

These two concepts emphasis that excessive investment in current assets affects profitability as idle investment yield nothing. Similarly, inadequate investment in current assets intakes it difficult of currying out day-to-day operations of the business smoothly.

The need for net concept of working capital arises due to the fact that short-term creditors want an enterprise to maintain current assets at higher level as compared to current liabilities. It shows the extent of protection provided to short-term liabilities.

"In fact the choice of particular concept will depend upon the purpose. Thus of the two concepts, the net is more useful. The purpose is to find all the liquidity position of an enterprise. If on other hand, the interest lies in finding out where the total current assets of an enterprise, are being put to maximum use, the gross concept is preferable[8]

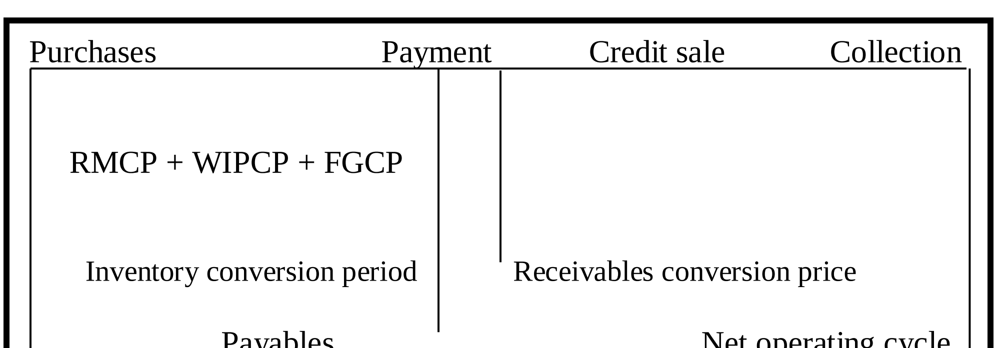
Business enterprises have to hoard sufficient current assets to pay current liabilities and constitute a margin or buffer for maturing obligation within the ordinary operation cycle. If the corporation is making adequate profit then such financing of net working capital is most likely to be from retained earnings. For a loss maker, however, other long term sources like term loan debenture or equally share should represent the equivalent of net working capital. This concept enables the business firms to have true picture of their financial position and also to measure the sufficient liquidity. But expensive current assets show idle funds with additional cost to be borne.

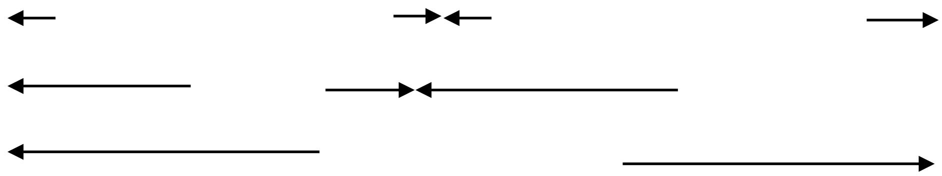
### 2.1.3 <u>Need For Working Capital</u>

[8] S.M. Salay *Financial Management of Public Enterprises*, Hand & company ltd., New Delhi, 1984. P.-90

The management of working capital has been regarded as one of the conditioning factors in the decision making issue. It is no doubt, very difficult to point out as to how much working capital is needed by a particular company, but it is very essential to analyze and find out the solution to make an efficient use of funds for minimizing the risk of loss to attain profit objectives. Thus there is the importance of working capital in operating life of a company. A successful business keeps its working capital moving rapidly; hence it is also a lead circulating capital or a moving capital. The transmutation of a company's working capital into income and profit and back into working capital is one of the must dynamic and vital aspects alive. A fully equipped factory, without stock to sell is of no use. These circumstances emphasize the importance of working capital in a business firm.

The need for working capital or current assets cannot be over emphasized. The objective of financial decision-making is to maximize the shareholder's wealth. To achieve this it is necessary to generate sufficient profits. The extent to which profits can be earned will naturally depend upon the magnitude of the sales, among other things. A successful sales program is, in other works, necessary for earning profit by any business enterprise. However, sales do not convert into cash instantly, there is invariable a time log between the sales of goods and the receipts of cash. There is, therefore, a need for working capital in the form of current assets to deal with the problem arising out of the lack of immediate realization of cash against goods sold. Therefore, sufficient working capital is necessary to sustain sales activity. Technically, this is referred to as the operating or cash cycle. The operating cycle can be said to be at the heart of the end for inventory to sales and sales to account receivable and back into cash is what is called the operating cycle. In other words, the term cash cycle refers to the length of time necessary to complete the following cycle of events.





(Operating cycle of manufacturing firm)

If it were possible to complete the sequences instantaneously, there would be no need for current assets (working capital). But since, it is not possible, the firm is forced to have current assets. Since cash inflows and cash outflows do not match firms have to necessarily keep cash or invest and short-term liquid securities so that they will be in a position to meet obligation when they become due. Similarly, firms must have adequate inventory to guard against the possibilities of not being able to meet a demand for their products. Adequate inventory therefore provides a cushion against being out of stock. If firms have to compete, they must sell goods to their customer on credit, which necessitates the holding of account receivables. It is in these ways that an adequate level of working capital is absolutely necessary for smooth sales activities which, in turn, enhances the owner's wealth.

### 2.1.4 <u>Nature of working capital</u>

Working management is focused with the problem that arises in attempting to manage the current and current liabilities. And their interrelationship that exist between them. The concept of working capital has undergone a change. Formerly, it was considered a margin safety for short-term creditors. i.e. meeting obligations as and when they fall due working capital is required for caring on the day-to-day operations of a firm and should not be taken merely as a margin of softy for short term creditors.[9]

[9] S.P. Jain & K.L. Narang: op. cit. P-B-174

The nature of working capital is described with the help of nature of cash cycle or operation cycle of the organization. The operation cycle is the firm duration required to convert sales after the conversion of resources into inventories into cash.[10]

Current assets are usually converted into cash with in the current accounting cycle. "A firm begins with cash which is used for purchase of raw materials and bought in components. Materials and other operating supplies can also be purchased on credit which is turn generation account payable. Further cash is expended to pay the labour and manufacturing costs and further trade credit obtained to enable production of finished goods which are eventually sold on credit going size to account receivable. The collection of receivables brings cash into the firm and creditors are paid.[11]

John J. Hamption says "Working capital has a volatile nature. This nature present some problems and contents in financing work capital need. The volatile nature of working refers to the change in total current assets. Thus the nature of working is not static it changeable as per transitions of goods.[12]

According to Khan M.Y and Jain P.K. "Incase of current liabilities current liabilities are obligations to outsiders repayable a short period usually with in the accounting period or the operation cycle of the firm. It can be said to the counterpart of current assets. Conventionally, they are paid out of the current assets in some case, however existing current liabilities can be liquidated through the creation of additional current liabilities.[13]

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[10] I.M. Pandey: op. cit. 7th ed. 1995. P-731

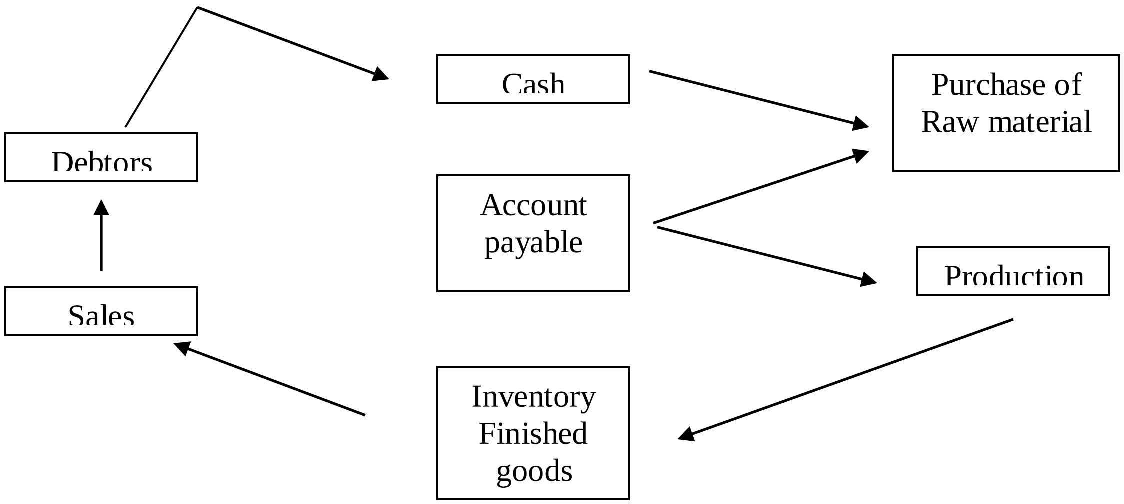
[11] S.P. Jain & K.L. Narang: op. cit. P-B-174

[12] John J. Hamption : As quoted by R.M. Dangol, K.P. Prajapati: *Accounting for Financial Analysis & Planning*, Taleju Prakashan, Bhotahity Kathmandu P-808.

[13] M.Y. Khan & P.K Jain : *Management Accountancy*, Tata Graw Hill Publishing company Ltd. New Delhi. 6th edition, 1991, P-105

We can show working capital in cycle and it shows interrelation among the current assets and other components.

## Working capital cycle




In order to reduce the requirement of working capital. The management should try to reduce the period of the operating cycle.

### 2.1.5 Important of working capital

Working capital is the life blood and nerve center of business. If the center becomes work, the business can hardly service sooner it is likely in collapse. Adequate working capital also makes available fund for unforeseen contingencies and a unit can successfully go through period of crisis. It is working capital, which is the force behind the fixed assets utilization. The manufacture and sale of new commodity may require not only a new plant but also additional raw materials and an increase in account receivable to support credit sale of the new product.

"Adequate working capital creates an atmosphere of certainly security and confidence. General moral of management is enhanced, the employees are to get their remuneration at the fixed time and shareholders are assured a good return on their investment be course of good performance of the company."

That is an important the feeling of security, the sense of power the promote, the self-confidence.

The need for working capital or current assets cannot be over emphasized. The objective of financial decision-making is to maximize the shareholders wealth. To achieve this, it is necessary to generate sufficient profits. The extend which profits can be earned will naturally depend on the sales, among other things. Sales do not convert into cash instantly, there is invariably a time-log between the sales of goods and the receipt of cash. There is, there fore a need for working capital in the from of current assets to deal with the problem arising out of the lack of immediate realization of cash against goods sold. Therefore, sufficient working capital necessary to sustains sales activity.

"Working capital management is particularly important for small firms. Although such firm can minimize their investment in fixed assets by renting or leasing plant and equipment, they can't avoid investment in cash, receivables and inventories. Therefore current assets are particularly significant for the financial manager of a small firm."

"Adequate working capital has also a technical role to play in increasing the rate of return on funds invested in the business. A business unit can increase its rate of return on the capital invested if it keeps pace with the technological developments taking plan into field to which it pertains."

General, adequate working capital is better than inadequate working capital because inadequate working capital increase ideal funds which may earn profit may be unnecessary used to purchase of inventories and creates waste age and losses. And due to liberal credit policy it increase higher bad debts cause of inadequate working capital. Ideal funds can't increase profit should pay inters of ideal fund which reduce profit. So that an adequate working capital necessary for sound helps of business. A firm can preserve the solvency position create good will, pay in time creates confidence face emergency period having adequate working capital.

### 2.1.5 Determinations of working capital

There are no formulate to determine the working capital requirements of the firm. A most number of factors influence the working capital necessary of the firm. Working capital requirement must be sufficient to achieve maximum profit and the successful run of the business enterprises. So that it must be inadequate volume. To determinate total working capital requirement a wide variety of factors into existence. However, the following factors are to determinate working capital.

(1) Nature of business: The nature of business affects the amount of working capital required. In tracing and manufacturing concerns, the amount of working capital required will be more as compared to public utility concerns because of the fact that former concern are required to invest substantially in inventories and debtors as compared to public concern.

(2) Production policy: Such policies have an important impact on amount of working capital. The amount of inventories is mostly determined by the production policies. In such labour intensive industries, the amount of working capital required will be more. In those concerns where the work is mostly done by automatic machine, the amount of working capital will be less than former.

(3) Length of the production cycle: If the manufacturer has to carry raw materials and supplies for a longer period in the processing stage with the additional expenditure of labour and service cost before finished goods are finally obtained, the amount of working capital will be more. If the production cycle is shorter, the amount of working capital required will be less.

(4) Period of credit allowed and granted: If the from can enjoy more liberal credit from the supplier of goods the amount of working capital required will be less. And liberal credit policy tends to increase in working capital requirements more than the strict policy does.

(5) In both periods of boom and depression the requirements of working capital will be more than the normal firms. In periods of boom a business will naturally produce more of its product for which more stock of raw materials will have to be maintained. For additional quantities of raw materials stock more working capital needed. When market goes dull and producer are required to carry large quantities of all types of stock which means more amount of working capital.

(6) If the supplies are available regularly less amount of working capital will be needed. But if supplies are irregular the business is required to have large quantities of stock in order to ensure uninterrupted flow of production. This will require more amount of working capital.

(7) In case of seasonal industries as in case of woolen, textile, hosiery etc more working capital will be required as stock of finished goods must be ready before the season comes as most of the amount is spent on raw material labour and other expenses.

(8) Rising price level will require a firm to maintain higher amount of working capital.

(9) If the firm is looking forward growth it naturally cost more working capital will need.

(10) There are also other factors as dividend policy, profit level, financing change, etc.

## 2.1.6 <u>Structure of working capital</u>

Structure of working capital includes a study of the elements of current assets and current liabilities. The important elements of current assets are inventory, receivables, cash and bank balance and short term investment other the trade investment. Current liabilities usually includes trade creditor. Bank borrowing accrued expenses accrued tax and up paid decides.

The details descriptions of three major components: as cash, marketable securities, inventory.

**A. Cash:**

"Cash is the crucial components of the working capital of a concern cash like blood streams in the human body gives strength to a business units, without it the firm in not able to pounce the other recourse that it needs to continue the operation of business unit to a stemdstill. Management has a duty. Therefore to see that the firm it manage sufficient cash balance at all times to meet its day to day requirements.[14]

Cash is one of the most important factors for the business organization. Without the procurement and proper management of cash on business organization has the out flow and inflow of cash. The inflow of cash increase the liquidity and out flow the decrease it. The main source of cash inflow for a business organization are sale of goods and service, interest in advance etc, and the out flow is necessary for the payment of trade creditors, administrative expenses wages, interest, creation installment of loans, different types of cash purchase selling and distribution expenses etc. So there should be proper balance between cash inflow and cash outflow. In other words, there should be an adequate amount of cash in the firm but not excess cash them requirement is not profitable for business firm.

[14] S.P. Jain & K.L. Narang: op. cite. P-B-182

The important objective in managing cash should be to trade off liquidity and profitability and profitability must be balanced in such a way that the organization retains its liquidity and at the same time maximize is profitability.

**B. Marketable Securities**

"Marketable securities are short-term money market instruments like treasury bills, quoted, corporate share, debenture etc. that can easily be converted into cash when the cash is needed in the business.[15]

Now-a-days it has become a practice with business concern to invest their surplus cash in marketable securities. Marketable, securities usually gives lower yield them firm's operating assets. There are two reason for making investment in these securities.

(1) There serve as a substitute for larger cash balance liquidation part of securities to increase the cash balance when cash outflows exceed, cash inflows.

(2) Their also used as a temporary investments to meet known financial requirement of the firm in near future.

## 3. Inventory:

Inventory represent a major current assets investment in most manufacturing firms ranging from perhaps 25 to 75 percent of their current assets depending upon the magnitude of the firm and the types of industry.

[15] S.P. Jain & K.L. Narang: op. cit. P-B-182

"Inventory may consist of raw material work-in-progress and finished goods awaiting sale and shipment.[16]

According to Kulshrestha. Raw materials includes those essential material, which are basically used to produce finished goods. Raw material are not final product but they are ingredients for it work in progress refers for that product which are not completed but under processing. It is the phase after raw material. Thirdly the finished goods refer to that stock of goods which is ready to consume and ready to sale and shipment, apart form there stores and supplies are also a kind of inventory. It includes fule, oil, coal, lubricants, chemicals etc.[17]

In this way next concepts of inventory is "Adequate inventories facilitate smooth production activities and help to provide off shelf delivery to customers on other hand, excessive inventory is idea resource of the firm and can prove costly because it lies up working capital unnecessarily which could have been better used it been utilized for some other purpose. The major problem of inventory management, therefore should be to arrive at an optimal balance between too much inventory and too little inventory. The optimum level if inventory is decided keeping in view the costs associated with holding inventories. There are two types of these cost, ordering cost and caring cost. A system for effective management of inventories involves there sub system economic order quantity record point and stock level.[18]

**4. Receivables.**

Receivable is one of the important current assets representing amount owed to the firm as a result of the sale of good or service on credit in the ordinary course of business. This term is also applicable to prepaid expenses and short-term loans and

[16] R.A. Brealy & S.C. Myers : *Principle of Corporate Finance*. Tata McGrow Hill Publishing Co. Ltd. New Delhi. 4th ed. 1996, Page-63

[17] R.S. Kul Shrestha. *Financial Management.* Shatita Bhawan Agra, 1992 P-385.

[18] Khan & Jain. Op. cit. P-B- 176

advances to subsidiaries and employees and supplies of raw materials of stores, spares and equipment Receivable like inventories, involve costs; it should be kept it mind that these cost should not exceed the profit earned on sale generated by receivables.

"Therefore, the objective of receivable management is achieving a balance which result in the combination of sales and profit rates that maximize that fact of close co-operation of the finance executive with sales executives can hardly be over emphasized."[19]

The greater the level of sales and longer the term of credit given to customers the more will be the quantum of investment in receivable. If the firm has a relatively liberal credit policy it will have still higher quantum of investment in receivable than a firm which has followed a stricter credit policy. A liberal credit policy encourage customer to delay statement of their accost.

## 2.2 Review of thesis on working capital

### 2.2.1 Review of Related Dissertations:

Working capital is a most important elements to run smoothly of firm. In the preceding topics discussion have been made on the introduction and conceptual setting of the study. The purpose regarding standing this chapter standing this chapter here in this study . The purpose regarding standing this chapter standing this chapter here in this study is to review the available literature on working capital management in the context of the Nepalese enterprises including the getting information on Koshi Metal Craft(Pvt.)Ltd. An attempt has been made to review the literature on working capital management in generate A Koshi Metal Craft Co. Pvt. Ltd.

[19] S.C. Kuchhal. op. cit. P-204

A well known Indian professor I.M. Pandey has disrobed some conceptual ingredient "There are specially two concepts of working capital: Gross concept and net concept , the gross working capital simply called as working capital simply called as working capital refers to the firms investment in current assets. Current assets are those assets which can be converted in to cash within an accounting year and include cash. short-term securities debtors, bills receivables, stock and prepaid expenses. The term net working capital refers to the difference between current assets and current liabilities. Current liabilities those claims of outsiders which are expected to nature for payment overdraft and outstanding expenses or accrued income. New working capital can be negative and positive. A positive net working capital will raise when current assets exceed current liabilities are in excess of current assets"[20]

"Prof. Dr. Khagendra Acharya had studied the management of working capital in the PES of Nepal with special reference to tea industries in 1985 which is based on his Ph.D. Thesis. He has focused working capital management of Nepal Tea Development Corporation (NTDC) for eight year from 1975/76 to 1982/83 A.D. In the study he found that the net working capital of NTDC was negative due to increase in current liabilities. Inventory held to largest position and it was accumulating in the corporation. The size or receivable of NTDC had also been increasing trend. Where as cash balance held by the corporation were is sufficient to meet the routing work of the corporation. At the same time, the liquidity position was very poor since current assets were less than current liabilities. The turnover of inventory receivables and current assets were below the NTDC had been selling mostly below the break even point even variable cost was higher than selling price.

[20] I.M. Pandev Op. cit. P-325

Dr. Acharya gave some suggestions regarding these were proper planning of production and sales, new credit policy, action against the delinquent dealers obtaining loans from any individual or financing institution. Lack of proper planning and programming ducting sales disintegrated as well as defecting inventory management. Lack of proper control and paucity and imprudent management of working capital have been observed as the main cause of inventory accumulation in the corporation"[21]

### 2.2.2 <u>Review of journal/article</u>

Article and journals are great significance for thesis writing. So various published article by different management expert and journals relating to working capital (WC) management have been considered.

Dr. Radhe S. Pradhan conducted a research named by "Working capital management" with special reference to 10 Nepalese public enterprises. Some major conclusions drawn by the research are mentioned below.

(a) Most of the selected enterprise have been achieving a trade-off bellowed risk and return there by following neither aggressive nor conservative approach.

(b) Almost all selected enterprises have a positive net working capital the negative net working has been observed in few cases.

(c) When quick assets are compared with current liabilities it is revealed that the former are insufficient to cover current liabilities on many occasions.

(d) If standard current ratio is to be taken as 2: I most of selected enterprise have current ratio of grater then two.

(e) The low level of current and quick ratio need not indicate poor liquidity position. They may still be considered good if the enterprises can generate cash flow sufficient to pay their current debt. Therefore the liquidity measure that consider

[21] Dr. K. Acharya: *The Management of WC in the PES of Nepal*, with special reference to tea industry, University of Allabahad 1985

cash flow have been employed in the study for all their enterprises for which current ration are greater than current assets and quick assets. The measure however showed a poor liquidity position of the enterprise. The poor liquidity position has been noticed of the enterprise have either negative cash flow or negative earning before tax or the have excessive net current debts which can't be paid with in year. [22]

The Nepalese manufacturing public enterprise has on an average half of their total assets in the firm of current assets on an average is largest followed by receivables, and cash in most of selected enterprises. Since inventory occupies a major share in current assets and its share has increase over time, Nepalese public enterprises should be pay more attention to management of inventories. The study of the turnover ratio computed over a period of time shows that there has been an improvement in utilization of current assets by the majority of manufacturing public enterprises of Nepal but this is not the case with net working capital utilization.

The pooled regression result of this study contradict unitary of more then unitary sales elasticity hypothesis of firmed man, Meltzer whalesn. De Allessi and Vogel and Maddala with respect to the demand for cash by Nepalese enterprises. The presence of economics of scale in cash holding is to same extent consists with the conclusion of Baurmo. Tobin, frazer, Nadiri and Coates. The regression result also show that the level of working capital and its components an enterprise desire to hold depend not only on sale but on holding as its also. The capital cost co-efficient is all statistically significant with the theoretically correct sing. The adjustment speed of actual to desired balance has been observed as highest for cash followed by inventories net W\C, receivables and gross W/C.

[22] Dr. R.S. Pradhan: *Management of Working Capital*. National Book Organization, New Delhi 1986, P-3.

"A comparative study of problem and impediment in the management of W/C of Nepalese Enterprise" has conducted Dr. K. Acharya state that is most of enterprise the management of W/C has been misunderstood as the management money rather than is efficient utilization. Thus the existing problems in the finance are mostly directed towards the management of W/C rather than increase. In his number of studies it has been repeatedly fund that the gross inefficient exist in the operation of enterprises. He has stressed on high cost of production which have left these manufacturing concern is less reduced position. Thus he further added the cost reduction program is highly associate with the optimization of W/C. He has focused some operational and organization problem of Nepalese public enterprises like aggregate corrected liabilities which is increased quickly than their current assets public enterprises not following traditional norms 2:1 between their current assets (C/A) and current liabilities (C/L) low rate of inventory turnover change in W/C in relation to fixed capital has very low impact over the profitability debt equity as 1:1 then transmutation of capital perforation information tools and techniques and working capital management has never been consider a managerial job. The overall adequateness of inventory in NTDC disclose that the growth of W/C and inventory in the corporation are negatively corrected. NTDC is expected to improve its prevalent system of inventory management regarding the planning and purchasing of spare parts manures insecticides, fuels etc.

The credit policy which is not clean in its self has not been followed by the corporation which collecting the over due account. Receivables are growing rapidly than the corresponding growth as sales volume. Monitoring the propone funding W/C management has never been induced in the managerial job all the related PEs with no exception to NTDC during the study period. The break even analysis of NTDC reveals that due to insufficient W/C the corporation has been selling its product as for below rate than its Break even.

Dr. A.K. Mukharjee had W/C management of public enterprise in Indian 1988. This study cover 20 manufacturing public sector undertaking owned wholly or partly by the control government. The scope of this study was limited to manufacturing of public enterprises and the period was limited to 5 years.

**The main focused of this research study have been as follows.**

- "W/C changes mainly due to charging pattern of investment in quick assets current assets are highly affected by the inventory policy of the unit.
- Production or output the size of W/C wore negatively corrected of all the units.
- The government is not in favor allowing depreciation funds to used for financing W/C requirements. Such funds at the very outset used to replace assets. The government has also laid down compressive guidelines regarding bank financing the SC needs of the firm in different industries.
- The current ratio less than two the contribution of cash credit management are more that the W/C requirement which indicates that portion of such financing has been diverted towards capital expedition.
- It was observed the overall profitability and size of working capital are negatively corrected poor and defecting product pricing policy has also lead to negatively profitability.[23]

In the study report and journals it is shown that the proper management of W/C is negated factor in most of the industries. In number of manufacturing industries. There are dazzling instances of in efficient cash management, detecting inventories of inefficient cash management, defeating inventories policy and account receivable management. Taken together the common threaded joining all the industries is tack appropriate W/C policy to determine liquidity needs and source of financing them. The efficiency in the management of working capital of Salt Trading Co. Ltd. should be analysis till now no any other study has been made for the analysis of W/C management of Salt Trading Corporation Ltd, by

[23] Dr. A.K. Mukharjee: *Management of Working Capital*. Vohia Pub & Distributors, Allahabad 1988.P-9

taking 6 yrs data for observation and other available information with the help of methodology as described in the following chapter.

# CHAPTER-III
# Research Methodology

## 3.1 Introduction

The basic objectives of this study is to evaluates the working capital position of STCL the study covers a period of 6 years. To fulfill the objectives following methodology has been adopted. The main objectives of this study is to analyze, examine highlight and interpret the working capital position of STCL. Over the years and recommend suggestions improvements. So the purpose of this chapter is to analyze and fulfill the stated objectives. The methodology for obtaining above objectives, consists of source of data, data collection procedure and tools and techniques of analysis.

## 3.2 Research Design

Research design is the arrangement of conditions for collection and analysis of data in a manner that aims to combine relevance to the research purpose with economy in procedure. Research design also can be defined as the plan, stricture and strategy of investigation concerned so as to answer the research questions and to control variants. Thus, it is not possible for a researcher to conduct a research project without a research design.

## 3.3 Nature and sources of data

Generally, we can classify the data into primary and secondary, primary data are those which are takes from the interview of the concerned person of the company. These data are essential and important for the study at the time of research. This study is primary based upon secondary data, which are publishing by the company during the fiscal year 2059 to 2064.

For the study purpose, 6 years audited balance sheets, profit & loss amounts and other related document, which are secondary nature collected from the company.

## 3.4 Population and Sample

Population is a total unit about which we are going to study or research where as sample is the number of representatives about of total population. It is difficult to analyze all the published financial statement of the population financial year from 2020 to 2064 of salt trading corporation. A sample has been chosen for the study which will represent the total population. The research has taken only 6 years data from 2059 to 2064 fiscal year which are very important for the study.

## 3.5 Data processing procedure

The collected raw data are processed and presented in tabular from with the help of simple arithmetic rules. The entire raw data are converted in to approximate and condensed in the from of summery balance sheet and profit and loss amount most of the data have been complied in one form and processed and interpreted as per the need of the study. The secondary types data are presented for the analytical purpose after the tabulation of the data. These types of data processing represent are clear situation.

## 3.6 Use of statistical and analytical tools

After the data have been tabulated the researcher most state the work of analyzing them. In briefly the following statistical and analytical tools are used to analyzed the collected data.

### 3.6.1 Statistical tools

The various statistical tools as under have been used for the analysis and interpretation of data. The sample data collected 6 years from fiscal years. There tools are discussed in the following heading.

### 3.6.1.1 Arithmetic mean (Average)

The arithmetic mean is the most popular and commonly used measure of central tendency, which represents the entire data by a single value. The arithmetic mean of values of a variable is defined as the ratio of the total values to the number of values. It can be calculated as follows.

$$\overline{X} = \frac{\sum X}{N}$$

Where as: $\sum X$ = Sum of the values

$\overline{X}$= Mean value, N= Number of the value.

### 3.6.1.2 Correlation Co-efficient (r)

The most important method of measuring the correlation between the two variables is Karl person's coefficient measuring the degree of association between the two variables. The formula for calculating simple correlation Co-efficient (r) by karl person's method is.

$$r= \frac{N\sum XY-(\sum X)(\sum Y)}{\sqrt{N\sum X^2-(\sum X)^2}\sqrt{N\sum Y^2-(\sum Y)^2}}$$

To interpret the value of correlation, the relationship between variables is positive if the value of 'r' is greater then 0 and it is negative if the relationship between variables is less then 0. Similarly, if the value of 'r' is +1, the relationship is perfect positive and if it is -1, the relationship is perfectly negative. If the value of 'r' is o, the relationship between variables is zero.

### 3.6.1.3 Probable Error (P.E)

Probable Error of the correlation coefficient denoted by P.E. It is calculated under as.

$$\text{P.E.} = 0.6745 \times \frac{1-r^2}{\sqrt{N}}$$

If 'r' is less than its P.E. It is not all significant, and greater than $\pm 0.5$ than considered signification.

### 3.6.1.4 <u>Standard Deviation</u>

The standard deviation is an important and widely used measure of dispersion. The measurement of the scatter ness of the mass of figures in a series about average is known as dispersion. The standard deviation is an absolute measurement of dispersion in which the drawbacks present in other measures of dispersion are removed. The high amount of dispersion reflects high standard deviation. The small standard deviation means the high degree of homogeneity of the observations. It is calculated for selected dependent and independent variables specified. If is the positive square root of the arithmetic mean of the square deviation from arithmetic mean.

$$\text{S.D. } (\sigma) = \sqrt{\frac{\in\left(x - \bar{x}\right)^2}{N}}$$

Where,

$\sigma$ = standard deviation

x = variables

N = Number of years

$\bar{X}$ = Actual mean of the variable.

### 3.6.1.5 <u>Co-efficient of variation (C.V)</u>

C.V. is the relation measure based on the standard deviation and it defined as the ratio of the standard deviation to the mean expressed in present.

C.V. $= \frac{\sigma}{\overline{x}} \times 100\%$

## 3.6.2. Financial (Analysis) Tools

### 3.6.2.1 Ratio Analysis:

Ratio is the numerical or an arithmetical relationship between two figures. It is expressed when one figure divided by another. Analysis means to describe it more & more. It can be used to index for evaluation. Ratio can be expressed as percentage time & fraction.

The use of ratio as a tool of financial analysis involves their comparison, for a single ratio, like absolute figure fails to reveal the true position. Under the analysis of ratio, there are only taken as profitability ratio & activity ratios etc.

### 3.6.2.2 Comparison of working capital

Our main focus of the research is about the working capital management, Thus we have to discuss about the management of funds & relationship between them. Their relation can be analyzed by the comparising of various individual assets to total current assets & total current liabilities. The comparison of individual assets to current assets & fixed assets as follow.

1. **Current assets to total current assets: (CATA):-**

Current assets to total current assets expressed the relationship between the total assets & total current assets. The height % of CATA shows the risk & deceasing the profitability. The low percentage of it indicates by the help of following formula.

$$\text{CATA}= \frac{Total\ current\ assets}{Total\ assets} \times 100\%$$

2. **<u>Current assets to fixed assets (CAFA):-</u>**

The ratio of current assets to fixed assets shows the relationship between CAFA. The higher ratios of CAFA shows greater liability of the SSU.

**The relationship between CAFA can be expressed by**

$$\text{CAFA}= \frac{Current\ assets}{Fixed\ assets} \times 100\%$$

3. **<u>Cash & Bank balance to current assets (CBCA):-</u>**

The ratio of cash and bank balance to current assets shows the relationship between cash and bank balance (liquid assets) to current assets. The small ratio of its shows the sound management and vice-versa. Thus, the working capital is directly affected by it. The relationship can be expressed by:-

$$\text{CBCA}= \frac{Cash \,\&\, Bank\ balance}{Current\ assets} \times 100\%$$

4. **<u>Cash and bank balance to total assets.(CBTA):-</u>**

The ratio of cash and bank balance to total assets shows the relationship between cash and bank balance (liquid assets) to total assets. The higher ratio indicates higher liquidity and lower risk and lower ratio indicates poor liquidity and higher risk. The greater the ratio indicates the sound working capital.

**The relationship between CBTA can be expressed as:-**

$$\text{CBTA}= \frac{Cash \,\&\, Bank\ balance}{Total\ Assets} \times 100\%$$

5. **<u>Inventories to Total Assets (ITA):-</u>**

The ratio of inventories to total assets shows the relationship between inventories to total assets. On the other hand it shows the relation between how volume of inventories must be kept to how volume of total assets. The higher ratio of it shows the liberal credit policy of WC management.

**The relationship between ITA can be expressed as:-**

$$\text{ITA}= \frac{Inventory}{Total\ Assets}\times 100\%$$

6. **Receivable to total assets(RTA):-**

The ratio shows the relationship between receivables & total assets. It indicates how volume of assets should be maintained to how volume of receivable. The higher ratio of TRA indicates the liberal credit policy of the business organization about it working capital structure.

**The relationship between RTA can be expressed as:-**

$$\text{RTA}= \frac{\mathrm{Re}\,ceivables}{Total\ Assets}\times 100\%$$

7. **Receivable to current Assets (RCA):-**

The receivable to current assets shows the relationship between receivable & current assets. The higher percentage of receivable to current assets indicates the greater working capital & vice-versa.

**The relationship between RCA can be expressed as:-**

$$\text{RCA}= \frac{\text{Re}\,ceivables}{TCA}\times 100\%$$

## 8. <u>Inventories to current assets (ICA):-</u>

The relationship between inventories & current assets express the how volume of inventories should be profitable for the business organization in respect of business organization of ICA indicates liberal inventory policy & vice-versa.

**The relationship between ICA can be expressed as:-**

$$\text{ICA}= \frac{Inventory}{Current\ Assets}\times 100\%$$

# CHAPTER-IV
## Presentation and Analysis of Data

### 4.1 Introduction

The main objective of this study is to analysis the working capital management of STLC. This chapter has been organized to present the results, analyze and interpret them accordingly. The presentation and analysis of the data in this study has been done to evaluate the working capital position through the financial reports from the fiscal year 2059 to 2064.

Efforts have been made to analysis working capital management in terms of composition of current assets, turnover position, liquidity position and profitability position of STLC. The composition of current assets is analyzed by making relationship of each component of current assets with fixed assets, total assets etc. The turnover position is analyzed with the help of current assets turnover, net working capital turnover, turnover of cash, receivables and inventory. The liquidity position is analyzed with the help of gross profit margin, net profit margin, return on total assets and return working capital.

Data collected for the analysis of working capital management are presented in the tabular form and they are analyzed with the help of financial tools and techniques and statistical tools.

### 4.2 Position of current assets

Any types of business organization require fixed assets as well as current assets. Each and every business organization has financed their capital in the assets like cash, marketable securities, inventories, receivable and so on for day to day operation of business organization. Total current assets which is known as W/C as per in gross concept. Most of the organizations require some amount of W/c and this requirement differ according to the size of the organization. Therefore C/A are those assets or resources of a firm, which are either held in the form of cash or are converted in cash with in accounting period, usually a year of the business.

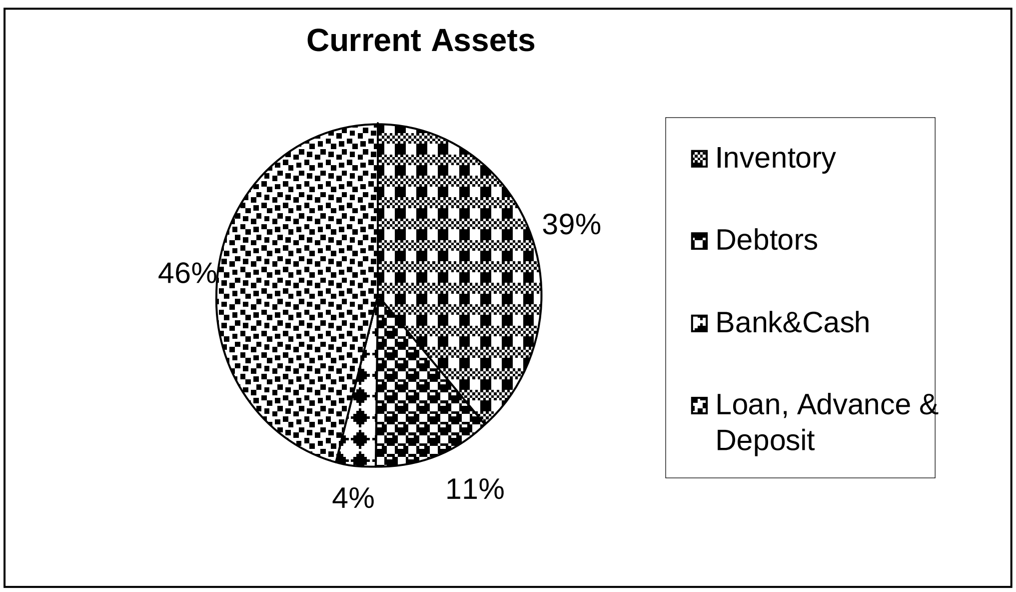
A firm needs W/C (gross) because the production, sale and cash flow are not instantaneous. The firm needs cash to purchase raw materials, and pay expenses those may not be perfect matching between cash in flow and cash cut flow. Cash may also be held to meet the future expenses. The stocks of raw materials are kept in order to ensure smooth production and to protect against the risk of non-availability of raw materials. The firms has to invest enough funds in C/A for the success of the sales activities. C/A are needed because sales do not convert into cash instantly. Earning a steady amount of profit requires successful sales activities.

Therefore it can be studied that the efficient management of C/A is an integral part of overall financial management and has to greater impact on maximization of owner's capital. In this context it is necessary to have proper analysis for current assets management therefore firstly the overall current assets are analyzed.

# Table-1
## Position of current Assets.

**Rs. in Million**

| **Particular** | **Average %** | **2059** | **2060** | **2061** | **2062** | **2063** | **2064** |
|---|---|---|---|---|---|---|---|
| Inventory<br>% | <br>38.66 | 370.72<br>33.25 | 688.13<br>40.93 | 470.67<br>30.48 | 789.89<br>45.06 | 876.58<br>44.48 | 714.44<br>37.76 |
| Debtors<br>% | <br>11.38 | 152.19<br>13.65 | 167.78<br>9.98 | 177.07<br>11.47 | 203.88<br>11.63 | 196.26<br>10 | 218.94<br>11.57 |
| Bank & Cash<br>% | <br>3.74 | 38.53<br>3.46 | 58.82<br>3.50 | 76.55<br>4.96 | 51.67<br>2.95 | 65.07<br>3.30 | 80.29<br>4.24 |
| Loan, Advance & Deposit<br>% | <br>46.23 | 553.37<br>49.64 | 766.34<br>45.59 | 819.65<br>53.09 | 707.41<br>40.36 | 832.84<br>42.26 | 878.27<br>46.42 |
| **Total** | | **1114.81** | **1681.07** | **1543.94** | **1752.86** | **1970.75** | **1891.97** |
| Indices of C/A<br>2059=100 | | 100% | 150.79% | 138.49% | 157.23% | 176.78% | 169.70% |




The above table no.1 represents the current assets position of the company. The above table shows investment pattern of the company in the current assets and their fluctuation in years. As per the table, investment in inventories and Loan & Deposit have been found as major in comparison to other current assets. Sometimes the percentage share of loan, advance and deposit is greater where as sometimes the percentage of share of inventory more the former. In this way, it can't be ignored contribution debtors and cash and Bank balance are covered share of current assets respectively.

The percentage share of all C/A indicates that there is not consistency in yearly change rather there exists a few fluctuation. It has adopted sometime increasing and sometime decreasing trend. The maximum percentage share of Loan, advance & deposit is seemed in fiscal year 2061 i.e. 53.09% and minimum percentage share is seemed in 062 i.e. 40.36%

Inventory occupy another major share in C/A. It is also no consistency trend. The percentage of share in 2062 seems maximum and in 2061 seems minimum i.e. 45.06% & 30.48% respectively and in as whole it coveres 38.66% C/A.

Sundry debtors is also in fluctuation trend. The percentage of share in 2059 seems maximum and in 2060 seems minimum i.e. 13.65% & 9.98% respectively and in as whole it coveres 11.38% C/A.

Position of cash and bank balance also is in fluctuating trend. Sometimes it increases and sometimes it decreases. Low percentage of cash chows the higher turnover of stock realization of more cash and sound liquidity of the company.

In total current assets of salt trading corporation limited is increasing trend.

## 4.3 Percentage of current Assets on Total Assets

As the requirement of the current assets depends upon the nature of the business, it is required to meet the working capital, which is required to run day to day activities. Higher percentage of current assets in total assets denotes greater liquidity position of the firm as well as lower the risk being in solvent and vice-versa. The table no. 2 given below represents the percentage of current assets to total assets.

## Table No.-2
## Current Assets to total Assets.

**Rs. in Million**

| Year | Current Assets | Total Assets | Ratio % | % Change |
|---|---|---|---|---|
| 2059 | 1114.80 | 1699.61 | 65.59 | - |
| 2060 | 1681.07 | 2282.85 | 73.63 | 8.04 |
| 2061 | 1543.93 | 2161.70 | 71.42 | (2.21) |
| 2062 | 1752.86 | 3587.77 | 48.85 | (22.57) |
| 2063 | 1884.21 | 3719.54 | 50.65 | 1.8 |
| 2064 | 1891.94 | 3638.46 | 52 | 1.35 |
| **Total :-** | **9868.81** | **17089.93** | **57.74** | |

The above table shows the percentage of current assets to total assets of STCL. The ratio represents the proportion of current assets investment to total assets investment of STCL for selected 6 years of study period. Sis year's period the above table shows that the proportion of current assets of total assets is fluctuating. In 2059 current assets volume is Rs. 1114.80 (Million). This is 65.59% of total assets. It has increased by 8.04% in the year 2060. But decreased in the year 2061, and 2062 by 2.21% and 22.57% respectively. The percentage of current assets is highest in the year 2060 which is 73.63% of total assets. This increase in mainly due to the holding of highest amount of Inventory and Loan, Advance & Deposit.

The relation between C/A and T/A are not uniform Higher level of C/A indicates good Liquidity position but it adversely effect the profitability of the company because idle money earn nothing.

## 4.4 Percentage of current Assets on Fixed Assets

This ratio shows the relationship between current assets and fixed assets. An actual proportion of current assets and fixed assets can be determined through it the lower ratio denotes slackness in trading activities and higher mechanization. On the other hand, an increase in ratio may reveal that inventories and debtors have been intensively used, increase in this ratio means increase in profit and expansion of business activities. In such situation relative size of working capital of salt trading corporation limited is analysed in the following table.

## Table No -3
## Current Assets to Fixed Assets.

Rs. in Million

| Year | Current Assets | Fixed Assets | Ratio |
|---|---|---|---|
| 2059 | 1114.80 | 445.17 | 250.42 |
| 2060 | 1681.07 | 462.13 | 363.77 |

| | | | |
|---|---|---|---|
| 2061 | 1543.93 | 465.99 | 331.32 |
| 2062 | 1752.86 | 1393.16 | 125.82 |
| 2063 | 1884.21 | 1379.61 | 136.58 |
| 2064 | 1891.94 | 1377.87 | 137.31 |
| **Total:-** | **9868.81** | **5523.93** | **-** |
| **Average:-** | **1644.80** | **920.65** | **178.65** |

From the above table we can say that there are 6 years CA & F.A., but all of them the highest CA & FA are Rs. 1891.94 (Million) & Rs. 1393. 16 (Million). Similarly the lowest CA & FA are Rs. 1114.80 (Million) & Rs. 445. 17 (Million). The above table also shows that the lowest % of CA & FA is 125. 82% in year 2062 & highest % is 363.77 in year 2060, where the average ratio is 178.65%

## 4.5 Analysis of current Assets to sales

The relationship between current assets to sales can be further presented to analysis the size of working capital. There is essential relationship between CA to sales because current assets include Cash, Bank, Receivable, marketable securities etc. Sales is depend up on cash & credit sales. If credit sales policy of STCL is high than its sales will be high. The help of STCL in a table as below can understand the relationship between CA to sales.

### Table No. - 4
### Current Assets to Sales

Rs. in Million

| Year | TCA | Sales | Ratio % |
|---|---|---|---|
| 2059 | 1114.80 | 1875.87 | 59.43 |
| 2060 | 1681.07 | 2461 | 68.31 |
| 2061 | 1543.93 | 3898.94 | 39.60 |

| | | | |
|---|---|---|---|
| 2062 | 1752.86 | 2193.94 | 79.90 |
| 2063 | 1884.21 | 1850.55 | 101.82 |
| 2064 | 1891.94 | 1916.22 | 98.73 |
| **Total:-** | **9868.81** | **14196.52** | **-** |
| **Average:-** | **1644.80** | **2366.09** | **69.52** |

The above table of CA to sales clearly shows that the lowest part of current assets is Rs. 1114.80 (Million) in the fiscal year 2059 & highest part is Rs. 1891.94 (Million) in the fiscal year 2064. Similarly, the lowest part of sales of STLC during last 6-years is Rs. 1850.55 & highest sales is Rs. 3898.94 (Million) in the fiscal years 2063 & 2061 respectively. The average current assets & average Sales are Rs. 1644.80 (Million) & Rs.2366.09 (Million) respectively. In fiscal year 2059, 2062, 2063 & 2064 the actual sales is less than its average sales Rs. 2366.09. On the other hand, the ratio of CA to sales for the fiscal year 2061 is 39.60% & the highest ratio is 10%82 for the year 2063. The average ratio of all of the 6-years is 69.52%.

## 4.6 Proportion of Inventory to Current Assets and Total Assets

Inventory is the most important element of current assets. A firm may require inventory of raw material, work in progress, finished goods and spare parts. Inventory of raw material and work in progress and spare parts are requited to ensure smooth and regular production while finished goods inventory is needed to facilitate sales. Therefore a firm should invest optional in inventory to ensure it's production and sales. Both excessive and inadequate level of inventory is harmful to the firm. The excessive level of inventories consumes the funds of the firm, which can't be used for any other purpose and thus, involve an opportunity cost. Similarly, inadequate inventory is also harmful due to the fact that is poses the change of production hold-up and failure to meet delivery commitment. Therefore, the inventory position must be optimal so that neither it causes to problem of excess inventory nor the problem of short.

The table presented below reveals the proportion of inventory on current assets and total assets and it's average position during the study period.

**Table No -5**

**Inventory to current Assets and Total Assets.**

Rs. in Million

| Year | Inventory | CA | Ratio | TA | Ratio |
|---|---|---|---|---|---|
| 2059 | 370.72 | 1114.80 | 33.25% | 1699.62 | 21.81% |
| 2060 | 688.13 | 1681.07 | 40.93% | 2282.85 | 30.14% |
| 2061 | 470.67 | 1543.93 | 30.48% | 2161.70 | 21.77% |
| 2062 | 789.89 | 1752.86 | 45.06% | 3587.77 | 22.02% |
| 2063 | 876.58 | 1884.21 | 46.52% | 2427.86 | 36.10% |
| 2064 | 714.44 | 1891.94 | 37.76% | 3638.46 | 19.64% |
| **Total:-** | **3910.43** | **9868.81** | | **15798.26** | |
| **Average:-** | **651.74** | **1644.80** | **39.62%** | **2633.04** | **24.75%** |

From the above table it is clear that the inventory to current assets and total Assets are fluctuating trend. The proportion of inventory to current assets during the fiscal year 2059 to 2064 is 33.25%, 40. 93%, 30.48%, 45.06%, 40.52% & 37.76%. In this period the average of inventory to current Assets is 39.62%. Similarly, the proportion of inventory on total Assets is 21.81%, 3014%, 21.77%, 22.02%, 36.10% & 19.64% during the F.Y. 2059 to 2064, respectively. Again average proportion of inventory to total assets is found 24.75%

## 4.7 <u>Proportion of Inventory to sales.</u>

Inventory is one of the components of current assets, which should be maintained effectively and efficiently. It has already been stated that the working capital, production and sales are correlated in general case. The production should be increased to meet higher level of sales target. To produce more raw materials will be required. The stock level of raw material requirement should be properly maintained to meet the raw material requirement for higher level of production. Hence, to fulfill this requirement the company has to increase its working capital.

Inventory turnover ratio indicates the number of times inventory is replaced during the years. It measures the relationship between sales and the inventory level. The inventory turnover ratio tests the efficiency on inventory management. It is a valuable measure of selling efficiency and inventory quality. A low inventory turnover may be due to a variety of reasons like poor merchandise, over valuation of closing stock, a large stock of un saleable goods over-buying and anticipated future increase in sales etc in the last case, low inventory turnover may be desirable in terms of its effect on sales and profits.

On the other hand, substantially higher rate of inventory turnover may disclose conservation pricing of closing inventory, inventory valuation at a point when it is unusually low, a real shortage of inventory for required sales, a contemplated on sales, etc. It is thus, worth nothing that a high inventory may not by itself be desirable.

**The proportion of inventory to sales has been presented below:-**

## Table No -6

## Proportion of Inventory to Sales:-

Rs. in Million

| Year | Inventory | Sales | Ratio |
|---|---|---|---|
| 2059 | 370.72 | 1875.87 | 19.76% |
| 2060 | 688.13 | 2461 | 27.96% |
| 2061 | 470.67 | 3898.94 | 12.07% |
| 2062 | 789.89 | 2193.94 | 36% |
| 2063 | 876.58 | 1850.55 | 47.37% |
| 2064 | 714.44 | 1916.22 | 37.28% |
| **Total:-** | **3910.43** | **14196.52** | **-** |
| **Average:-** | **651.74** | **2366.09** | **27.55%** |

The above table shows that the proportion of inventory to sales is maximum in the year 2063. The proportion of inventory to sales in this year is 47.37%. Where the sales amount is Rs. 1850.55 (Million) only but the inventory amount is Rs. 876.58 (Million). The proportion of inventory to sales is minimum in the year 2061, which is only to sales is minimum in the year 2061, which is only 12.07%, where the sales amount is Rs. 3898.94 (Million) and inventory amount is Rs. 470.67 (Million) only.

## 4.8 Cash and Bank Balance to Current Assets

Cash and Bank balance both are liquid assets of the STCL, which assures the sale increase or decrease. Cash & Bank of STCL is necessary for the incensement of business volume. The relationship between Cash & Bank to current assets is likes as "Nail & Meat".

The following table shows the ratio of cash & bank balance to current assets for 6 years.

**Table No -7**

**Cash & Bank Balance to Current Assets:**

Rs. in Million

| Year | Cash & Bank | CA | Ratio |
|---|---|---|---|
| 2059 | 38.53 | 1114.80 | 3.46% |
| 2060 | 58.82 | 1681.07 | 3.50% |
| 2061 | 76.55 | 1543.93 | 4.96% |
| 2062 | 51.68 | 1752.86 | 2.95% |
| 2063 | 65.07 | 1884.21 | 3.45% |
| 2064 | 80.29 | 1891.94 | 4.24% |
| **Total:-** | **370.94** | **9868.81** | **-** |
| **Average:-** | **61.82** | **1644.80** | **3.76%** |

The above table shows that the proportion of cash & Bank to current assets is high in 2061. The cash & Bank balance of STCL is fluctuating trend. The average Cash & Bank balance is Rs. 61.82 (Million) which is less than 2061, 2063 & 2064. And greater than 2059, 2060 & 2062.

## 4.9 Correlation Analysis

Correlation analysis deals with determining the degree of relationship between two variables. This analysis describes not only the magnitude of relationship but also it's direction. The measure of correlation, correlation coefficient summarizes in one figure, the direction and degree of correlation. Thus, correlation analysis refers to the techniques used in measuring the relationship between the variables. Correlation analysis between the different variables of STCL is measured and tested by Karl Pearson's method, popularly known as coefficient of correlation and is denoted by symbol 'r'. The value of r lies in between +1 and -1

### 4.9.1 Correlation Analysis Between Current Assets & Current Liabilities.

The following table shows the necessary values of variables, which are to be used in determining the value of correlation coefficient between current assets and current liabilities.

**Table No -8**

**Current Assets & Current Liabilities**

Rs. in Million

| Year | CA<br>X | CL<br>Y | $X^2$ | $Y^2$ | XY |
|---|---|---|---|---|---|
| 2059 | 11.15 | 2.98 | 124.32 | 8.88 | 33.23 |
| 2060 | 16.81 | 3.80 | 282.57 | 14.44 | 63.88 |
| 2061 | 15.44 | 3.57 | 238.39 | 12.74 | 55.12 |
| 2062 | 17.53 | 4.07 | 307.30 | 16.56 | 71.35 |

| | | | | | |
|---|---|---|---|---|---|
| 2063 | 18.84 | 4.88 | 354.94 | 23.81 | 91.94 |
| 2064 | 18.92 | 4.45 | 357.96 | 19.80 | 84.19 |
| | **$\sum$ X =98.69** | **$\sum$ Y =23.75** | **$\sum X^2$ =1665.48** | **$\sum Y^2$ =96.23** | **$\sum$ XY=399.71** |

Now, we calculate correlation coefficient 'r' using Karl Pearson's correlation coefficient.

$$r= \frac{N\sum XY-\sum X\sum Y}{\sqrt{N\sum X^2-(\sum X)^2}\ \sqrt{N\sum Y^2-(\sum Y)^2}}$$

$$= \frac{6\times 399.71-98.69\times 23.75}{\sqrt{6\times 1665.48-(98.69)^2}\ \sqrt{6\times 96.23-(23.75)^2}}$$

$$= \frac{54.38}{15.91\times 3.65} = \underline{0.936}$$

The correlation coefficient 'r' between current assets and current liabilities is 0.936. This reveals that these is positive and high degree of relationship between current assets & current liabilities. Thus increase / decrease in current assets results increase / decrease in current liabilities.

To test the significance of value of correlation coefficient calculated above, we calculate probable error (PE)

We know that,

$$PE = 0.6745 \times \frac{1-r^2}{\sqrt{N}}$$

$$= 0.6745 \times \frac{1-(0.936)^2}{\sqrt{6}}$$

$$= \underline{0.0341}$$

Now, 6×PE = 6×0.0341=0.2046

## 4.9.2 <u>Correlation Analysis Between Current Assets And Total Assets</u>

The following table shows the necessary values of variables, which are to be used in determining the value of correlation coefficient between current assets and total assets.

**Table No -9**
**Current Assets And Total Assets**

Rs. in Million

| Year | CA<br>X | TA<br>Y | $X^2$ | $Y^2$ | XY |
|---|---|---|---|---|---|
| 2059 | 1114.80 | 1699.62 | 1242779.04 | 2888708.14 | 1894736.37 |
| 2060 | 1681.07 | 2282.85 | 2825996.34 | 5211404.12 | 3837630.649 |
| 2061 | 1543.93 | 2161.70 | 23833719.84 | 46722946.89 | 3337513.48 |
| 2062 | 1752.86 | 3587.77 | 3072518.18 | 12872093.57 | 6288858.52 |
| 2063 | 1884.21 | 2427.86 | 3550247.32 | 5894504.18 | 4574598.09 |
| 2064 | 1891.94 | 3638.46 | 3579436.96 | 13238391.17 | 6883748.01 |
| | **$\sum$ X =9868.81** | **$\sum$ Y =15798.26** | **$\sum X^2$ =16654697.68** | **$\sum Y^2$ =44778048.07** | **$\sum$ XY =26817085.12** |

Now, we calculate correlation coefficient 'r' using Karl Pearson's correlation coefficient.

$$r = \frac{N\sum XY - \sum X \sum Y}{\sqrt{N\sum X^2 - \left(\sum X\right)^2}\ \sqrt{N\sum Y^2 - \left(\in Y\right)^2}}$$

$$= \frac{6\times 26817085.12 - 9868.81\times 15798.26}{\sqrt{6\times 16654697.68-(9868.81)^2}\times \dfrac{\sqrt{6\times 44778048.07}}{\sqrt{-(15798.26)^2}}}$$

$$= \frac{4992484.45}{1592.09\times 4368.44}$$

= 0.72

The correlation coefficient 'r' between current assets and total assets is 0.72. This reveals that there is positive and very high degree relationship between current assets and total assets. Thus increase / decrease in current assets results increase / decrease in total assets.

To test the significance of value of correlation coefficient calculated above, we calculate probable error (PE).

We know that,

$$\text{PE}= 0.6745 \times \frac{1-r^2}{\sqrt{N}}$$

$$= 0.6745 \times \frac{1-(0.72)^2}{\sqrt{6}}$$

$$= \frac{0.3248392}{\sqrt{6}} = 0.1326$$

6PE = 6×0.1326=0.7956

Here, me find that r< 6PE. Hence, the value of 'r' calculated above is not significant.

## 4.9.3 <u>Correlation Analysis Between current Assets & Sales</u>

The following table shows the necessary values of variables, which are to be used in determining the value of correlation coefficient between current assets (gross working capita) and sales.

### Table No -10

# Current Assets & Sales

Rs. in Million

| Year | CA X | Sales (Y) | $X^2$ | $Y^2$ | XY |
|---|---|---|---|---|---|
| 2059 | 11.15 | 18.76 | 124.32 | 351.94 | 209.17 |
| 2060 | 16.81 | 24.61 | 282.57 | 605.65 | 413.69 |
| 2061 | 15.44 | 38.99 | 238.39 | 1520.22 | 602 |
| 2062 | 17.53 | 21.94 | 307.30 | 481.36 | 384.60 |
| 2063 | 18.84 | 18.51 | 354.94 | 342.62 | 348.73 |
| 2064 | 18.92 | 19.16 | 357.96 | 367.10 | 362.50 |
| | **$\sum X$ =98.69** | **$\sum Y$ =141.97** | **$\sum X^2$ =1665.48** | **$\sum Y^2$ =3668.88** | **$\sum XY$ =2320.69** |

Now, we calculate correlation coefficient 'r' using Karl Pearson's correlation coefficient.

$$r= \frac{N\sum XY-\sum X\sum Y}{\sqrt{N\sum X^2-(\sum X)^2}\ \sqrt{N\sum Y^2-(\sum Y)^2}}$$

$$= \frac{6\times 2320.69-98.69\times 141.97}{\sqrt{6\times 1665.488-(98.69)^2}\ \sqrt{6\times 3668.88-(141.97)^2}}$$

$$= \frac{-86.86}{15.91\times 43.10}=-0.1267$$

= - 0.1267

The correlation coefficient 'r' between current assets and sales is -0.1267. This reveals that these in negative relationship between C.A. & Sales. Thus, increase in C.A. does not result increase in sales.

To test the significance of value of correlation coefficient calculated above, we calculated probable error (PE)

We know that,

$$PE = 0.6745 \times \frac{1-r^2}{\sqrt{N}}$$

$$= 0.6745 \times \frac{1-(-0.1267)^2}{\sqrt{6}}$$

$$= \frac{0.66367}{2.44948} = 0.271$$

Here, we find that r <PE, Hence there is no correlation between CA & Sales.

### 4.9.4 Correlation Analysis Between Inventory & Sales

The following table shows the necessary values of variables, which are to be used in determining the value of correlation coefficient between inventory & sales.

**Table No -11**

**Analysis Between Inventory & Sales**

Rs. in Million

| Year | CA<br>X | Sales<br>(Y) | $X^2$ | $Y^2$ | XY |
|---|---|---|---|---|---|
| 2059 | 3.71 | 18.76 | 13.76 | 351.94 | 69.60 |
| 2060 | 6.88 | 24.61 | 47.33 | 605.65 | 169.32 |
| 2061 | 4.71 | 38.99 | 22.18 | 1520.22 | 183.64 |
| 2062 | 7.90 | 21.94 | 62.41 | 481.36 | 173.33 |
| 2063 | 8.76 | 18.51 | 76.74 | 342.62 | 162.15 |
| 2064 | 7.14 | 19.16 | 50.98 | 367.10 | 136.80 |
| | **$\sum X$ =39.10** | **$\sum Y$ =141.97** | **$\sum X^2$ =273.40** | **$\sum Y^2$ =3668.88** | **$\sum XY$ =894.84** |

Now, we calculate correlation coefficient 'r' using Karl Pearson's correlation coefficient.

$$r = \frac{NXY - \sum X \sum Y}{\sqrt{N\sum X^2 - (\sum X)^2}\ \sqrt{N\sum Y^2 - (\sum Y)^2}}$$

$$= \frac{6 \times 894.84 - 39.10 \times 141.97}{\sqrt{6 \times 273.40 - (39.10)^2}\ \sqrt{6 \times 3668.88 - (141.97)^2}}$$

$$= \frac{-181.99}{10.56 \times 43.10}$$

$$= -0.3998$$

The correlation coefficient 'r' between Inventory & Sales is - 0.3998. This reveals that there is negative relationship between Inventory & Sales. Thus increase in inventory does not result increase in sales.

To test the significance of value of correlation coefficient calculated above, we calculate probable error. (PE)

$$PE = 0.6745 \times \frac{1 - r^2}{\sqrt{N}}$$

$$= 0.6745 \times \frac{1 - (-0.3998)^2}{\sqrt{6}}$$

$$= \frac{0.5666}{\sqrt{6}}$$

$$= 0.2313$$

Here, we find that r < PE, Hence these is no correlation between Inventory & Sales.

### 4.9.5 <u>Correlation Analysis Between Cash & Sales</u>

The following table shows the necessary values of variables, which are to be used in determining the value of correlation coefficient between Cash & Sales.

## Table No -12

## Analysis Between Cash & Sales

Rs. in Million

| Year | Cash X | Sales (Y) | XY | $X^2$ | $Y^2$ |
|---|---|---|---|---|---|
| 2059 | 0.385 | 18.76 | 7.222 | 0.148 | 351.94 |
| 2060 | 0.588 | 24.61 | 14.47 | 0.345 | 605.65 |
| 2061 | 0.765 | 38.99 | 29.83 | 0.585 | 1520.22 |
| 2062 | 0.516 | 21.94 | 11.32 | 0.266 | 481.36 |
| 2063 | 0.650 | 18.51 | 12.031 | 0.422 | 342.62 |
| 2064 | 0.803 | 19.16 | 15.38 | 0.645 | 367.10 |
| | **$\sum$ X** | **$\sum$ Y** | **$\sum$ XY** | **$\sum X^2$** | **$\sum Y^2$** |
| | **=3.707** | **=141.97** | **=90.25** | **=2.411** | **=3668.88** |

Now, we calculate correlation coefficient 'r' using Karl Pearson's correlation coefficient.

$$r = \frac{N\sum XY - \sum X \sum Y}{\sqrt{N\sum X^2 - \left(\sum X\right)^2}\ \sqrt{N\sum Y^2 - \left(\sum Y\right)^2}}$$

$$= \frac{6\times 90.25 - 3.707\times 141.97}{\sqrt{6\times 2.411 - (3.707)^2} \times \sqrt{6\times 3668.88 - (141.97)^2}}$$

$$= \frac{15.22}{0.85088\times 43.10}$$

$$= \ 0.415$$

The correlation coefficient 'r' between Cash & Sales is 0.415. This reveals that there is positive relationship between Cash & Sales. Thus increase / decrease in cash results increase / decrease in sales.

To test the significance of value of correlation coefficient calculated above, we calculate probable error (P.E.)

We know that,

$$PE = 0.6745 \times \frac{1-r^2}{\sqrt{N}}$$

$$= 0.6745 \times \frac{1-(-0.415)^2}{\sqrt{6}}$$

$$= \frac{0.5583}{2.4494}$$

$$=0.2279$$

Now, $6 \times 0.2279 = 1.3674$

Here, we find that r< 6PE. Hence, the value of r calculated above is not significant.

## 4.9.6 Correlation Analysis Between Net working Capital & Sales

The following table shows the necessary values of variables, which are to be used in determining the value of correlation coefficient between networking Capital & Sales.

### Table No -13
### Analysis Between Net working Capital & Sales

Rs. in Million

| Year | NWC (X) | Sales (Y) | $X^2$ | $Y^2$ | XY |
|---|---|---|---|---|---|
| 2059 | 8.17 | 18.76 | 66.75 | 351.94 | 153.27 |
| 2060 | 13.01 | 24.61 | 169.26 | 605.65 | 320.18 |
| 2061 | 11.87 | 38.99 | 140.90 | 1520.22 | 462.81 |
| 2062 | 13.46 | 21.94 | 181.17 | 481.36 | 295.31 |
| 2063 | 13.96 | 18.51 | 194.88 | 342.62 | 258.40 |
| 2064 | 14.47 | 19.16 | 209.38 | 367.10 | 277.25 |
| | $\sum X$ =74.94 | $\sum Y$ =141.97 | $\sum X^2$ =962.34 | $\sum Y^2$ =3668.88 | $\sum XY$ =1767.22 |

Now, we calculate correlation coefficient 'r' using Karl Pearson's correlation coefficient.

$$r = \frac{N\sum XY - \sum X \sum Y}{\sqrt{N\sum X^2 - \left(\sum X\right)^2}\ \sqrt{N\sum Y^2 - \left(\sum Y\right)^2}}$$

$$= \frac{6 \times 1767.22 - 74.94 \times 141.97}{\sqrt{6 \times 962.34 - (74.94)^2}\ \sqrt{6 \times 3668.88 - (141.97)^2}}$$

$$= \frac{-35.91}{12.57 \times 43.10}$$

$$= -0.06628$$

The correlation coefficient 'r' between NWC & sales is - 0.06628. This reveals that these is negative relationship between NWC & sales. Thus increase in NWC does not result increase in sales.

To test the significance of value of correlation coefficient calculated above, we calculate probable error (PE)

$$PE = 0.6745 \times \frac{1 - r^2}{\sqrt{N}}$$

$$= 0.6745 \times \frac{1 - (-0.06628)^2}{\sqrt{6}}$$

$$= \frac{0.6715}{2.4495}$$

$$= .2741$$

Here, we find that r<PE, Hence these is no correlation between NWC& Sales.

## 4.10. <u>Analysis of Liquidity Ratio</u>

The ability of a firm to meet it's obligation in the short-term is known as liquidity. It reflects the short-term financial strength of the organization. A firm should ensure that it does not suffer from lack of liquidity and also that it has not too much liquidity. The failure of a company to meet it's obligations due to lack of liquidity will result in bad credit ratings, loss of creditor's confidence, or even in lawsuits resulting the closure of the company. A very high degree of liquidity is also bad as idle assets earn nothing. Therefore, it is necessary to strike a proper balance between liquidity and lack of liquidity.

Here we go through current ratio and quick ratio to evaluate and analyze the liquidity of the firm.

### 4.10.1 <u>Current Ratio</u>

Current ratio is frequently used to measure the liquidity position of the firm. This ratio is calculated by dividing current assets by current liabilities. This ratio shows the availability of current assets in Rupees for every one Rupee of current liabilities. Generally, the current asset of the firm should be twice the current obligation to be technically solvent. Technically solvent means the ability of the firm to meet current obligation duly as they become matured. A relatively high value of current ratio is considered as an indication that the firm is liquid and has the ability to pay it's bill and vice-versa.

The current ratio of STCL is calculated in the table given below.

**Table No -14**

**Analysis of Current Ratio**

Rs. in Million

| Year | CA | CL | Current Ratio (CA/CL |
|---|---|---|---|
| 2059 | 114.80 | 298.19 | 3.74 |
| 2060 | 1681.07 | 380.75 | 4.42 |

| | | | |
|---|---|---|---|
| 2061 | 1543.93 | 357.47 | 4.32 |
| 2062 | 1752.86 | 406.86 | 4.30 |
| 2063 | 1884.21 | 488.12 | 3.86 |
| 2064 | 1891.94 | 445.43 | 4.25 |
| **Total** | **9868.81** | **2376.82** | **-** |
| **Average** | **1644.80** | **396.14** | **4.15** |

Current ratio is found fluctuating during the study period. It is observed highest 4.42:1 times in F.Y. 2060 and the lowest 3.74:1 times in F.Y. 2059. Average current ratio is 4.15:1. If the standard current ratio (2:1) is taken, it can be said that STCL hold strong liquidity position. In each year current ratio is higher than normal ratio 2:1 thus it is not satisfactory condition.

The current ratio of STCL reflects the higher liquidity maintained by the firm or there is lower risk of short term solvency. Excess current assets are not beneficial to the company, because, it shows the investment in unproductive assets, and working nothing.

### 4.10.2 Acid-Test Ratio/Quick Ratio

The acid test ratio or quick ratio is the relationship between quick assets and current liabilities. The ratio is measure of liquidity designed to overcome the defect of the current ratio. It is a measurement of company's ability to convert its current assets quickly into cash in order to meet its current liabilities. Higher is the ratio, better is the ability to honor current obligation.

The quick ratio is finding out by dividing quick Assets by current liabilities.

$$\text{Quick Ratio} = \frac{Quick\ Assets}{Current\ Liabilities}$$

## Table No -15

## Analysis of Quick Ratio

Rs. in Million

| Year | Quick Assets | Current Liability | Quick Ratio (QA/CL) |
|---|---|---|---|
| 2059 | 744.09 | 298.19 | 2.50 |
| 2060 | 992.94 | 380.75 | 2.61 |
| 2061 | 1073.25 | 357.47 | 3.00 |
| 2062 | 962.97 | 406.86 | 2.37 |
| 2063 | 1094.18 | 488.12 | 2.24 |
| 2064 | 1177.50 | 445.43 | 2.64 |
| **Total** | **6044.93** | **2376.82** | **-** |
| **Average** | **1007.48** | **396.14** | **2.54** |

Quick ratio is increasing trend during the study period. The average quick ratio is found to be 2.54:1 times. The quick ratios calculated above are observed higher than standard level (1:1) each year. Thus it is not Satisfactory condition.

## 4.11 Profitability Position

### I. Gross profit Margin Ratio

The difference between net sales and lost of good sold is a very significant terms, because it represents the margin of gross profit on sales. It is generally contended that the margin of gross profit should be sufficient enough to recover all operating expenses and other expenses and also to leave adequate amount as net income in relation to sales and owner's equity. The gross profit margin reflects the efficiency of operations of the company.

GPM = $\frac{G.P}{Sales} \times 100$

## Table No -16

## Analysis of Gross profit Margin

Rs. in Million

| Year | Sales | Gross profit | Ratio |
|---|---|---|---|
| 2059 | 1875.87 | 192.21 | 10.25% |
| 2060 | 2461.00 | 258.70 | 10.51 |
| 2061 | 3898.94 | 295.68 | 7.58 |
| 2062 | 2193.94 | 256.70 | 11.70 |
| 2063 | 1850.55 | 258.49 | 13.96 |
| 2064 | 1916.22 | 271.68 | 14.18 |
| **Total** | **14196.52** | **1533.46** | **-** |
| **Average** | **2366.09** | **255.57** | **10.80** |

The above table shows the gross profit margin of STCL for fiscal years 2059 to 2064, which are 10.25%, 10.51, 7.58%, 11.70%, 13.96%, & 14.18%, respectively. The corporation's average gross profit margin is 10.80%. In the last three years, the gross profit margins are higher than the average but in the first three years, these are at lower side. This shows that the company is more efficient in manufacturing each unit of it's products in last three years rather than in the first three year of the study period.

**II. <u>Net Profit Margin Ratio</u>**

Net profit is the profit, which comes after deducting operating expenses and income tax from gross profit. This ratio is the relationship on net profit after tax to sales. This ratio shows the ability of management to operate business with sufficient success. The ratio of net profit to sales essentially expresses the cost price effectiveness of the operation. The operating expenses mainly affect the net profit of the company.

Net profit ratio = $\frac{Net\ \ profit}{Net\, sales} \times 100$

## Table No -17
## Analysis of Net profit Margin

Rs. in Million

| Year | Sales | Gross profit | Ratio |
|---|---|---|---|
| 2059 | 1875.87 | 26.65 | 1.42 |
| 2060 | 2461.00 | 50.25 | 2.04 |
| 2061 | 3898.94 | 73.02 | 1.87 |
| 2062 | 2193.94 | 49.81 | 2.27 |
| 2063 | 1850.55 | 29.05 | 1.57 |
| 2064 | 1916.22 | (103.65) | -5.41 |
| **Total** | **14196.52** | **125.13** | **-** |
| **Average** | **2366.09** | **20.85** | **0.88** |

The net profit margin calculated above shows that the firm is able to earn profit in the F.Y 059 to 2063. The corporation has loss in the year 2064. Net profit margin is the highest in 2.27%. F.Y. 2062 and the lowest (5.41)% in 2064. Average net profit margin of the corparation over the study period is 0.88%. Corporation's net profit margin from F.Y. 2059 to 2063 are at satisfactory level since the margins are higher than the average in these years. But it is loss in F.Y. 2064.

# CHAPTER-V
# SUMMARY, CONCLUSION AND RECOMMENDATION

This chapter summarizes the whole study, draws the major findings, conclusion and forwards the recommendation for more efficient working capital management of trading company of STCL.

## 5.1 Summary

The term "working capital management" is a very sensitive area of financial management abundantly used by trading sectors to improve their efficiency for the betterment of their organization "A study of working capital management of trading companies with respect to Salt Trading Corporation Limited" is an exciting and challenging study. The basic objective of this study is to examine the management of working capital position of trading company.

The first chapter focuses the brief introduction of the study, manufacturing and trading views, and historical background of the selected trading company, conceptual framework of working capital and its practices in Nepal. Some questions have been raised regarding the working capital management of STCL with respect to the liquidity and financing policy and profitability position in the statement of the problem. It has also attempted to set the objectives, significance and limitation of the study.

The second chapter deals with the review of literature which include the conceptual thought, and different view of different writers, books and articles. The conceptual framework sheds light on concept and types of working capital. It attempts to explore the literature on the investment and financing policies of working capital. Some important forces which determine the working capital requirement of the firms are described in the conceptual framework. Review of literature section has attempted to review of studies done on the same topic of different organization and journals and articles.

Research Methodology followed in this study is given in the third chapter. It has included the research design. It presents the nature and sources of data collection and processing techniques and tools like statistical tools financial tools etc.

Presentation and data analysis of this study are given in the fourth chapter. For the purpose of study necessary data on working capital and other related variables have collected from secondary sources and presented in this chapter. All the data are tabulated and analyzed by applying various important financial as well as statistical tools and techniques. Now, in this chapter attempt has been made to conclude the study by pinpointing the major findings and given some suggestions for future course of action.

This study has focused on the liquidity position, profitability position and efficiency of working capital and overall working capital management policy of STCL. To accomplish these objectives of the study, different financial variables and statistical tools like mean, coefficient of correlation and probable error has been used for the meaningful interpretation of the data. The analysis found out that high amount of current assets to STCL. STCL hasn't maintained the current assets properly. Similarly, STCL could not able to maintain the operating efficiency, which indicates that companies have to improve overall working capital policy to survive in present competitive market.

## 5.2 Conclusion

In conclusion, it can be said that working capital is most important part of trading companies and its should not be neglected. Trading companies are not getting prosperous position due to their administrative negligence in day to day operation, unnecessary blockage of inventory and lack of specific working capital policy. While pinpointing to the sample companies, we can found that investment in current assets is high with respect to its total assets and net fixed assets and it has been stated after analyzing various turnover ratio that current assets is not properly utilized in the company. However, liquidity position of STCL is very strong; it shows that there are excess current assets.

Similarly, after analyzing the various profitability ratios, it can be conclude that there is operating inefficiency in sample company and overall return position of the company is also not in favorable condition because of inefficient utilization of current assets, total assets and shareholders wealth. Very short period is also not good for the company because the company can't get the credit due to the delay in paying obligation.

Although trading companies are following aggressive financing policy, which comprises higher risk and higher return and low liquidity position are not in condition of following this policy. Being unsteady in financial situation, company will be unsuccessful to take high risk and if attempts has been made to take risk cause to getting negative return. It means that risk-return trade off is not matched in Nepalese trading companies. Hence, from our overall financial analysis, it can be said the Nepalese Trading companies are not in tremendous condition. They are suffering from sickness.

The correlation coefficient of the variables selected for the statistical analysis shows that STCL has significant and positive correlation with each other except with net profit and net working capital & sales. As we know that positive correlation means both the variables are moving towards the direction. Above stated finding also helps to conclude that STCL is financially steady, and better during the study period, it seems that main sources of cash of STCL are sales of goods and loan from bank. Besides this, corporation receives miscellaneous income, like interest commission, dividend and sales of fixed assets. Corporation uses cash at huge amount for purchase of commodities paid bonus, interest, income tax, purchase of fixed assets; selling expenses etc. the corporation holds cash for transaction motives.

During the study period, average current ratio of the company is recorded 4.15 times. If the standard current ratio i.e. 2:1 is taken, it can be concluded that STCL hold strong liquidity position. In each year, current ratio is higher than the standard level. Hence, current ratio of STCL refuels the higher liquidity maintained by the company or there is low risk of short-term solvency.

## 5.3 Recommendation

Based on findings of the analysis mentioned above, the researcher has forwarded some practicable recommendation for the improvement of the working capital management of trading company.

1. STCL is following aggressive financing policy. It has poor return and turnover position. Which means that risk and return trade off is not matched in trading company. So, company better have to follow the mix financing policy between moderate and aggressive financing policy to reduce the risk and earn some profit.

2. To run day to day business activities and earn maximum profit current assets should be properly managed. Inventory is consisting largest portion in total current assets. Therefore, the huge amount of inventory kept by the company should be reduced or optimum level should be adjusted according to the sale. In this regard management is advised to improve its marketing policy and should be integrated with credit policy. The credit policy has highly influence to the sales. So, certain target would be set for credit policy.

3. Negative working capital represents the poor financing management of the company. Therefore, to eradicate this situation, suitable working capital should be

formulated and implemented. Keeping optimum size of investment in current assets and current liabilities and regular check of working capital could do it.

4. The management should give attention towards the unnecessary expenses; misuses of facilities, over staffing, heavy expenses on overheads are the major causes for high operating cost. To overcome such short comings management should be strict for use of facilities, not only these but also right number of workers in right place providing necessary training also contribute for lower administrative and operating cost.
5. Management is backbone of the company and success and failure of the company depends upon the managerial skill. So, company should allocate some money for training of financial employees to produce skilled and experienced manpower.
6. It should adopt strength credit policy especially for its staff and workers for effective credit and collection performances as low total receivable. One of the reasons of lower turnover and high collection period arise due to more advances to corporation employees.
7. Corporation should manage its cash affairs in such a way as to keep cash balances to a minimum level and to invest the surplus cash funds in profitable opportunities.

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