### **CHAPTER I**

### INTRODUCTION

## 1.1 Background

Industrialization is an important factor for achieving the basic objective of a country's economic and social progress. Industrialization not only provides goods and services but also creates employment opportunities. It facilitates an effective mobilization of resources of capital and skill, which might other wise remain unutilized. Industrial development, thus has a multiple effect on the economy (Pant, 2005 : 250).

Nepalese economy is primarily based on agriculture. About 76 percent of Nepal's population is tied up with agriculture. The contribution of this sector to the GDP is 39% (Pant, 2005). Nepalese agriculture has suffered from the lack of modernization, deterioration in fertility due to soil erosion and rapid deforestation. Agriculture is a major source of raw materials particularly for agro-based and food processing industries. Substantial portion of the country's export is also provided by agriculture. Hence, agriculture has a significant bearing on the manufacturing and export sectors of Nepal. National development depends upon economic development of a country. Similarly economic development depends upon industrial development of the country. In this way industrial development is foundation of national development. Hence, industrialization is universally accepted as a strategy of economic development as well as fundamental goals of most developing countries.

The manufacturing sector of Nepal is very small due to infancy period of industrialization. The role of manufacturing industry in the national economy is not satisfactory. The industrial sector now contributes nearly 20% of Nepal's GDP and the share of manufacturing sector in the GDP is around 10% (Pant, 2005). The manufacturing sector has to face various

problems, which have acted as constraints in growth or manufacturing industries. Mainly such problems arise due to the landlocked and undeveloped situation of the country, lack of human and financial resources, administrative infrastructure, inconvenience in transportation and communication network, shortage of capital, shortage of energy at reasonable rates, higher cost of production, lack of trained skilled manpower, small size of market, instability in government policies, manpower, technology etc.

## 1.2 Development of Manufacturing Industry in Nepal

Nepal is one of the developing countries whose economy totally depends on the agriculture sector. About 81.3% of the total population of the country is based on agriculture. The literacy rate of the Nepalese people is 41.8% and the per capita income is \$270 (Pant, 2005). According to human development report 2006, Nepal is in 138<sup>th</sup> position among the 177 countries of the world.

In this scenario, industrialization is a comparatively new phenomenon in Nepal. Role of manufacturing industries in the national economy is not satisfactory.

The growth and development of the industries in Nepal can be traced to some thirteen or fourteen hundred years ago, when Nepal was ruled by Lichhivi kings. At that period especially cottage and small industries were established and operated. Nepal is rich in the skill of making handicraft goods, wooden goods, statues and art from very beginning. After the beginning of the nineteenth century some verities of goods were imported into Nepal.

In 1935, a development agency named 'Udyog Parisad', was formed which was responsible for accelerating the development of industrial

and commercial activities within the country. Immediately in 1936 the Nepal Company Act came into force.

The history of public limited company began with Biratnagar Jute Mill Limited. The Biratnagar Jute Mills set up in 1936 marked the beginning of organized industry in the country. In the years that followed, industrial growth was accelerated. Industries like the Morang Cotton Mills (1941), the Morang Sugar Mills (1946), the Raghupati Jute Mills (1946) and the Juddha Match Factory (1946) were set up in Biratnagar in collaboration with Indian businessman. Industrial development in Nepal, however, started getting regular attention of the government under the aegis of development plans after the dawn of democracy in 1951. Several industries were established in the public sector.

The process is continued till the end of the sixth plan. As a result, Nepal witnessed the development of quite a large number of manufacturing industries in the public sector, particularly in areas like leather, sugar, paper, cigarette, brick and tiles, agricultural tools and textile. Also, the government on its own investment set up factories in sectors like cement and sugar.

The industrial development strategy of the government, however, changed after mid 1980s. The government then shifted its development strategy from state-led development to market-led open economy. As a result, many of the public sector industrial units were privatized in the early 1990s.

# 1.3 A Brief Overview of Unilever Nepal Limited

Nepal lever limited is one of the biggest manufacturing industries in Nepal. It was established in 1994 as joint venture company between Hindustan Lever Limited, India and Nepali promoters under the company act 2021. The factory's registered office is situated at

Basamadi Village Development Committee-5 of Makwanpur district, which is about six kilometer far from Hetauda Municipality and its corporate office is situated at Heritage Plaza, Kamaladi, Kathmandu. Few months ago, a notice was issued dated on 18<sup>th</sup> February, 2005 (2061/11/07) in the "Kathmandu Post" to inform all concerned about the change in the name of the company from Nepal Lever Limited, to Unilever Nepal Limited as per the approved decision taken by eleventh annual general meeting held on 13<sup>th</sup> Dec. 2004 (2061/08/28) under the special resolution. The change in name has been approved by the company register office/HMG of Nepal with effect from 9<sup>th</sup> Feb. 2005 (2061/10/27) binding Unilever Nepal Limited to bear assume all the tax and other payable liabilities towards all the movable and immovable assets existing in the company's former name.

## 1.3.1 Ownership

Unilever Nepal Limited is the first subsidiary company of Hindustan Lever Limited outside of India with holding 80% ownership and has invested Rs.73.7 million in equity. The authorized capital of the company is Rs.30,00,00,000 divided in to 30,00,000 ordinary share of Rs.100 each and paid up capital is Rs.9,20,70,000 divided in to 9,20,700 of Rs.100 each. The share holding is as follows:

Name of shareholders	No. of share	% of share
Hindustan Lever Limited	7,36,500	80%
Sibkrim Land & Industrial (Pvt.) Ltd	46,035	5%
Public shareholders	1,38,105	15%

Source: Annual Report of UNLtd.

## 1.3.2 Aim of the Company

The main objective of the company is to meet the everyday needs of people everywhere, to anticipate the aspirations of their consumers and customers and to respond creatively and competitively with branded product and services, which raise the quality of life.

The main products of the company are soap, detergents, cosmetics, creams, toothpaste and toilet soaps. Fair and lovely, Close-up, Sunsilk, Lux, Liril, Pepsodent, Wheel Rin, Red level tea, Lifeboy, Vim, Clinic plus are some of its famous products.

#### **1.4** Statement of the Problem

Working capital is a crucial capital, which is compared as life blood of the human beings for the organization. If a firm wants to maintain good financial position, it should maintain optimum level of WC. Though most of the enterprises in Nepal have well recognized the importance of proper WC management, they are still facing the problem of WC management. For any institution, to run the business in profitable manner it has to manage the WC according to the need of the business. Neither excess nor less WC is beneficial for an organization. That is why we are concentrated on the WC management of the company. There are several indicators of WC management. So, basically this study has tried to find out the issues of WC management of UNLtd. This study attempts to find out answers of the following questions.

- i) Is the composition of WC of UNLtd is appropriate?
- ii) Is the UNLtd following appropriate WC policy?
- iii) Is there the sound liquidity position of UNLtd?
- iv) What is liquidity position of UNLtd?
- v) How WC is being financed in UNLtd?

- vi) What CA and CL policy has UNLtd been following?
- vii) What is relationship between liquidity and profitability in UNLtd?

## 1.5 Objective of the Study

WC plays vital role for the success of an organization. The main objective of this study is to examine the WC management of UNLtd. The specific objectives of this study are as follows:

- 1. To analyze the liquidity, composition of WC, assets utilization and profitability position of UNLtd,
- 2. To analyze the financing pattern of WC of UNLtd,
- 3. To examine the relationship between WC & profit and WC & sales of UNLtd,
- 4. To analyze the cash conversion cycle of UNLtd,
- 5. To make suggestions about w/c management to the management of UN Ltd.

# 1.6 Significance of the Study

Proper financial management is of great importance for every business enterprises from the point of view of achieving success. In this respect working capital plays a significant role in every aspect and more so in trading enterprises whose structure and function depends upon it. Lack of the knowledge about managing working capital causes harm to the organization and finally pushes it into liquidation. A manufacturing company must have an adequate supply of raw materials to process, labour, power, and fuel etc. Then these raw materials convert into work-in-process into finished goods and the product sales in market. It also must have capability of waiting for the market and also have ability to sale in credit in this era of cutthroat competitions. Neither excess working capital nor less-working capital is favorable for the company. So it has to manage in such a way that which will be just adequate for

maintaining solvency and continuing the business. Adequate working capital brings security and confidence with numerous advantages such as better terms of goods purchased cash discount, bank loan on favourable rate of interest. There would be steady work and thereby raises the employees morale, efficiency and creation of sound good will in the company.

A manufacturing company should not have excess working capital. It is a sign of poor management. It impairs firms profitability, though it reduces risk by providing more liquidity. The idle investment in it earns nothing. In the other hand, inadequate amount of working capital can threaten the solvency of the organization if it fails to meet its current obligations. It should be realized that the working capital needs of the firm might be fluctuating with changing business activity. This may cause excess or shortage of working capital frequently. The management should be too prompt to initiate an action and correct the imbalance. Working capital deals with the matrix of current assets and current liabilities. Every manufacturing firm needs various types of assets to run the production process without any interruption. Some assets are required to meet the needs of regular production and some to meet the expenses and short-term obligation of a firm. So management has to manage working capital properly.

Unilever Nepal Limited is one of the manufacturers of soaps, detergents, cosmetics, oleaginous, saponaceous and other chemicals products. It had monopoly in market of cosmetic products, but at present it has to face the cutthroat competition because of the establishment of a huge number of cosmetic companies and introduction of liberal market economy of the country. Every organization wants to compete its competitors. In order to complete the rivals in the market, working capital management is the most vital part of any firm.

Mainly this study might be helpful for UNLtd in relation to the WC management. Therefore, this study will be of great reference:

- a. It will help other similar nature of manufacturing enterprises to determine and manage WC.
- b. It will be useful for government to formulate appropriate economic policy for their enterprise.
- c. It will help for new financial manager or new business to take decision on efficient WC management and deciding its component strategically.
- d. This study helps to evaluate impact of WC or profitability of business enterprises.

# 1.7 Limitation of the Study

The study was not free from short comings. The major ones were:

- 1. The analysis will be based upon the primary as well as secondary data which will be provided from UNLtd and the reliability and validity of the conclusions are highly depends upon the reliability and validity of these data.
- 2. This study will cover the time period of seven years from 2058/059 to 2064/065.
- 3. The major sources are the secondary data of financial statement of UNLtd, which are extracted from the progress report of UNLtd, NEPSE, CBS and other published and unpublished articles.

# 1.8 Design of the Study

The study has been divided in to five major chapters:

I. **Introduction:** The first chapter 'Introduction' deals with background, evaluation of industrial development in Nepal, brief

- overview of UNLtd, statement of problem, objectives of the study, significance of the study and limitation of the study.
- II. **Literature Review:** The second chapter 'Literature review' deals with the review of related literatures and available studies written and conducted by different experts and researchers in the field of WC.
- III. **Research Methodology:** The third chapter presents the methodology used in this study. It deals with research design, source of data, procedures employed and financial and statistical tools used for the study.
- IV. **Presentation and Analysis of Data:** The fourth chapter fulfils the objective of the study by presenting the data and analyzing them with the help of various statistical tools followed by methodology.
- V. **Summary, Findings and Recommendation:** The fifth chapter will summarize the whole study. Moreover, it draws the conclusions and forwards the recommendation for the improvement of WC management of UNLtd.

At last, an appendix has been included according to the test of relationship in between various variables of WC and a bibliography has also been included according to the literatures are reviewed.

#### **CHAPTER II**

### **REVIEW OF LITERATURE**

#### 2.1 Introduction

This chapter deals with theoretical framework of working capital and review of relevant studies. Under the theoretical framework of working capital management, it reviews the meaning and concept, classification of working capital, factors determining working capital, techniques of forecasting working capital requirement and so on.

Besides, it also presents the relevant studies carried out in the Nepalese context, including the available information of Unilever Nepal Limited.

# 2.2 Conceptual Framework

# 2.2.1 Working Capital Management

Financial management looks after two types of capital need: for fixed capital to invest in things such as buildings, plants and equipments and working capital principally to pay for stock and to cover the amount of credit extended to customers. Fixed capital, as the name implies, tends not to vary in the short term but to move up or down in jumps when major investment decisions are made. Working capital on the other hand, is much more fluid and fluctuates with level of business.

Working capital management is the important branch of the financial management which gives answer to the questions such as:

- a. How much should we invest in each category of current assets?
- b. How should we finance that investment in current assets i.e. appropriate mix of short and long term sources to finance current assets?

c. In most business, funds are deployed in assets which are in the form of cash or bank deposits or will be turned in to cash in a relatively short period as part of normal business activities.

Management of working capital usually involves management or administration; i.e. planning and controlling current assets, namely cash and marketable securities, account receivables and inventories and also the administration of current liabilities. Current assets are assets convertable in to cash with in one year. Any firm should always maintain the right cash balance so that flow of cash or funds is maintained at a desirable speed not allowing any slow downs or, stoppage. Thus, the enterprises can have a balance between liquidity and profitability.

"In short the working capital is the sources of financing current assets and it includes short as well as long term financing" (Pradhan, 1992).

Planning and controlling of working capital naturally cluster around the sound cash planning which includes setting of cash policies, process, control of cash and receivables. This implies that the cash is the major and very sensitive component of working capital.

The basic goal of WC management is to manage the current assets and current liabilities of a firm in such a way that a satisfactory level of WC is maintained, i.e. it is neither inadequate nor excessive.

Working capital management is always interested with problems which arise at the time of management of current assets and current liabilities and their interrelation. "For conventional accounting purpose current assets may be defined as those assets held for trade or production or which result from the routine operations of the business (Sharma and Gupta, 1996).

In examining the management of current assets answer will be sought to the following questions:

- a. What is the need to invest funds in current assets?
- b. How much funds should be invested in each type of current assets
- c. What should be the proportion of long term and short term funds to finance current assets?
- d. What appropriate sources of funds should be used to finance current assets?

## 2.2.2 Determinants of Working Capital

A number of factors affect different firm in different ways. Internal policies and environment changes also affect the working capital. Generally the following factors affect the working capital requirements of the firm.

- 1. **Nature and size of business:** A trading and banking companies require large working capital and industries may require relatively lower WC. If the size of the firm is bigger, then it requires more working capital. While small firm needs less WC.
- 2. **Process of manufacture :** If the production process is time consuming and complex then large WC is required as compared to the simple production process.
- 3. **Requirements of raw material:** If raw material requirements is large then large WC is required and vice-versa.
- 4. **Credit policy :** Credit policy also affects the WC of a firm. WC requirement depends on term of sales. Different term may be followed to different customers according to their credit worthiness.

If the firm follows the liberal credit policy, then it requires more WC. On the other hand, if a firm follows the stringent credit policy it requires less WC.

- 5. **Growth and expansion of a business:** If the firm is fast growing then larger amount of WC is required as compared to the business with normal or low rate of expansion.
- 6. **Operating efficiency:** Operating efficiency refers to the efficient utilization of available resources at minimum cost. A financial manager can contribute to strong working capital position through operating efficiency. If a firm has strong operating efficiency then it needs lesser amount of WC and vice-versa.
- 7. **Seasonal change :** During the busy season a business requires larger WC while during off season it requires lower WC.
- 8. **Level of tax:** The level of tax also influences WC requirements. If tax liability increases, it needs to increase the WC and vice-versa.

Price level change, profit margin, production policy, manufacturing cycle are some other factors that affect WC.

# 2.2.3 Concept of Working Capital

One of the important area of day-to-day management of firms operation is the management of working capital. This is defined as the management of all the short term assets used in daily operations. The proper management of firms working capital is very much crucial to the financial manager in this competitive scenario. The effective management of working capital is the primary means of achieving the firms goal of adequate liquidity.

Working capital management is concerned with the management of current assets, current liabilities and the interrelationship that exist between them. Current assets refer to those assets which can be converted in to cash within one year. For example: cash, inventories, account receivables marketable securities etc. Current liabilities are those liabilities which are normally payable within a year. The major current liabilities are bank overdraft, Sundry creditors, bills payable and outstanding expenses. There are two concept of working capital- gross and net.

**Gross Working Capital:** According to this concept working capital is the total of all current assets.

Working Capital = Total of all Current Assets

Gross WC is also known as total working capital. The gross WC management analyzes the optimize investment in current assets and investment in current assets should be just adequate, not more not less, to the needs of the business firm. Another aspect of gross working capital points to the need of arranging funds to finance current assets.

Whenever a need for WC funds arises due to the increasing level of business activity, financing arrangement should be made quickly. Similarly, if suddenly, some surplus funds arise they should not be allowed to remain idle, but should be invested in short term securities. Thus, the financial manager should have a knowledge of sources of WC funds as well as investment avenues where idle funds may be temporarily invested.

**Net Working Capital:** According to this concept working capital is the difference between current asset and current liabilities.

Net Working Capital = Current Assets – Current Liabilities

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Net working capital is a qualitative concept. It indicates the liquidity position of the firm and suggests the extent to which working capital needs may be financed by permanent source of funds.

Net working capital can be positive or negative. When the current assets exceed the current liabilities, the firm has positive net working capital. When current assets are less than current liabilities, the firm has negative net working capital.

This concept is not very useful for comparing the performance of different firms as a measure of liquidity, but it is quite useful for internal control. This concept helps to compare the liquidity of the same firm over a time. Net working capital concept also covers the question of judicious mix of long term and short term funds for financing current assets. For every firm, there is a minimum amount of net working capital which is permanent. Therefore, a portion of the working capital should be financed with the permanent sources of funds such as equity share capital, debenture, long term debt. etc.

In summary, it may be emphasized that both gross and net concepts of WC are equally important for the efficient management of WC. There is no precise way to determine the exact amount of gross net WC for any firm.

# 2.2.4 Types of Working Capital

Sources of finance or working capital must be decided on the basis of period for which the fund is required. For this purpose, working capital can be classified in to two groups. Those two types of WC are necessary for continuous production and sales without any interruptions.

## **Permanent Working Capital**

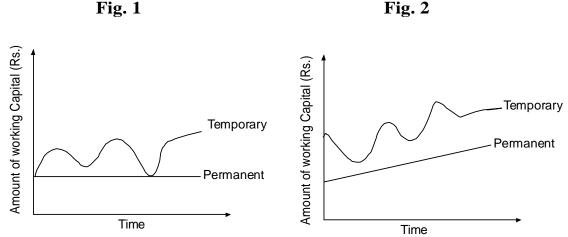
The amount of working capital required for the business to maintain a minimum level of current assets for the whole period is called permanent WC. The nature of this capital is similar to the capital invested in the fixed assets. Both these capitals can't be withdrawn from the business. Financing of this WC by using short term sources needs to renew the loan repeatedly. If the supplier of fund disagrees to renew the loan, firm has to go for fresh loan to repay the existing short term debt.

A manufacturing concern can't operate regular production and sales functions in the absence of this portion of working capital. Therefore the manufacturing concern holds certain minimum amount of working capital to insure uninterrupted production and sales functions. This portion of working capital is directly related to the firms expansion of operation capacity.

### **Variable Working Capital**

Variable working capital represents that portion of working capital which is required over permanent working capital. In the other words, this represents additional assets required at certain times during the year.

In most business the requirement of working capital may be high during a particular seasons and it comes down during other periods. This additional portion of working capital which is required during peak business season is known as temporary or variable or seasonal working capital. Variable working capital is required during peak season only. This portion of WC can be withdrawn from the business after end of such season. Fig. 1 and 2 shows clearly about this portion of working capital.



Source: I.M. Pandey, Financial Management, Eighth Edition, Page. 815.

## 2.2.5 Working Capital Policy

A firm's net working capital position is not only important as an index of liquidity but it is also used as a measure of the firm's risk. Risk, in this regard, means chances of the firm being unable to meet its obligations on due date. Working capital management involves deciding upon the amount and composition of current assets and how to finance these assets.

These decisions involve trade off between risk and profitability. The greater the relative proportion of liquid assets, the lesser will be the profitability as well as the risk.

Again the profits of the firm are likely to be less. Resolution of the trade off between risk and profitability with respect to these decisions depends upon the risk performance of management.

Working capital policy refers to the firm's basic policies regarding target level of each category of current assets and how current assets will be financed. So first of all, the firm has to determine how much funds should be invested in WC in gross concept. Every firm can adopt different financing policy according to the financial managers attitude towards the risk return trade off. One of the most important decision of

financial manager is how much current liabilities should be used to finance current assets. Every firm has to find out the different sources of funds for WC.

#### 2.2.5.1 Current Assets Investment Policy

Current assets investment policy refers to the policy regarding the total amount of current assets to be carried to support the given level of sales. There are three alternative current assets investment policies. Fat cat, lean and mean and moderate.

### a) Fat Cat Policy

This is known as relaxed current assets investment policy. In this policy, the firm holds relatively large amount of cash, marketable securities, inventory and receivable to support the given level of sales. This policy creates longer inventory and cash conversion cycle. It also creates the longer receivable collection period due to the liberal credit policy. Thus this policy provides the lowest expected return on investment.

### b) Lean and Mean Policy

In lean and mean policy, a firm holds the minimum amount of cash, marketable securities, inventory and receivable to support the given level of sales. This policy tends to reduce the inventory and receivable conversion cycle. Under this policy firm allows a fight credit policy and bears the risk of losing sales.

#### c) Moderate Policy

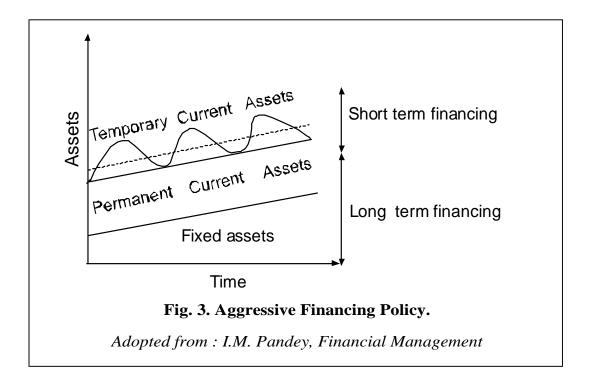
In moderate policy, a firm holds the amount of current assets in between the relaxed and restrictive policies. Both risk and return are moderate in this policy.

## 2.2.5.2 Current Assets Financing Policy

Working capital policy refers to the firm's basic policies regarding target levels for each category of current assets and how current assets will be financed. There are three working capital policies regarding the total amount of current assets carried. They are as follows:

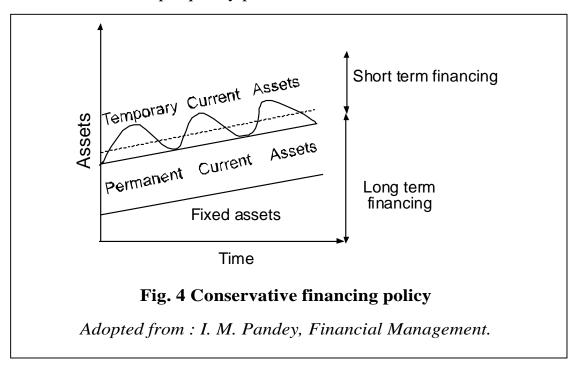
#### a. Aggressive Policy

A firm may be aggressive in financing its assets. An aggressive policy uses more short term-debt and loss long-term debt for financing current assets. Under an aggressive policy, the firm finances a part of its permanent current assets with short term financing. Some extremely aggressive firms may even finance a part of their fixed assets with short term financing. The aggressive financing is illustrated in fig. 3



### b. Conservative Policy

The less risky approach refers to financing all the assets by long term funds. Here the short term requirements are financed with long term fund, which would necessitate the payment of interest for the use of funds when they are not needed. Under this policy the firm finances its permanent assets and also a part of temporary current assets with long term financing. Under this policy the firm has less risk of facing the problem of shortage of funds. When the firm has no temporary current assets, the long term funds released can be invested in marketable securities to build up liquidity position of the firm.

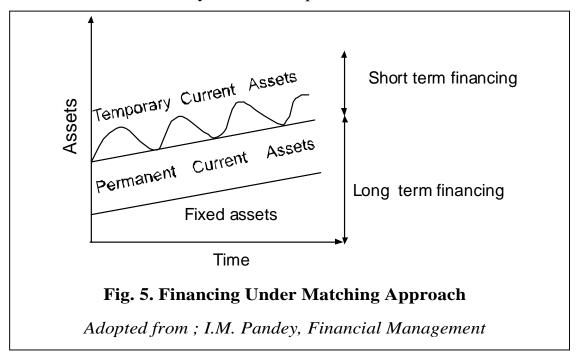


#### c. Matching Approach/Policy

This approach is also known as average or hedging approach. In this approach, long term financing sources are used to finance fixed assets and permanent current assets and short term financing sources are used to finance temporary or current assets. In other words, expected life of assets are matched with expected life of the sources of the funds raised to finance assets, i.e. maturity period of both assets and source of finance should be the same. If short term financing is used to finance long term assets, then it will be inconvenient and costly because arrangement of new short term financing should be made on a continuing basis. Similarly, when short term assets are financed with

long term fund, then its cost also increase because funds will not be utilized in full extent. Thus, we can say in this approach, we have exact match between life of assets and life of funds to finance the assets.

However, it should be realized that exact matching is not possible because of the uncertainty about the expected life of assets.



## 2.2.6 Need for Working Capital

Most of firms want to maximize the wealth of shareholders. The firm should earn sufficient return from its operation. The extent to which profit can be earned naturally depends upon the magnitude of sales among the other things. For constant operation of business, every firm needs to hold the working capital components cash receivable, inventory etc. Therefore every firm needs working capital to meet the following motives.

#### a. The Transaction Motive

According to transaction motive a firm holds cash and inventories to facilitate smooth production and sales operation in regular. Thus, the firms need the working capital to meet the transaction motive.

#### b. The Precautionary Motive

Precautionary motive is the need to hold cash and inventories to guard against the risk of unpredictable change in demand and supply forces and other factors such as strike, failure of important customer, unexpected slow down in collection of account receivable cancellation of some order for goods and some other unexpected emergency. Thus the firm needs the working capital to meet any contingencies in future.

#### c. The Speculative Motive

Speculative motive refers to the desire of a firm to take advantages of following opportunities:

- a. Opportunities of profit making investment,
- b. An opportunity of purchasing raw materials at a reduced price on payment of immediate cash,
- c. To speculate on interest rate and
- d. To make purchase at favorable price etc. Thus the firms need the
   WC to meet the speculative motive.

# 2.2.7 Importance of Working Capital

Working capital is important for these reasons:

- a. A financial manager of the firm devotes his most of the time on day to day internal operation. The main function under internal operation deals with current assets and current liabilities. Therefore working capital management is an important element in business.
- b. The relation between sales and the need to invest in current assets is close and direct. When there is change in sales, some items of the firm are also changed spontaneously which are inventory, account receivable etc. So along with change in sales, current assets also

need to manage accordingly. Thus the financial manager must stay alert about the working capital management.

- c. Working capital management is particularly important for small firms because they can acquire the fixed assets by renting and leasing but they can't avoid investment in current assets or they have to invest a large amount of their capital in current assets. So, small firms consider working capital management as an important aspect in business.
- d. Generally in a f36-irm, current assets represent more than half of its total assets. By nature, current assets are more volatile. Due to high investment in current assets and volatile nature, the financial manager of the firm should pay careful attention on working capital management.

# 2.2.8 Financing of Working Capital

Every manufacturing concern or industry requires additional assets whether they are in stable or growing conditions. When the firm wants to generate sustained profit, normally it requires fixed capital as well as WC. Additional portion of WC is approximately dominated by the same rate as sales. But this portion of capital requirement depends upon the nature of the firm (Pandey, 2000: 823). Therefore the most important function of financial manager is to determine the level of WC and to decide how it is financed. Financing of any assets is concerned with two major factors: cost and risk. Therefore, the financial manager must determine an appropriate financing mix, or decide how current liabilities should be used to finance current assets. However, a number of financing mixes are available to the financial manager. He can resort generally three kinds of financing.

## 1. Long term financing

- 2. Short term financing
- 3. Spontaneous financing

### 1. Long term financing

Long term financing has high liquidity and low profitability. Ordinary share, debenture, preference share, retained earning and long term debt from financial institution are the major sources of long term financing.

## 2. Short term financing

A firm must arrange its short term credit in advance. The sources of short-term financing of WC are trade credit and bank borrowing.

**Trade credit:** Trade credit refers to the credit that a customer gets from suppliers of goods in a normal course of business. If the buying firm does not pay cash immediately for the purchase is called trade credit. It is mostly an informal arrangement and is granted on an open account basis. Another form of trade credit is bills payable. It depends upon the term of trade credit (Van Horn, 1996 : 248).

**Bank Credit :** Bank credit is the primary institutional source of WC financing. For the purpose of bank credit, amount of WC requirement has to be estimated by the borrowers and banks are approached with the necessary supporting data. After availability of this data, bank determines the maximum credit based on the margin requirement of security. The types of loan provided by commercial banks are loan arrangement, overdraft arrangement, commercial papers etc.

### 3. Spontaneous Financing

Spontaneous financing arises from the normal operation of the firm. The two major sources of such financing are trade credit and accruals. Whether trade credit is free of cost or not actually depends upon the terms of trade credit. Financial manager of the firm would like to finance its WC with spontaneous sources as much as possible. In practical aspect, the real

choice of current assets financing is either short term or long term sources. Thus, the financial manager concentrates his power in short term versus long term financing. Hence, the financing of WC depends upon the WC policy which is perfectly dominated by the management attitude towards the risk-return (Pradhan, 1992 : 153).

## 2.3 Review of Related Studies

#### 2.3.1 Review of Books

The concept of WC is used in two ways. Gross WC refers to the firm's investment in current assets. Net WC means the difference between CAs & CLs and therefore represent that portion of CAs which the firms has to finance either from long term funds or bank borrowing. A firm is required to invest in CAs for a smooth, uninterrupted production and sale. Manufacturing cycle is the major determinants of WC requirements. The firm's decision about the level of investment in CAs involves a trade off between risk and return. The financing of CAs also involves a trade off between risk and return (Pandey, 1998).

A book has written by Radhe S. Pradhan named "Financial management." In the word of Pradhan "An organization needs not only the fixed assets but also the current assets. WC is nothing but the capital needed to run day-to-day operation of a business such as wages, freight, raw materials, etc. If all these expenses which are to be incurred on short term or day-to-day basis, are put together, it is called WC. He further explained that there are two concept of WC: gross WC and net WC. Various factors affect the WC requirements in an organization and there are three alternative financing policies for current assets: moderate, aggressive & conservative (Pradhan, 2004).

Firms need cash to pay for all their day to day activities. They have to pay wages, pay for the raw materials, pay bills and so on. The money

available to them to do this is known as the firm's WC. WC management is the management of CAs & CLs of the firm. Cash, marketable securities, sundry debtors are some current assets and bank overdraft, sundry creditors, bills payable are some current liabilities. There are two types of WC: permanent WC and variable WC. WC of a firm are determined and influenced by various factors and is very important for an organization (Adhikari, Bhattarai & Thapa, 2005).

WC management is the management of CAs & CLs of the firm, which must be considered as a total package because of the many links between CAs and CLs. WC equals CAs minus CLs. WC is therefore the portion of the firm's CAs that is financed with long term debt, preferred stock & equity.

The matching principle states that short term needs for money should be financed with short term financing sources and that long term needs for money should be financed with long term sources. If the matching principle is followed, temporary investments in CAs should be financed with CLs, such as trade credit, commercial paper and short term bank loans. WC requirements are important parts of capital budgeting decisions and should be included in the evaluation of each project (Schall & Haley, 1991).

#### 2.3.2 Review of Articles

This section is focused to review journals/articles and by different management expert relating to working capital management.

In this regards, an observation of twelve selected PEs have been conducted by Manohar K. Shrestha. In this article he has described the conceptual setting, sources of working capital and types of WC. From the analysis he found that the liquidity position of the selected PEs differs widely due to the differences is their nature of business. These

were also above normal acid-test ratio. While analyzing the turnover of those selected PEs showed wide deviation. Based on the sales volume, four out of seven PEs had normal inventory turnover, the other three had not been satisfactorily maintained and in some of them inventory had exceeded sales. The collection period relating to the selected PEs, exhibited market difference ranging from 32 days to 755 days, the profitability position was analyzed through return on net working capital was positive for 8 PEs, negative for 2 PEs, and rest 2 had not any return. Since they were in establishment phase.

During the analysis period, some problems like the lack of farsighted liquidity adjustment strategy in most of the PEs, no guiding criteria to ascertain the satisfactory maintenance of acid-test ratio and WC needs, large blocking of capital in inventories and low capacity utilization were observed. All these were due to the inefficient management of WC in those PEs (Shrestha, 1995).

Another article published by K. Acharya was relating to working capital management. He has described the two major problems, operational problems and organizational problems regarding the working capital management in Nepalese public enterprises. The operational problems which he found are increase of current liabilities than current assets, not allowing the current ratio 2:1 and slow turn over of inventory. Similarly change in WC in relation to fixed capital had very low impacts over the profitability, thin transmutation of capital employed to sales, absence of apathetic management information system, break even analysis, funds flow analysis and ratio analysis were ineffective for performance evaluation. Finally monitoring of the proper functioning of WC management has never been considered a managerial job.

In the second part, he has listed the organizational problem in the public enterprises. In most of the public enterprises there is lack of regular internal audit system as well as evaluation of financial results. Similarly, very far public enterprises have been able to present their capital requirement. Functioning of finance department is not satisfactory and some public enterprises are even facing the underutilization of capacity (Acharya; ISDOC, Vol. 10, 1985).

Pradhan and Koirala had jointly conducted a study on "Working Capital Management in Nepalese Corporation." They had focused on evaluation of WC of selected manufacturing and non-manufacturing corporations of Nepal. They had sampled five manufacturing and six non-manufacturing public companies. This study was concentrated in the size of investment in current assets, significance of current assets management. The major findings of the study were as follows:

- Investment on total assets had declined over a period of time in manufacturing corporations. However, the manufacturing corporations had consistently more investment in cash and receivable as compared to non-manufacturing corporation.
- Inventory management was of great significance in manufacturing corporations and the management of cash receivable was of great significance in non-manufacturing corporations.
- Management of WC was more difficult than that of fixed capital and the major motive for holding cash in Nepalese corporation was to provide a reserve for routine net outflow of cash to keep on the production process (Pradhan & Koirala, 1982).
- R.S. Pradhan has studied on "The Demand of WC by Nepalese Enterprises." In his studies he has selected 9 manufacturing public corporations with 12 years data from 1973 1984 and adopted the regression equation for analysis. The conclusion of this study is:

The earlier studies concerning the demand for cash and inventories by business firms didn't report unanimous findings. A lot of controversies exist with respect to the presence of economics of scale, role of capital and capacity utilization rates and the speed with which actual cash and inventories are adjusted to describe cash and inventories respectively. The pooled regression result shows the presence of economics of scale with respect to the demand for WC and its various component. The regression result suggests strongly that the demand for WC & its components are functions of both sales and their capital costs. The estimated results shows that the inclusion of capacity utilization variable in the model seems to have contributed to the demand functions of cash and net WC only. The effect of capacity utilization on the demand for inventories, receivables and gross WC is doubtful (Pradhan, 1988).

An article was published by New Zealand government relating to WC management. According to this article, good management of WC is part of good financial management. Effective use of WC will contribute to the operational efficiency of a department; optimum use will help to generate maximum return. Ratio analysis can be used to identity WC areas which requires closer management. Various techniques and strategies are available for managing specific WC items. Debtors, creditors, cash and in some cases inventories are the areas most likely to be relevant to departments (New Zealand government report 2007).

Another article was published by Steve Bush on "New WC, Church Financing and Commercial Loan Sites." According to Steve Bush, founder and chief executive officer for AEX commercial financing, "Business loan needs have become much more specialized. It has become obvious that the unique commercial financing obstacles involved with commercial mortgages, WC management and church loan financing can be dealt with more effectively by explaining each area

individually. By establishing three different websites for these key business financing components, AEX will both eliminate needless confusion and also zero in on the distinct topics impacting each of these vital business loan segments" (Bush, 2007).

#### 2.3.3 Review of Thesis

A number of studies have been done by students of MBS, relating to working capital management in Nepal. This section is focused to review some of those dissertations.

Dhurba Nath Yogi has studied on "Working capital management of Nepal Level Limited." He has analyzed the financial statement of the company for five years (2051/52 to 2055/56). This thesis is conducted through basically secondary data. He has used ratio analysis, coefficient correlation, and hypothesis for analysis. He has found that all component of current assets are highly fluctuating during the study period. And the component of current liabilities are not related to each other. It means that Nepal Level Limited has not taken seriously about the sources of financing. He has also found that some of fixed assets is also financed by long term financing rather than by short term funds. The analysis shows that the liquidity position of the company is fluctuating year by year. The proportion of CA is affected by the sales. In other words, the sales is affected the management of CA. The component of current assets and current liabilities are fluctuating nature. He has also found that the insignificant relationship between liquidity and profitability. Company has still followed conservative WC management policy, which reduces the risk of the company (Yogi, 2000).

Bhakti Devi Gurung has set main objectives of her study to examine the WC position of Gandaki Noodles Pvt. Ltd. and studied the relationship between sales and different variables of company. In this study she has analyzed 5 years financial statement of the WC to achieve the objective. In that study she has found that the proportion of cash and bank, sundry debtors, inventories, and other current assets to current assets on an average 4.76%, 10.34%, 54.31%, and 31.77% respectively which shows that inventory holds the largest portion. Her study clearly shows that the investment in CAs was high with respect to its total assets and net fixed assets. Fluctuation in the position of receivables was affected by the fluctuating sales volume of the company. From that study it was also found that in the total financing more amount was financed from long term source of fund i.e. general reserve, and less amount was financed from short term source of fund i.e. from bank borrowing. In short the company was followed conservative WC policy.

At last she has concluded that there was positive correlation between inventory and current assets and receivable and current assets. WC was the life blood of sales. The WC should be arranged in such a way that it should generate more turnover (Gurung, 2001).

Baburam Gimire has carried out "WC management of selected manufacturing companies listed in Nepal Stock Exchange Limited." He has used data from 1997-2001. He has selected Nepal Lever Limited, Bottler Nepal (Balaju) (BNK), Bottler Nepal (Terai) (BNT), Arun Vanaspati Udghyog (AVU), Joyti Spinning Mills (JSM), Raghupati Jute Mills (RJM), Nepal Lube Oil (NL). He has used ratio analysis, WC approach, cash conversion cycle, du-pont analysis, correlation coefficient and simple regression analysis as per tools. The findings of this study were as follows:

a. Risk and return trade off is not matched in Nepalese manufacturing companies.

- b. Most of the selected manufacturing companies have followed a moderate WC policy.
- c. NLO, BNK, BNT, RJM, and NL have followed the moderate approach where as other two companies such as JSM, and AVU have followed aggressive WC policy.
- d. Out of seven companies only two companies have higher conversion period than average. NLO has highest and JSM has lowest conversion period.
- e. He has found that Nepalese manufacturing company has inefficiency, missing WC policy, less encouraging attitude towards the working capital, high level cost, excessive borrowing, weak liquidity position, managerial ineffective-ness and high conversion cycle.
- f. He has also found that Nepalese manufacturing companies in present context are facing certain policy issues, like deficient financial planning, neglect of WC management, deviation between liquidity and turnover etc (Gimire, 2003).

A research work entitled "A study on working capital management of Nepalese manufacturing companies" had been carried out by **Bishwa Raj Adhikari**. He conducted his study on the basis of different years data. The main objectives of his study were to appraise the WC management of manufacturing companies, to analyze the liquidity composition of WC, assets utilization and profitability composition of selected manufacturing companies. During his study he had basically used secondary data. Both quantitative and qualitative methods had been used by him for analysis. He had derived following major findings from his study.

- Most of the selected manufacturing companies have followed a conservative WC policy.
- Nepalese manufacturing companies are suffering form loss or they are in loss position but not so much.
- Findings on cash conversion cycle

The inventory conversion period of Nepalese manufacturing companies is 77 days. The overall receivable conversion period of Nepalese manufacturing companies is 28 days. The payable deferral period is only 36 days and cash conversion cycle is 69 days during his study period.

The correlation coefficient between CAs and CLs (0.78), receivables and sales (0.764), inventory and sales (0.68), net WC and sales (0.87), net profit and sales (0.54) and current assets and sales (0.94) are highly correlated to each other (Adhikari, 2004).

Anil Kumar Agrawal, a student of management finished his research study about working capital management. That study was conducted on "Working Capital Management of Cigarette Industry in Nepal with Special Reference to Janakpur Cigarette Factory." He has used data from 2050/051 to 2059/060. The main objectives of his study were to evaluate the performance of management of WC of JCF, to measure the efficiency of management in utilization of inventory, appraising the efficiency of management in utilization of account receivable, measuring the efficiency of management in the use of cash and evaluating the financial pattern of WC of the factory.

The major findings of his study were as follows:

Short term financial position of the factory is sound from the creditors point of view.

- The factory's liquid financial position is weak from the creditors points of view.
- Inventory of the factory has not been managed efficiently.
- Receivable, cash has not been managed efficiently.
- Working capital turnover ratio of the factory marked a fluctuating trend during the period of analysis.
- The current assets of the factory marked an irregular tendency while the current liabilities and net WC recorded mixed trend.
- On the whole, the performance of working capital management is not satisfactory (Agrawal, 2005).

"A study on WC management of pharmaceutical industry of Nepal with special reference Royal Drugs Ltd. (RDL)" was conducted by **Bishwas Raj Aryal** a student of management. The main objective of that study was to find out WC management system and its effect on profitability of the company by using nine years data. The major findings of the study are described in the next paragraph.

WC is more difficult to manage than that of fixed capital. 65% of respondents of RDL said that WC was more difficult to manage than fixed capital and only 35% were in favours of that fixed capital management is more difficult to manage than WC. So far as the importance of current assets management, 82% of respondents of RDL have said that a lot of time has taken to it. With respect to receivable management the major factors affecting the larger investment in receivable is found to be liberal credit policy. The major reason for holding inventories is to facilitate smooth operation of production and sales. Majority of respondents of RDL performed for it not for to take advantage of price increase (Aryal, 2006).

# 2.4 Research Gap

Many research studies have been conducted by the different students, experts and researchers about WC management but they have not focused on the impact on profitability. Present researcher has focused on impact of WC on profitability of WC. On the another side, many previous studies were conducted with the help of old data but the present researcher has used new data. Therefore, this study will be fruitful to those interested persons, parties, scholars, professors and businessmen for academic as well as policy perspectives.

#### **CHAPTER III**

### RESEARCH METHODOLOGY

#### 3.1 Introduction

Research methodology describes the methods and process applied in entire study. Research methodology refers to the various sequential steps to adopt by a researcher in studying a problem with certain objectives in view. It is necessary for the researcher to know not only the research methods/techniques but also the methodology. Researchers should not only aware about the certain financial and statistical tools but also need to know whether these tools are appropriate or not to be used and the reason behind using these tools also should be known. As this chapter describes the research methodology or research strategy, it contains research design, population and sample, sources of data, data collection procedure, data processing procedure and analysis tools.

# 3.2 Research Design

An architect prepares a blue print before he/she approves a construction. An army prepares a strategy before lunching an attack. An artist makes a design before he/she executes his/her ideas. So also the researcher makes a plan of his/her study before undertaking the research work (Joshi, 2001). A research design is the specification of methods and procedure for acquiring the information needed. It is the overall operational pattern of frame work of the project that stipulates what information is to be collected from which source by what procedure. If it is a good design, it will ensure that the information obtained is relevant to the research questions and it will be collected by objective and economical procedures.

Research design is highlighted for ascertaining the basic objective of the study. Research design includes definite procedure and techniques which guide to sufficient way for analyzing and evaluating the study. As already mentioned, the main objective of the study is to examine the working capital management of Unilever Nepal Limited, so the research design of this study is based on descriptive and analytical study. That means to conduct the study, descriptive and analytical research design is to be adopted. Attempts have been to describe and explore the composition of WC, turnover position, liquidity position, and profitability position of Unilever Nepal Limited for the period of seven years ranging from 2058/2059 to 2064/2065.

# 3.3 Population and Sample

There are altogether 29 manufacturing and processing companies listed in NEPSE, which have been considered as total population. Out of 29 manufacturing companies Unilever Nepal Limited, is selected as sample, which is only one manufacturing company under group 'A' classified by NEPSE.

# 3.4 Nature and Sources of Data

To achieve objective of the study, the secondary data has been used. The main secondary sources of data are annual reports and audited financial statements (P/L a/c and balance sheet) of the company submitted to NEPSE.

The secondary data and information have been collected from the various publications and the data available in the record of Unilever Nepal Limited. The major sources of secondary data are as follows:

- Various documents (i.e. accounting and financial reports) of Unilever Nepal Ltd.
- Different bulletin and annual reports of UNLtd.

- Related act and regulation published by government and the company.
- Statistical Year Book of Nepal (CBS), various institution's annual reports, related government and non-government publications about WC management, books, journals articles, various research studies, web site of the company and SEBON.

## 3.5 Collection of Data

Financial data required to achieve the set objective of the study have been directly extracted from the balance sheet and income statement of the company. In order to collect the supportive data, a detail review of the related document has been carried on and qualitative information has been collected through interview with the officials of UNLtd.

# 3.6 Data Processing Procedure

This study is mainly based on secondary data. The collected financial statements and necessary data have been tabulated as per the need of this study. In order to process the data, financial statement and other available information have been reviewed. These data were grouped in different tables and charts according to their nature.

# 3.7 Methods of Analysis of Data

The main purpose of analyzing the data is to change it from an unprocessed form to an understandable presentation. The analysis of data consists of organizing, tabulating and performing statistical analysis.

Percentage analysis has been done to examine the share of various components of current assets in the total current assets. Further, the growth of each type of current assets and current liabilities has been calculated and compared with the growth in sales.

# 3.7.1 Ratio Analysis

Ratio analysis is main tool used for financial analysis in the study. Various ratios are employed to examine the following aspects of Unilever Nepal Ltd.

- 3.7.1.1 Composition of WC
- 3.7.1.2 Liquidity position
- 3.7.1.3 Turnover position
- 3.7.1.4 Profitability position
- 3.7.1.5 Cash conversation cycle

The ratios used to analyze the above aspects are described below.

## 3.7.1.1 Composition of WC

The composition of WC has been studied by analyzing following ratios.

# a) Composition of Current Assets

To operate the business, different kinds of assets are needed. For day-to-day business operations different types of current assets are required. The current assets are composed of inventories receivables, cash and bank balance, prepaid and advance.

# i) Proportion of inventory to total current assets

This ratio implies the percentage of total CAs in the form of inventories. It is calculated as:

$$INV/TCA = \frac{Inventory}{Total Current Assets} \times 100\%$$

The increase in the ratio indicates that company is adopting moderate inventory policy. If the ratio is increased it means greater part is

occupied by inventory. If the ratio is small, the firm will have greater volume of WC.

## ii) Proportion of receivables to total current assets

This ratio shows the share of receivable on total current assets. It is calculated as:

$$R/TCA = \frac{Receivables}{Total Current Assets} \times 100$$

An increase in the ratio shows that the management of receivables has an important bearing on the performance of the enterprise. Higher ratio indicates the liberal credit policy of enterprise.

## iii) Proportion of cash and bank balance to total CA

This ratio shows the ratio of cash and bank balance in total current assets. It is calculated as:

$$CB/TCA = \frac{Cash \& Bank Balance}{Total Current Assets} \times 100$$

High ratio indicates the poor management of WC.

# iv) Proportion of pre-paid and advance to total CA

This ratio shows the relationship between the total current assets and prepaid and advances. It can be calculated as:

$$P\&A/TCA = \frac{Prepaid \ and \ Advance}{Total \ Current \ Assets} \times 100$$

# v) Proportion of total current assets to fixed assets

This ratio shows the relationship between the total current assets and fixed assets. It can be calculated as:

$$CA/FA = \frac{Total \ Current \ Assets}{Fixed \ Assets} \times 100$$

# vi) Proportion of total current assets to sales

The company invests in total CA to support the given level of sales. This ratio is calculated as follows:

$$CA/Sales = \frac{Total \ Current \ Assets}{Net \ Sales} \times 100$$

# b) Composition of Current Liabilities

All obligations maturing with in a year are current liabilities. Thus it is composed by trade and other payable, short term loans and provision.

# i) Proportion of short-term loan to total current liabilities

Short term loan is interest bearing loan. The ratio of short term loan to total current liabilities is calculated as:

$$STL/TCL = \frac{Short term loan}{Total CL} \times 100$$

# ii) Proportion of trade and other payable to TCL

Trade and other payable is not interest bearing loan. The ratio of trade and other payable indicates the percentage of company's total CLs financed by trade & other payable. It is calculated as:

$$T\&P/TCL = \frac{Trade \& Other payable}{Total CL} \times 100$$

# iii) Proportion of provision to total CL

Provision is also non-interest bearing. The ratio is calculated as follows:

$$Pro/TCL = \frac{Provisions}{TCL} \times 100$$

## 3.7.1.2 The Liquidity Position

The liquidity position of Unilever Nepal Limited is computed by analyzing current ratio and quick ratio:

## a) Current Ratio (CR)

It is the basic yardstick of measure in the solvency and liquidity position of the firm. It indicates the ability for payment of current debt from current assets. It is defined as:

$$CR = \frac{Current Assets}{Current Liabilities}$$

Higher the current ratio, better is the liquidity position. Generally current ratio of 2:1 is considered to be satisfactory.

# b) Quick Ratio (Acid-Test Ratio)

Quick ratio is the ratio between quick current assets and current liabilities and is calculated by dividing the quick assets by current liabilities. Thus,

$$QR = \frac{Quick \ assets}{Current \ liabilities} = \frac{Current \ assets-Inventory}{Current \ Liabilities}$$

Generally, the company with quick ratio of 1:1 is considered to be in sound position.

#### 3.7.1.3 Turnover Position

The activity ratio indicates the relationship between uses of assets in generating the sales. It traces out that how the firm manages the assets. It is related with measuring the efficiency in assets management as well as the effectiveness of the investment of resources in the business enterprises. With the help of this ratio, we can easily know whether the funds have been used effectively or not. The relationship between sales

and various assets of the firm can be defined with the help of activity ratio.

# a) Inventory Turnover Ratio

Inventory turnover ratio shows how rapidly the inventory is turning into receivable through sales. It means the ratio shows the efficiency of the business concern in as inventory management. It is computed by dividing the cost of goods sold by the average inventory. Thus,

Inv. turnover ratio = 
$$\frac{\text{Cost of goods sold}}{\text{Average inventory}}$$

The cost of goods sold means sales minus grass profit. The average inventory refers to the simple average of the opening and closing inventory. The ratio indicates how fast inventory is sold. A high ratio is good from the view point of liquidity and vice versa. A low ratio would signify that inventory doesn't sell fast and stays on the shelf or in the warehouse for a long time.

# b) Inventory conversion period

Inventory also takes the time to convert into cash. Inventory conversion period is the average time required to convert materials in to finished goods and then to sell those goods. ICP is calculated by dividing days in a year by inventory turnover ratio.

Inventory conversion 
$$=$$
  $\frac{\text{Days in year}}{\text{Inventory turnover ratio}}$ 

## c) Receivables Turnover Ratio

The liquidity position of the firms depends upon the quality of debtors to a great extent. The receivable turnover indicates the collection efficiency of the firm. It is determined by dividing the net credit sales by average receivable outstanding during the year. Thus,

Receivable turnover ratio = 
$$\frac{\text{Net credit sales}}{\text{Average receivable}} = \frac{\text{Sales}}{\text{Receivable}}$$

The ratio measures how rapidly debts are collected. A high ratio is indicative of shorter time-lag between credit sales and cash collection. A low ratio shows that debt are not being collected rapidly.

# d) Receivable Conversion Period

Receivable conversion period is the average length of time required to convert the firms receivables in to cash, that is, to collect cash following a sales. This ratio is calculated as follows:

Receivable conversion period = 
$$\frac{\text{Days in a year}}{\text{Receivable turnover ratio}}$$

# 3.7.1.4 Profitability Position

Most of firms aim to maximize the profit. The profitability ratio is used to measure the operating performance of the company. The profitability position of the companies are analyzed with the help of following ratios.

# a) Gross Profit Margin

Gross profit margin ratio indicates the percentage of profit after cost of production. The ratio is a measure of productive efficiency. A high gross profit margin reflects the low cost of production and a low gross profit margin reflects the higher cost of production. Gross profit margin ratio is given by:

Gross profit margin = Gross profit/sales  $\times 100\%$  or (sales - cost of goods sold)/Sales  $\times 100\%$ 

# b) Net Profit Margin

Net profit margin is obtained after deducting all operating expenses and income tax from gross profit. It shows the percentage of net profit out of

total sales. This ratio shows the overall measurement of the company's ability to earn net profit. It is calculated by dividing net profit by sales and given by :

Net profit margin = Net profit after tax / sales  $\times$  100%

# c) Operating Expenses Ratio

The ratio is calculated to ascertain the relationship between operating expenses and volume of sales. The higher percentage of operating expenses ratio shows the higher operating cost and vice-versa. It is given by:

 $OER = (Cost of goods sold + Operating expenses)/Sales \times 100\%$ 

# d) Return on Assets (ROA) Ratio

Return on assets ratio reflects the success or failure of the management in order to utilize the total assets. This ratio is computed by dividing net profit after tax (NPAT) by total assets and given by:

 $ROA = NPAT / Total assets \times 100\%$ 

# e) Return on Capital Employed

It shows the earning capacity of the capital employed in the business. Profit is related to the total capital employed. The term capital employed refers to long term funds supplied by the creditors and owner of the firm. It is given by:

Return on capital employed = 
$$\frac{\text{Net profit}}{\text{capital employed}} \times 100\%$$

# 3.7.1.5 Cash Conversion Cycle

Cash conversion cycle measures the length of time the firm has funds tied up in WC. It is the length of time between paying for raw materials and receiving cash from the sale of finished goods. The cash conversion cycle or cash conversion period is inventory conversion period plus receivables conversion period minus payable deferral period. The cycle consists of the following periods.

Cash conversion cycle = inventory conversion period + Receivables conversion period – payables deferral period

# a) Inventory conversion period (ICP)

It is length of time required to convert raw materials in to finished goods and then to sell these goods. It may be computed as under.

Inventory conversion period = 
$$\frac{360}{\text{Sales/inventory}}$$

# b) Receivable conversion period (RCP)

It is the length of time required to convert the firm's receivables into cash, that is, to collect cash following a sale. It is also called the day's sales outstanding.

Receivables conversion period = 
$$\frac{\text{Receivables}}{\text{Sales per day}}$$

# c) Payables deferral period (PDP)

It is the length of time between the purchase of raw materials and labor and the payment of cash for them.

Payables deferral period = A/C payable/Sales per day

## 3.7.2 Calculation of Correlation Coefficient (r)

In order to test the significance of the relationship in between two variables during the period of study, Karl Pearson's correlation coefficient (r) is calculated as;

$$r = \frac{n\Sigma dx dy - \Sigma dx - \Sigma dy}{\sqrt{\left\lceil n\left(\Sigma dx^2\right) - \left(\Sigma dx\right)^2\right\rceil \left\lceil n\left(\Sigma dy^2\right) - \left(\Sigma dy\right)^2\right\rceil}}$$

Where,

X =The first variable

Y =The second variable

N = No. of year (observations)

$$dx = (X - A_1)$$

$$dy = (Y - A_2)$$

A<sub>1</sub> and A<sub>2</sub> are assumed means for X and Y respectively.

Probable error (PE) = 
$$\frac{0.6745(1-r^2)}{\sqrt{n}}$$

If r is less than its PE, it is not significant. If 'r' is more than PE, there is correlation. If 'r' is more than 6 times of its PE, than it is considered significant.

The all over ratios and significance test are done in the next chapter.

# 3.7.3 Simple Regression Model

Correlation coefficient measures the degree of relationship between two variables whereas the regression analysis is used to estimate the likely value of one variable from the known value of the other variable. There are two types of variables in regression analysis- dependent variable and independent variable. The variable whose value is influenced or is to be predicted is called dependent variable whereas the variable which influences the value or is used for prediction is called independent variable. A simple regression equation which is used in this research study is given below. The regression equation of Y on X:

Regression equation of Y on X.

General equation y = a + bx

Where,

Y = Dependent variable

X = Independent variable

b = slope of the line (i.e. measure the charge in Y per unit charge in X)

a = Y- intercept because its value is the point at which the line crosses the y-axis (the vertical axis).

# 3.7.4 Hypothesis testing (Student's t-test)

To test the validity of the assumptions, t-test is used when the sample size is less than thirty. Student t-value is calculated first compared with the table value of 't' at a certain level of significance for given degree of freedom.

Symbolically: 
$$t = \frac{r}{\sqrt{1-(r)^2}} \sqrt{n-2}$$

Where, r = correlation coefficient

n = No. of observation

On testing, the null hypothesis will be rejected if the calculated t-value is greater than the table value at 5% level of significance for the n-2 degree of freedom and vice-versa.

# 3.8 Definition of Key Terms

In the analytical process of this study different terms have been used. The key terms used in this study have been defined below to avoid any confusion and misunderstanding.

# i) Working Capital

The term working capital refers to the gross working capital for this study. It means the working capital covers total volume of current assets minus current liabilities of Unilever Nepal Ltd.

## ii) Current Assets

The current assets of a firm represent those assets which can be in the ordinary course of business, converted in to cash within a short period of time, normally not exceeding one year and include cash and bank balance, bills receivables, marketable securities, prepaid expenses, accrued, short term loan and advance, stock etc.

## iii) Current Liabilities

Current liabilities include those liabilities, which are estimated to mature within an accounting year. It includes sundry creditors, sales, tax, deposit, income tax provision and short term loans.

## iv) Receivable

It includes receivables from the trade debtors and other debtors.

## v) Inventories

It means the aggregate of those items, which are held for sale in the ordinary course of business (finished goods), or are in the process of production for such sales (work-in-process) or are to be current consumed in the production of goods and service (raw material) to be available for sales.

#### vi) Fixed assets

Fixed assets include such assets like land and building, plant and machinery, furniture and fixture, vehicles and other miscellaneous assets which are supposed to be existed more than an accounting year.

# vii) Sundry Creditor

It includes total amount purchases which is to be paid to creditors.

## **CHAPTER IV**

# DATA PRESENTATION AND ANALYSIS

# 4.1 Introduction

The main objectives of this chapter is to fulfill the objective of the study by presenting data and analyzing them with the help of various statistical tools followed by methodology. This chapter has been presented the components of WC of UNLtd which includes composition of current assets & current liabilities, size, structure & utilization of CAs, liquidity & profitability position, relationship between current assets & fixed assets, turnover position, investment in CAs are presented in tabular and graphical form and analyzed the data using various ratios along with correlation and regression as mentioned in previous chapter.

# 4.2 Net Working Capital

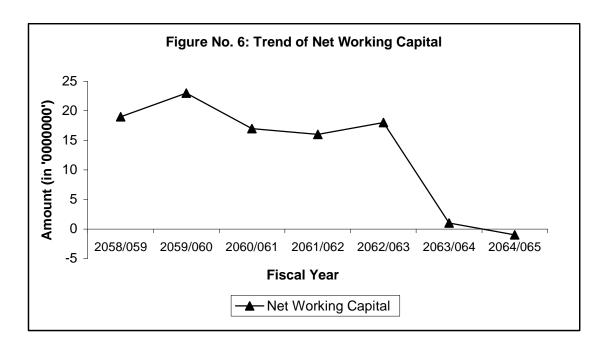
The difference between current assets and current liabilities is called net working capital. Net working capital is calculated by subtracting the CLs from CAs. Net WC can be positive or negative. Positive net WC indicates the firm's ability to pay its current obligations and the negative WC indicates the inability to pay its current obligations. Table No. 1 shows the Net WC of UNLtd and figure No. 1 shows its trend.

Table: 1
Net Working Capital of UNLtd

(Unit: NRs.)

Fiscal Year	Current Assets	Current Liabilities	Net Working Capital
2058/059	451880500	261820000	190060500
2059/060	567575200	327895000	239680200
2060/061	399136300	223210300	175926000
2061/062	589884900	426450600	163434300
2062/063	724244800	543705800	180539000
2063/064	891414700	882022500	9392200
2064/065	741606300	742231700	-625400

Source: Balance Sheet of Unilever Nepal Ltd.



According to the above table, there is positive net WC of UNLtd in first six years. It indicates that in these years, UNLtd has more CAs than its current obligations. Therefore company is able to pay its current liabilities. In the fiscal year 2064/065, net WC of UNLtd is in negative figure which indicates that the firm has more obligations than its current assets. In this year, the firm is unable to pay its current liabilities.

# 4.3 Financial Analysis

# 4.3.1 Composition of Current Assets

Any firm has to maintain the appropriate level of current assets to run the business smoothly. The business firm requires the different type of CAs to run the business. Without current assets no business can run. The success and the failure of any business firm depend upon the proper management of CAs. The major components of CAs are inventories, sundry debtors, cash and bank balance etc. A firm which has risk adverse management maintains the high liquidity of the firm by holding the large proportion of liquid assets in total WC. So, the composition of CAs has been analyzed here in order to fix the CAs policy in terms of the holding of more liquid assets. Objective of any business

organization is to earn maximum profit and ultimately maximize the shareholders wealth from its operation, which depends upon the volume of sales. So, the firm has to invest enough funds in CAs in order to increase the sales. If the sales can't be converted into cash immediately, the extra amount of WC is needed. So the effective composition of CAs has the greater impact on the whole WC management as well as the success or failure of the organization. So the data of CAs of Unilever Nepal Ltd. is presented below.

Table : 2
Unilever Nepal Limited
Composition of Current Assets

(Unit: NRs.)

Fiscal	Invento	Inventories		Sundry Debtors		Cash and Bank		Misc. CA	
Year	Amount	%	Amount	%	Amount	%	Amount	%	Amount
2058/059	132465000	29.31	49311500	10.91	99105000	21.94	170999000	37.84	451880500
2059/060	293927500	51.79	32177600	5.67	6271600	1.10	235198500	41.44	567575200
2060/061	144447300	36.19	32163100	8.06	62335000	15.62	160191000	40.13	399136300
2061/062	126107300	21.38	64775200	10.98	317404200	53.81	81598200	13.83	589884900
2062/063	184215700	25.44	97062600	13.40	391531700	54.06	51434800	7.10	724244800
2063/064	229764500	25.77	157721500	17.69	443311200	49.73	60617400	6.80	891414700
2064/065	256168000	34.54	138318800	18.65	242671700	32.72	104447800	14.08	741606300
Average		32.06		12.19		32.71		23.03	

Source: Balance Sheet of Unilever Nepal Ltd.

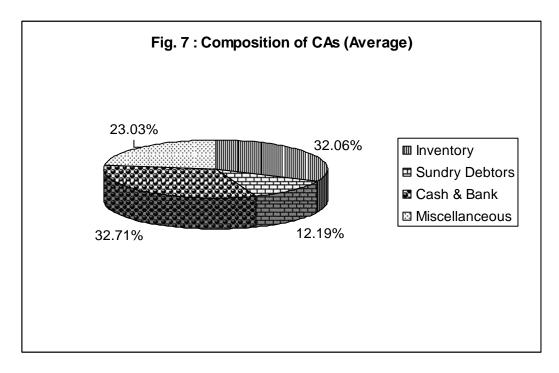


Table 2 shows the composition of CAs of UNLtd. In this table percentage indicates the proportion of individual current asset in total CAs of UNLtd. In the above table it can be seen that all the components of CAs, are highly fluctuating during the study period. According to table 1, inventories hold the major portion of CAs, which is in the range of 21.38% to 51.79%. The average percentage of inventories is 32.60. Proportion of inventories has been fluctuated during the study period. Company's inventories include the raw material, work-in process and finished goods. The proportion of sundry debtor to total current assets are 10.91%, 5.67%, 8.06%, 10.98%, 13.40%, 17.69% and 18.65% respectively. Proportion of sundry debtor has been fluctuated in between 18.65% to 5.67% during the observed fiscal years. The average percentage of sundry debtor is 12.19 which is less than that of 2063/064 and 2064/065 but it is more than that of the another years. In conclusion, sundry debtor holds least portion of current assets in average which is 12.19%.

In the table cash and bank balance is also fluctuating during the study period. The proportions of cash & bank balance to total current assets are 21.94%, 1.10%, 15.62%, 53.81%, 54.06%, 49.73% and 32.72%. The average portion of cash and bank balance is 32.71%.

Miscellaneous assets are another major components of current assets. It includes the amount of prepaid expenses, advances to employees, deposits, investment in government bonds and other current assets. Its proportion in total CAs in FY 2059/060 is the highest. The proportion of Misc. CAs shows the increasing and decreasing tendency. The average percentage of misc. CAs is 23.03%.

# 4.3.2 Proportion of Current Assets to Fixed Assets and Current Assets to Sales

For the purpose of success of any manufacturing concerns, firm should invest in CAs as well as fixed to support a particular level of output. Therefore, the firm should determine the proper portion of CAs with fixed and total assets. The level of CAs can be measured by relationship between CAs to FAs, which can help to find the CAs investment policy. Assuming a constant level of fixed assets, a higher CAs to FAs ratio indicates an aggressive CAs policy, conversely lower ratio indicates the conservative CAs policy. If the firm increases the proportion of CAs, there is the high probability of return as well as risk and vice versa.

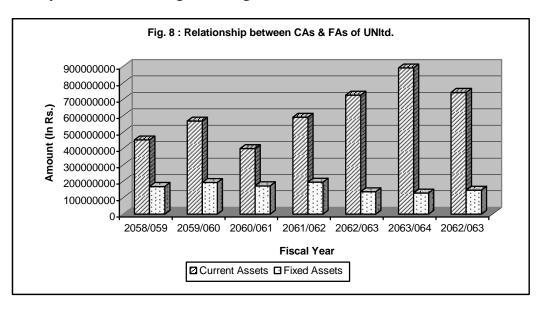
Table : 3
Unilever Nepal Limited
Relationship between CA to FA and CA to Sales

(Unit: NRs.)

Fiscal	Current	Fixed	Net Sales	CA/FA	% of CA to
Year	Assets	Assets			Sales
2058/059	451880500	168269000	1728630000	2.69	26.14
2059/060	567575200	192840000	1540990000	2.94	36.83
2060/061	399136300	172200000	1236050000	2.32	32.29
2061/062	589884900	194990000	1244730000	3.03	47.39
2062/063	724244800	135710600	1524901000	5.34	47.49
2063/064	891414700	127777000	1481560000	6.98	60.16
2064/065	741606300	145776200	1469685700	5.09	50.46

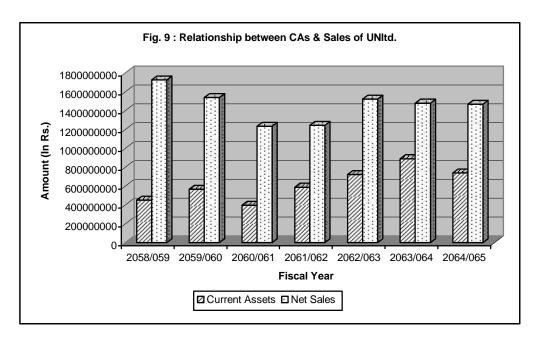
Source: Balance Sheet and Income Statement of UNLtd.

The ratio of CAs to fixed assets and CAs to sales of UNLtd is presented in table 3. The ratio of CAs to fixed assets of UNLtd is in increasing order. The investment in CAs is greater than fixed assets. As a whole it is also in the increasing order during the study period. Increasing order of CAs to fixed assets ratio means the company has applied conservative current assets investment policy. The ratio shows that the company is following the more conservative CAs investment policy. The relationship between CAs and FAs of UNLtd can be presented clearly in the following bar diagram.



# **Proportion of Current Assets to Sales**

Sale is only that activity which generates fund from outside. So it is the most integral part of manufacturing industry like UNLtd. The survival and growth of every manufacturing concern depends on the proportion of sale of the product what they produce. The company's sales policy depends upon the available resources and demand. It is also greatly affected by the financial policy and their strategic planning. Therefore, the co-ordination between those elements of company is the most important. Thus, the company invests in CAs to support the given level of sales. The amount investment on CAs is to support the given level of sales, which depends upon the CAs investment policy and the attitude of management. When a firm holds relatively large amount of CAs to support a given level of sales is called fat cat policy. When a firm holds relatively minimum amount of CAs to support given level of sales is called lean and thin policy and between these two polices is called as moderate policy. For the purpose of analysis of investment policy of CA, relative measure current assets to sale has been used. The proportion of current assets to sales of UNLtd is also presented in Table No. 3. The proportion of current assets to sales is in fluctuating trend. It varies from 26.14% to 60.16%. As a whole, percentage of CAs on sales is increasing year by year. These facts suggest that company's policy is moving towards the conservative policy. In order to make sales maximization, the company is investing a large amount in CAs.



# **4.3.3** Composition of Current Liabilities

The entire obligation which should be paid by the company with in an accounting period, includes short term loan, sundry creditors, provision for taxation, interest payable, advance from customer, proposed dividend, outstanding bills etc. Firm should maintain the optimum level of liquidity in order to enable the organization to meet the current obligations. Firm has to raise funds from short term as well as long term sources to meet its short term obligations. Short term sources of funds, firm raised by different components of CLs should be according to the requirement. But the proportion of different components of CLs depends upon the financial policy of the firm. Thus, the composition of CLs must be analyzed for proper management of WC.

(Unit: NRs.)

Fiscal Year	Short term loan		an Sundry Creditors		Misc. CL. & Prov.		Total CL
	Amount	%	Amount	%	Amount	%	Amount
2058/059	_	0.00	129355000	49.41	132465000	50.59	261820000
2059/060	145082000	44.25	156178000	47.63	26635000	8.12	327895000
2060/061	_	_	96593700	43.27	126616700	56.72	223210300
2061/062	_	_	247008200	57.92	179442400	42.07	426450600
2062/063	_	_	335716100	61.74	207989700	38.25	543705800
2063/064	_	_	370237300	41.98	511785200	58.02	882022500
2064/065	_	_	353309000	47.6	388922800	52.40	742231700
Average		6.32		49.94		43.74	

Source: Calculated Data from Balance Sheet of UNLtd.

Table 4 shows the composition of CLs. According to the table, sundry creditors hold the major portion of CLs of UNLtd. Sundry creditors holds nearly 50% of total CLs in average. Each individual component of CLs is fluctuating during the observed period. The average proportion of sundry creditors is 49.94%, which is major component of CLs for UNLtd. The Misc. liability is also fluctuating during the study period. In both relative and obsulate terms, it is fluctuating during the observed period. Its proportion ranges from 8.12%, to 58.02% during the study period. It is the least in the FY 2058/059 and highest in the FY 2063/064. It shows the very high fluctuation in Misc. CL and provision of the company. The Misc. CL includes the amount of provision for taxation, provision for dividend, staff housing, bills payable etc. The

average proportion of loan and advance of the company is only 6.32%, which is too low in comparison to other sources of CLs. Because of interest bearing nature of short term loan, company may use lower proportion of it. Company has used short term loan in the FY 2059/060 only. Company has not used short term loan in other FYs during study period.

# 4.3.4 Liquidity Position

Liquidity position of the firm depends on its WC policy. If the firm follows aggressive policy, it has low liquidity position, while conservative policy has high liquidity position. So, for the analysis of WC policy of UNLtd, the liquidity position is calculated. Liquidity position indicates the ability to pay its short term obligations. The liquidity positions of UNLtd can be analyzed with the help of current ratio and quick ratio.

#### 4.3.4.1 Current Ratio

The current ratio of a firm measures its short-term solvency i.e. its ability to meet short term obligation. As a measure of short term/current financial liquidity it indicates the rupee of CAs available for CLs/obligation. In this study also, this ratio has been used to measure the liquidity position of UNLtd. This ratio is calculated by dividing CAs by CLs.

Fiscal Year	Current Assets (in Rs.)	Current Liabilities (in Rs.)	Current Ratio
2058/059	451880500	261820000	1.72:1
2059/060	567575200	327895000	1.73:1
2060/061	399136300	223210300	1.79 : 1
2061/062	589884900	426450600	1.38:1
2062/063	724244800	543705800	1.33:1
2063/064	891414700	882022500	1.01:1
2064/065	741606300	742231700	0.99:1
Average			1.42:1

Source: Different Years' Balance Sheet of Unilever Nepal Ltd.

Table 5 shows the liquidity position of UNLtd. In FY 2064/065, current ratio is less than 1. It means UNLtd is not able to pay its current obligation. Further, there is very poor liquidity position in FY 2063/064. The ratio in that year is only 1.01:1. The ratio for the another FYs is greater than one. In these years, the company is able to pay its current obligations. Above table clearly shows that the company has sufficient liquidity position to meet its short term financial obligation except FY 2063/064 and 2064/065. Generally, the current ratio is considered as perfect when it becomes 2:1. During the period of study, the company has not able to meet this obligation. In conclusion, the company has not satisfactory liquidity position.

## 4.3.4.2 Quick Ratio

Current ratio measures the short term solvency in gross term. Thus, it doesn't measure the actual liquidity position of the firm. So quick ratio has been used to measure the liquidity position of UNLtd in net terms.

For the purpose of the calculation of this ratio, inventories have been excluded from total CAs.

(Unit: NRs.)

Fiscal Year	Quick Assets	Current Liabilities	Quick Ratio
2058/059	319420000	261820000	1.22:1
2059/060	273650000	327895000	0.83:1
2060/061	254689000	223210300	1.14:1
2061/062	463777600	426450600	1.09:1
2062/063	540029100	543705800	0.99:1
2063/064	661650200	882022500	0.75 : 1
2064/065	485438300	742231700	0.65 : 1
Average			0.95 : 1

Source: Balance Sheet of Unilever Nepal Ltd.

(Quick Assets = Total Current Assets - Inventory)

The quick ratio of 1:1 of any firm is considered as good position. But the quick ratio of UNLtd for many years is less than the considerable ratio. So the company maintains low level of quick assets. But FY 2058/059, 2060/061 and 2061/062 maintain high level of quick assets than considerable ratio.

# **4.3.5** Turnover Position (Assets Management Ratio)

Assets management ratio measures how efficiently the firm is managing its assets. It reports that the level of each assets is reasonable, too high or too low in view of current and projected operating level. If the assets are too high, the interest expenses will be too high and hence their profits be depressed and on the other hand, if assets are too low, profitable sale may be less.

# 4.3.5.1 Inventory Turnover Ratio

Inventory turnover ratio shows the efficiency of inventory management and it is also used to measure the liquidity of inventory. High inventory turnover ratio shows optimum utilization of inventory and vice-versa. In UNLtd, inventory includes raw material, packing material, work in process, finished goods, and store & spares parts etc. The calculated inventory turn over ratio are given in table 7.

(Unit: NRs.)

Fiscal Year	Sales	Inventory	Inventory Turnover	ICP
2058/059	1728630000	132465000	13.05 times	28 days
2059/060	1540990000	293927500	5.24 times	70 days
2060/061	1236050000	144447300	8.56 times	43 days
2061/062	1244730000	126107300	9.87 times	37 days
2062/063	1524901000	184215700	8.28 times	44 days
2063/064	1481560000	229764500	6.45 times	57 days
2064/065	1469685700	256168000	5.74 times	64 days
Average			8.17 times	49 days

Source: Income Statement and Balance Sheet of UNLtd.

(Days in a year = 365)

Table 7 shows the inventory turnover position of UNLtd. It is found that in FY 2058/059, the inventory turnover ratio is highest. So in this FY the low inventory is kept in the firm. It indicates the high sales by using the optimum raw materials and in FY 2059/060, the inventory turnover ratio is lowest which indicates the low sales of finished goods and low utilization of raw materials. Thus, in average, UNLtd is turning its inventory over 8.17 times per year, or about every 45 days (365/8.17). forty five days represent the average time taken from the purchase of raw material to the ultimate sale of the finished product. There is

inventory conversion period of 49 days on average. It means UNLtd requires 49 days to convert raw materials into finished goods and then to sell these goods.

## 4.3.5.2 Receivable Turnover

Receivable turnover ratio plays a vital role to determine the liquidity position of the company. It indicates the speed with which receivable are being converted in to sales. The higher turnover ratio shows higher degree of liquidity of receivable and vice-versa. The table below shows the sales to receivable ratio and receivable conversion period of UNLtd. This company used to sell all products, except the wastage of the soaps and detergents, on credit. So all sales are assumed as credit sales for the purpose of calculation of receivable turnover and receivable conversion period.

Table : 8

Receivable Turnover and Average Collection Period of UNLtd.

(Unit: NRs.)

Fiscal Year	Net Sales	Receivables	Sales/Receivable	RCP
2058/059	1728630000	49310000	35.06 times	11 days
2059/060	1540990000	32180000	47.89 times	8 days
2060/061	1236050000	32163100	38.43 times	10 days
2061/062	1244730000	64775200	19.22 times	19 days
2062/063	1524901000	97062600	15.71 times	24 days
2063/064	1481560000	157721500	9.39 times	39 days
2064/065	1469685700	138318800	10.63 times	35 days
Average			25.19 times	21 days

Source: Income Statement and Balance Sheet of UNLtd. (Days in a year = 365)

According to the above table 8, average receivables turnover ratio is 25.19 times, that means UNLtd turns its receivables 25.19 times per year. In other words, UNLtd collects its accounts receivables about 26 times per year.

Similarly, average length of time required to convert the UNLtd's receivables into cash is about 21 days. In other words, twenty-one days is required to convert firm's receivables in to cash.

# 4.3.6 Profitability Position

An ability to earn maximum from the maximum use of available resources by the business organization is known as profitability. It is the measure of efficiency. WC component has affected profitability position of the enterprises. The strong profitability position fulfills the aim of wealth maximization as well as profit maximization, which motivates investor to invest. Profitability position is measured by gross profit margin, net profit margin, operating expenses ratio and return on assets ratio.

# 4.3.6.1 Gross Profit Margin (GPM)

GPM is the relationship between gross profit and net sales. It measures the percentage return of gross profit out of total sales. Gross profit doesn't adjust operating & administrative expenses. Following table depicts the GPM of UNLtd.

Table: 9
Gross Profit Margin of UNLtd

(Unit: NRs.)

Fiscal Year	Gross Profit	Net Sales	Gross Profit Margin
2058/059	326750000	1728630000	18.90 %
2059/060	320170000	1540990000	20.78 %%
2060/061	298318300	1236050000	24.13 %
2061/062	401585700	1244730000	32.26 %
2062/063	555792200	1524901000	36.45 %
2063/064	543742400	1481560000	36.70 %
2064/065	529449300	1469685700	36.02 %
Average			29.32%

Source: Income Statement of UNLtd.

According to above table, the GPM of UNLtd has shown increasing trend except FY 2064/065. It means there is a sign of good management, which makes the high gross profit in sales. The average GPM, during the study period, is 29.32%.

## 4.3.6.2 Net Profit Margin (NPM)

Earning the profit is the main objective of every business firm. So, the analysis of net profit margin can be meaningful. The net profit margin is also known as net margin. It shows the relationship between net profit and sales. It indicates the efficiency of management in overall management function of the firm. It also indicates the firm's capacity to withstand adverse economic condition.

Table : 10

Net Profit Margin of UNLtd

(Unit: NRs.)

Fiscal Year	Net Profit	Net Sales	NPM
2058/059	120580000	1728630000	6.98%
2059/060	68040000	1540990000	4.42%
2060/061	42606200	1236050000	3.45%
2061/062	93167100	1244730000	7.48%
2062/063	140782700	1524901000	9.23%
2063/064	189199500	1481560000	12.77%
2064/065	238156500	1469685700	16.20%
Average			8.65%

Source: Income Statement of UNLtd.

The above table shows that NPM is in fluctuating trend due to the fluctuation of net profit and sales volume. The highest net profit margin in the overall study period is 16.20%. Similarly, 3.45% is the lowest NPM in the overall study period. From the FY 2058/059 to FY 2060/061, the NPM has decreasing ratio of UNLtd. In recent years the

company's NPM is in increasing trend. Average NPM of the company is only 8.65%.

## 4.3.6.3 Return on Assets (ROA)

ROA is the relationship of NPAT & TA. Return on assets ratio reflects the success or failure of the management in order to utilize the total assets. The return on assets ratio of UNLtd is presented below in the table.

Table: 11
Return on Total Assets (ROTA)

(Unit: NRs.)

Fiscal Year	NPAT	Total Assets	Return on Assets
2058/059	120580000	629750000	19.15%
2059/060	68040000	760420000	8.95%
2060/061	42606200	571335300	7.46%
2061/062	93167100	784879700	11.87%
2062/063	140782700	939719600	14.98%
2063/064	189199500	1098955800	17.22%
2064/065	238156500	967146600	24.62%
Average			14.89%

Source: Income Statement and Balance Sheet of UNLtd.

Table 11 shows the return on total assets of UNLtd. In the first three years it is in decreasing trend after that it comes in increasing trend. The highest ROTA (24.62%) is in FY 2064/065. 15.76% is the average ROTA during the overall study period.

# **4.3.6.4 Operating Expenses Ratio (OER)**

Operating expenses ratio tries to establish relation between operating cost and net sales. It helps to assess the operating efficiency and effectiveness of enterprises. Following table presents the operating efficiency of UNLtd.

Table No. 12 Operating Expenses Ratio

(Unit: NRs.)

Fiscal Year	Cost of goods sold	Operating expenses	Sales	OER (in %)
2058/059	1401880000	185590000	1728630000	91.83
2059/060	1220880000	229240000	1540990000	94.10
2060/061	937734100	224567800	1236050000	94.03
2061/062	843141700	268033500	1244730000	89.27
2062/063	969108800	365470700	1524901000	87.52
2063/064	937817700	295477200	1481560000	83.37
2064/065	940236400	233978700	1469685100	79.90
Average				88.57

Source: Income Statement of UNLtd.

OER of UNLtd shows that it has decreasing expenses. During the seven year study period OER of UNLtd is 88.57%. It indicates that there is high operating cost in the company.

# **4.3.7 Cash Conversion Cycle (CCC)**

Cash conversion cycle measures the length of time that firm has funds tied up in working capital. It is the length of time between when the company makes payments and when it receives cash payment. Following table presents the CCC of UNLtd.

Table No. 13
Cash Conversion Cycle

Fiscal Year	ICP	RCP	PDP	CCC
2058/059	27 days	11 days	29 days	10 days
2059/060	70 days	8 days	24 days	54 days
2060/061	43days	10 days	25 days	28 days
2061/062	37 days	19 days	70 days	-14 days
2062/063	44 days	24 days	78 days	- 10 days
2063/064	57 days	39 days	89 days	7 days
2064/065	64 days	35 days	85 days	14 days
Average				13 days

Source: Table 7 and 8.

The above table shows the CCC of UNLtd over the seven year study period. The CCC of UNLtd is more variant. The average CCC of UNLtd is 13 days. This would improve profits, because the shorter the CCC, the smaller the need for external financing and thus lower the cost of such financing. It is favourable for the company but it will cause negative impact on its trade creditors.

# 4.4 Statistical Analysis

# 4.4.1 Correlation Analysis

In order to examine the significance of the relationship between two variables like WC and profit of UNLtd, Karl Pearson's coefficient of correlation (r) has been calculated. It measures the degree and importance of relationship between variables. Karl Pearson's correlation coefficient (r) and their probable error are calculated and given in appendixes and their results are presented in following table 14.

Table : 14

Coefficient of correlation between WC & Profit and WC & Sales

Correlation coefficient	r	$r^2$	PE	6PE	Remarks
between					
Working capital and sales	0.071	0.0050	0.254	1.524	Insignificant
Working capital and profit	-0.86	0.7396	0.066	0.396	Insignificant

(Source: Appendix 1 and 2)

It is apparent from the table (Table : 14) that the correlation coefficient of UNLtd is 0.071 which shows there is positive insignificant correlation between WC and sales. As we know that positive correlation means both of the variables are moving towards the same directions.

The value of coefficient of determination (r<sup>2</sup>) is 0.005. It means only 0.5 percent of the total variation in dependent variable (Net WC) has been explained by the independent variable (Net Sales).

Working Capital & Profit: The above table (Table : 14) evinces that there is negative relationship between NPAT and net WC. Value of 'r' is less than the 6PE. Thus the relationship between NPAT and net WC obviously is insignificant.

The value of coefficient of determination (r2) is 0.7396. It means 73.96 percent of the total variation in dependent variable (Net Profit) has been explained by the independent variable (Net WC).

# 4.4.2 Simple Regression Analysis

The regression analysis is used to find out the estimation of unknown value. Regression analysis is a mathematical measure of the average relationship between two or more variables in terms of the original units of data.

Table: 15
Simple Regression Result

Particular	r	Reg. coeff. (b)	Constant (a)	Remarks
NWC and sales	0.071	0.0385	80.5939	Insignificant
NWC and Profit	-0.86	-0.63	213.41	Insignificant

(Source: Appendix 3 and 4).

Working capital = (f) sales

$$Y = a + bx$$

$$Y = 80.5939 + 0.0385x$$

The above table (Table:15) evinces that the regression coefficient (b) between net WC (dependent variable- Y) and sales (Independent

variable - X) is positive i.e. 0.0385 which indicates that if we increase sales by one million, WC will be increased by 0.0385 million as sales=(f) WC.

Similarly, regression coefficient (b) between NWC (Independent variable) and profit (Dependent variable) is negative i.e. -0.63. This indicates that if UNLtd increases WC by one million profit will be decreased by 0.63 million.

# **4.4.3** Hypothesis Testing (Student's t-test)

# Net WC and Sales:

To know the relationship between WC and sales, following hypothesis has been formulated and tested by applying the student's t-test.

H<sub>o</sub>: There is no significant correlation between sales & WC of UNLtd during the period of study.

H<sub>1</sub>: There is significant correlation between sales & WC of UNLtd during the period of study.

The relationship between WC and sales has been observed even precisely by studying their regression equations and correlation values which have been presented in table 16 given below:

Table: 16  $Coefficient\ of\ correlation\ with\ their\ t\text{-values}\ for\ net\ WC\ (Y)\ on\ sales$   $(X)\ of\ UNLtd$ 

Company	r	table value	t-value	d.f.	Result
UNLtd	0.071	2.571	0.159	5	Not sign.

(Source: Appendix 5)

It is vivid from the above table that there was indeed no significant relationship between WC & sales in the UNLtd during the period of

study 2058/059 and 2064/065. The correlation between sales and WC is positive but not statistically significant. Therefore the null hypothesis is accepted as the calculated value is less than the table value of student's t-test at 5% level of significance ( $t_{0.05,5} = 2.571$ )

## Net WC and Net Profit:

H<sub>o</sub>: There is no significant correlation between net WC and net profit of UNLtd during the period of study.

H<sub>1</sub>: There is significant correlation between net WC and net profit of UNLtd during the period of study.

Table: 17 Coefficient of correlation with their t-value for net profit (Y) on net  $WC \; (X) \; of \; UNLtd.$ 

Company	r	t-value	table value	d.f.	Result
UNLtd	-0.86	3.768	2.571	5	Significant

(Source: Appendix 6).

It is apparent from the table (Table: 17) that there is significant correlation between net WC and net profit in UNLtd during the period of study. Therefore alternative hypothesis ( $H_1$ ) is accepted as the calculated value of t is greater than the tabulated value of student's t-test at 5% level of significance ( $t_{0.05.5} = 2.571$ ).

# 4.5 Major Findings of the Study

The major findings of this study are as follows:

I. The major components of CAs in UNLtd are inventories, trade and other receivables, cash and bank balance and advance. Among these, inventories and cash and bank balance have held the major portion of CAs. The average proportions of inventories, sundry debtors, cash and bank balance, and misc. CA to total

- current assets are 32.06%, 12.19%, 32.71% and 23.03% respectively during the period of study.
- II. The major components of CLs in UNLtd are short term loan, sundry creditors and provisions. The average proportion held by the sundry creditors is 49.94%.
- III. Liquidity Position: Liquidity position of UNLtd has been found below the standard. The average CR and QR are 1.42 and 0.95 times.
- IV. Inventory Turnover Ratio and Inventory Conversion Period: The average inventory turnover ratio and inventory conversion period over the study period are 8.17 times and 49 days respectively.
- V. Receivable Turnover Ratio and Receivable Conversion Period: On an average, receivable turnover ratio and receivable conversion period of UNLtd are 25.19 times and 21 days respectively during the study period.
- VI. Profitability Position: Profitability position of UNLtd has been found that average GPM, NPM, ROA OER are 29.32%, 8.65%, 14.89% and 88.57%. In recent years, GPM and NPM are in increasing trends, It has been found that there is high gap between GPM and NPM due to the high operating expenses.
- VII. Cash Conversion Cycle: The average cash conversion cycle of the UNLtd is 13 days which seems satisfactory for short run. Because of long PDP and short ICP and RCP, it seems shorter which is favourable for the company but it will cause negative impact on its trade creditors.
- VIII. Relationship of WC with profit and sales: UNLtd has negative insignificant relationship of WC with profit. There is positive correlation between net WC and sales and has insignificant relationship between them.

## **CHAPTER V**

# SUMMARY, CONCLUSION AND RECOMMENDATION

This chapter is used to summarize the whole study. This study also aims to draw the conclusion of the study and forward the applicable recommendations for more efficient WC management of UNLtd.

# 5.1 Summary

Establishment of industries and business for the sake of the economic development of nation is essential. Consequently, in Nepal few numbers of industries and business concerns are established in different sectors for the overall development of the country. Nepal is one of the developing countries whose economy is totally dominated by the agriculture sector. About 76% of the total population of the country is based on agriculture sector. But the role of manufacturing sector in the national economy is not satisfactory. Therefore, Nepal is under critical juncture in its modern economic situation.

The success or failure of business, industries or manufacturing sectors mainly depends upon the effective overall management of the organization. Besides this, financial management plays the vital role in the success of any organization. One of the most important aspects of the financial management for the success of business is proper WC management. WC is said to be lifeblood of any business organizations. To run the daily production activities of the company, besides the manpower, equipment etc., one of the major component is WC. Without proper management of WC no business success can be imagined. In this regard, UNLtd is selected and this study has attempted to know that how far UNLtd has been able to manage its WC for achieving the goals.

For the purpose of the analysis this study has been confined in five chapters. The first chapter focuses the brief introduction of the study, development of manufacturing industry in Nepal. It attempts a little bit to introduce the WC management of UNLtd. It deals with the problems studied and the objectives of the study too. The second chapter deals with review of literature which includes conceptual framework and different view of different writers, books and articles. Research methodology followed in this study is given in the third chapter. It presents the nature and sources of data, data collection and processing technique, population and sample and financial and statistical tools used. The fourth chapter includes the presentation and analysis of the data derived from UNLtd. An attempt to analyze the WC component of UNLtd for seven years has been done. For the purpose of analysis of the composition of CAs and CLs, proportion of CAs to FAs and proportion of CAs to sales have been analyzed. It has also analyzed the liquidity position, turnover position, profitability position and cash conversion cycle of UNLtd. As statistical tools, coefficient of correlation simple regression model and hypothesis testing have been applied for the fulfillment of the objective as described in chapter three. The necessary data are derived from the balance sheet and profit and loss account of the UNLtd. With the help of the methodology described in chapter three, these data are presented and analyzed.

According to the study, proportion of current assets is highly fluctuating during whole study period. Inventory and cash & bank have held the large portion of CAs. The average portion of inventory and cash & bank are 32.06% and 32.71% respectively during the study period. The ratio of CAs to FAs varies from 2.32 to 6.98.

The components of CLs i.e. short term loan, sundry creditors and provision are fluctuating. The average proportion of sundry creditors is 49.49%. Current ratio of UNLtd is less than one times in the FY 2064/065. It varies from 0.99 to 1.79 times. During the study period

quick ratio is less than one times except in FY 2058/059, 2060/061 and 2061/062. Average quick ratio of UNLtd is 0.95 times which is less than the standard. Inventory turnover ratio and inventory conversion period are 8.17 times and 49 days respectively. Similarly, receivable turnover ratio and receivable conversion period of UNLtd are 25.19 times and 21 days respectively. The average gross profit margin is 29.32% but the net profit margin of UNLtd is only 8.65% because of high operating expenses ratio i.e. 88.57%. In average, the cash conversion cycle of the company is only 13 days which is favourable for the company. The relationship of WC with profit and sales of UNLtd is not significant during the study period.

# 5.2 Conclusion

All components of CAs of UNLtd are highly fluctuating during the study period. CA/FA ratio is greater than two times. It means UNLtd is following the conservative current assets investment policy. Though the current ratio of the company is satisfactory, the management of UNLtd has no clear policy about the investment of WC.

The composition of different components of CLs varies during the study period. Components of CLs are not related to each other. It means that UNLtd has not taken seriously about the source of financing. There is positive net WC in first six years and negative in the FY 2064/065. UNLtd is unable to pay its current liabilities in the last year of study period. The average current ratio of UNLtd is 1.42: 1. It means the liquidity position of the company is satisfactory but not perfect one. But in recent years, it has decreasing trend which should be improved by the company. Similarly, after analyzing the various profitability ratios, it can be concluded that there is operating inefficiency in the company and overall return position of the company is also not in favourable condition because of inefficient utilization of current assets. The out

come of CCC of the company is in satisfactory condition. But analysis shows that there is long PDP and short ICP and RCP in UNLtd, which is favourable only for short run but it will cause negative impact from its trade creditors in upcoming days of the company.

The correlation coefficients of the variables selected for the statistical analysis show that UNLtd has insignificant relationship and negative correlation between net WC and profit. On the other hand, there is positive correlation between net WC and sales. UNLtd has still followed conservative WC management policy. It reduces the risk but it also lead to reduce the possibility of higher return. Besides all above conclusions the profitability of UNLtd is satisfactory.

# 5.3 Recommendations

At the end of research, the study without practicable suggestion would be incomplete phenomenon. Therefore, the following recommendations have been made on the basis of foregoing analysis for further improvement of the existing WC management.

- I. UNLtd should set the standard for the ratio of CAs to FAs. It has not any clear vision about the management of CAs to fixed assets. Thus, UNLtd should have the proper plan to improve its profitability in future.
- II. UNLtd has high amount of cash & bank and inventories, which should be reduced or optimal level should be adjusted according to the sales and production. In this regard management is advised to invest in marketable securities and should apply JIT and Kanban system.
- III. The study shows that there is not perfect liquidity position. So the company should improve the liquidity position by reducing the current liabilities.

- IV. There is extremely high operating ratio in UNLtd which indicates inefficiency and mismanagement of the company. So, to maintain the position, UNLtd should reduce the operating expenses by adopting various techniques such as: value analysis, standard costing and budgeting.
- V. There is negative CCC in the FY 2061/062 and 2062/063 which is not good for the company. It causes negative impact from its creditors. So, company should manage ICP, RCP and CCC by applying suitable credit policy. For this company should clearly define its credit standard, credit terms and collection policy.
- VI. To run day-to-day business activities and earn maximum profit CAs should be maintained properly, but it has been observed that there is no concrete CAs management and specific WC policy in UNLtd. So, the company should introduce effective inventory control techniques to decrease huge blockage of inventory and credit policy technique for collecting receivables.
- VII. To increase net income, company should adopt aggressive WC policy by borrowing on short term basis to finance the fixed assets like plant and machinery.
- VIII. Since the management is backbone of any company, its success and failure depends upon the managerial skills. So, company should allocate some money for training of financial employees to produce skilled and experienced manpower.

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