# CHAPTER - I

# INTRODUCTION

## 1.1 Background of the Study

The term business denotes activities related to trade, commerce, profession, occupation, and industry carried out to make profit. A business is an organization. It is engaged in the production and marketing of products to make through customer satisfaction. The primary beneficiaries of a business are its owners. Products are the focus of all business activities. A product is anything that satisfies the needs of customers. Products can be of Goods, services, ideas, event information, Properties, Places, and Person etc.

Industrialization is the pre-requisite for economic development as the history of advanced country now. For the development, the share of industrial sector rise and then an economy moves towards prosperity. Manufacturing is physical or chemical transformation of material or component in to new product by power driven hands and machines Mfg. industries plays vital role for economy. The development of industrialization in Nepal is very sloe in Nepal. It is completely new phenomenon. Biratnagar Jute Mill in 1936 marked up beginning of organized mfg. industry in Nepal. By then Morang Cotton Mills, Raghupati Jute Mills and Juddha Match Factory were established till 1946 in Biratnagar. On the period of Second World War, the promoters of industries were able to reap wind full profit with in a very short period because of extreme shortage of essential customer goods in the world market. This made the automation attraction for establishment of new industries. In Nepalese planned development govt. made direct

investment in many industries. After emergence of democracy in 2047 Nepalese government have put step in economic liberalization and foreign investment policy to attract foreign investment in Nepal. Many establishments are made through direct and indirect (partial) foreign investment. Many banks, insurance companies, hotels, casinos construction companies etc. are established in Nepal. Government. is trying to support many establishment through one umbrella policy.

Nepalese economy is heavily characterized by pre dominant agriculture. People are engaged in and 82% of population are employing in this sector. Now a day, the overall performance of this sector has been declining. (Source: economic survey NRB 2006-07)

Agriculture alone is not sufficient for poverty reduction and overall development of the country. Industrialization is one of the major basic ingredients for progress, modernization and economic development of Nepal.

Expansion of industry offers prospects of increased employment; improve balance of payment and more efficient use of resources. In present situation, industrialization has proved itself a most powerful instrument in speeding up the economic development through establishment of different companies in different sector.

Manufacturing sector is critical to the pursuit of sustained growth due to its potential to promote technological capacities, advance the divaricating of production and exports. So, the study is related to manufacturing companies.

In manufacturing companies, working capital managements plays a vital role in the success or failure of these companies. Working capital

management is an important aspect of the manufacturing companies. Every business firms needs various types of assets to carry out their operation. Some assets are required to meet long terms needs which are fixed assets and some are needed to meet day to day expenses and to pay current obligation which are termed as current assets. Working capital management is related to management of current assets.

Amount invested in the form of raw material, cash, semi- finished goods etc. put together is called working capital. There are two concept of working capital; net concept and gross concept. Net concept of working capital is excess of current assets over current liabilities. Gross concept is the total current assets. It is particularly useful for business in deciding the size of the investment in each type of current assets. Inadequate investment in working capital threatens the solvency of the companies where as excessive investment affects firm's profitability. The Working capital is the blood-life and controlling nerve center of the business. The excess working capital as well as short working capital is harmful for business. Therefore, proper use of working capital is necessary for these organizations.

## 1.2   Profile of Dabur Nepal Pvt. Ltd.

Dabur Nepal Pvt. Ltd. was established in 1989 as joint venture company agreement in Nepal with Dabur India Ltd. for the production of ayurvedic-based personal care, health care and food products and started manufacturing Dabur products in 1992. The Company's factory registered office is in Rampur Tokani at Bara District and the corporate office is in TNT building at Teenkene, Koteshwore. Permanent employees working at Tokani Bara are 25. 125 employee are working under daily wages basis. At TNT building corporate office 33 employee

are permanent. Security guards working at TNT are provided by (Group 4). Salary is given by (Group 4). 4 security staff are working at corporate office.

The company is the first of its kind in the country to harness ecological resources and manufacture commercially viable and value added top of line products locally, to be sold at prevalent rates for domestic use and export to India, Bangaldesh and other neighboring countries. In the span of twelve years, there has been vertical growth in all shares of business and operation s in addition to lateral expansion in the area of research and development. In order to enable effective utilization of resources, company has set up "Plant for Life" 90 million green house projects at Banepa in 1996. The application of this project has spurred a steady supply rare, endangered medicinal herb spring in a state of the art green house equipped with modern climate controls. The saplings are sold at cost to farmers in remote areas to grow and harvest with "buy back" guarantee. Steps have been taken to subsidize the cost of saplings in order to enable broader participation of the local people.

The company's various community initiatives; generations of employment and income for the local people have resulted in improved socio-economic condition. Besides, it has earned several accolades including the Highest Exporter Award from the Ministry of Commerce, NICCI Award for Excellence, and CIP Award for outstanding contribution to the country.

DNPL is a leading company operating on a private sector of Nepal. It produces various types of products that are related to health and personal care. Today, DNPL produces and sales following types of product:

1. Lal Dant Manjan

2. Binaca Tooth Powder

3. Vatika Hair Oil

4. Vatika Shampoo

5. Amla Hair Oil

6. Special Hair Oil

7. Baby Olive Oil

8. Hajmola Tablet

9. Hajmola Candy

10. Real Fruit Juice

11. Gulcose D Power

12. Kshudhavardhak Churan/ Pachan Churan

13. Chywanprash Parkshep/ DCP Mishran

14. Dantmukta

15. Plastic Containers/ Bottles

16. Taxin Resin

17. Honey

18. Dabur Lal Tooth Paste

19. Babool Tooth Paste

20. Meswak Tooth Paste

21. Vatika Hair Oil (Bulk)

22. SLES 30%

23. Vatika Face Pack

24. Vatika Honey Saffron Soap

25. Anmol Coconut Oil

26. Anmol Shampoo

27. Anmol Sarson Oil

28. Dabur Gulabari

29. Plastic Containers / Bottles / Caps/ plugs**

30. Bee Frames/ Hives/Thermocol Sheet

31. Sanifresh

32. Chirayita – Plant

33.Stevia Powder/Sappling

(Source: Annual Report 2006-07)

**Organizational Structure of DNPL:**

Organizing is the process of creating structure. It is deciding how best to group organizational activities and resources. It is an important function of management. It is essential for performing staffing, directing and controlling functions. Organizing is establishing working relationships among employees to achieve goals.
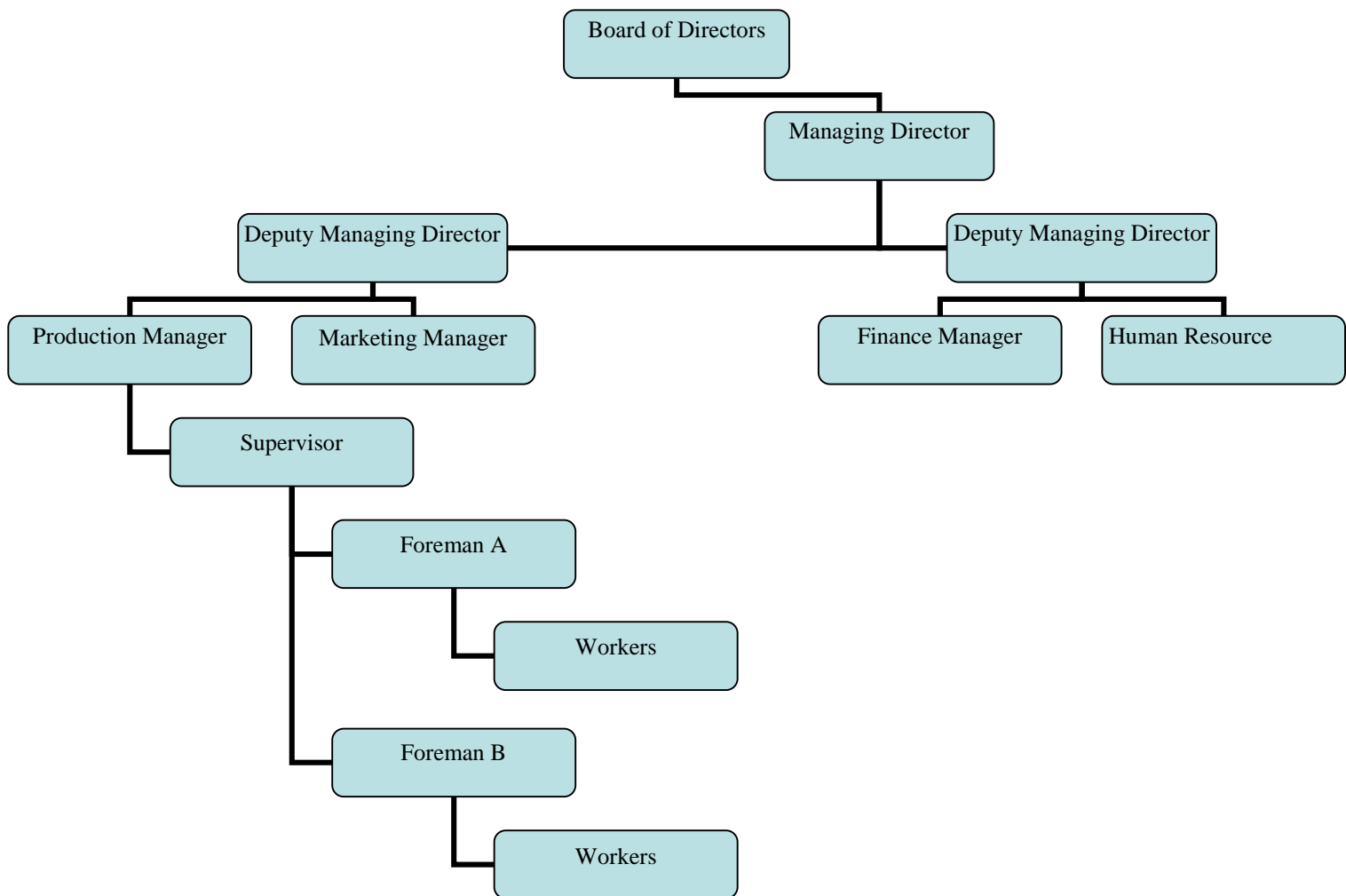
```
                        Board of Directors
                                 |
                          Managing Director
                 _____|_____
                |                                 |
    Deputy Managing Director          Deputy Managing Director
        _____|_____                  _____|_____
       |                 |                |                 |
Production Manager  Marketing Manager  Finance Manager  Human Resource
       |
   Supervisor
       |
       |____ Foreman A
       |          |____ Workers
       |
       |____ Foreman B
                  |____ Workers
```

**Figure: Organizational Structure of DNPL**

**Board of Directors**

| | |
|---|---|
| Mr. Pradip Burman | Chairman |
| Mr. Rukuma Shusher Rana | Managing Director |
| Mr. A.C. Burman | Director |
| Mr. P.D. Narang | Director |
| Mr. Amit Burman | Director |
| Ms. Iswori Rana | Director |
| Mr. Charanjeet Mohan | Director |
| Mr. Udayan Ganguly | Chief Executive Officer |
| Mr. S. Singh | AGM – Finance |

**Bankers**

Nabil Bank Ltd.

Standard Chartered Bank Nepal Ltd.

Nepal SBI Bank Ltd.

**Auditors**

T.R.Upadhya & Co. Chartered Accountants

104 Tanka Prashad Marg, Baneshwor

Kathmandu, Nepal


Internal Auditors

Pricewaterhouse Coopers

New Delhi, India

## 1.3 Focus of the Study

Industrialization is an integral part of a national plan to accelerate the rate of economic development in Nepal. It is imperative therefore to create situation in which industrial investment is encourage and the private sectors can be persuaded to play an important role. A nation can undertake development works through a sound economic development, which is possible with the establishments of different industries are established, they can provide various services and products at fair price and create more employment to skilled as well as unskilled workface of the country. Therefore an establishment of different industries helps to solve unemployment problems as well as better use of available resources and can earn foreign currency.

Every business firm needs various types of assets to run the business 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. Therefore, management has to manage properly different types of assets especially required to run the operation of the firm smoothly. To run daily production activities of the company besides the manpower, equipment etc., one of the major components is working capital without which other things are useless. Therefore, this study mainly focuses on how DNPL is managing its working capital.

## 1.4 Statements of the Problems

Nepalese Manufacturing Companies is using traditional approach in cash management, Receivable management. A more serious aspect of working capital management has been absence of any formalized system of

planning and budgeting. Main objective in managing working capital should be trade of liquidity its profit. Thus the basic problem of study is to examine the working capital management system as practices by company.

Working capital is essential for transaction motive to every business organization. The company needs working capital primarily to pay its obligation. Secondly, the holding of cash to precautionary motive to meet any contingency in future, the holding of cash to speculative motive to a desire, a firm to take advantage of opportunities and lastly it is balanced for compensative. Holding of cash has been found to be unplanned but generally for transaction motive. The strategy on collection and disbursement in organizations has been considerable liquidity position. They are not able to meet current obligation at a stated period of time.

This study is primarily focused on working capital management of DNPL or how they are managing their working capital and is the management policy appropriate? Therefore, the specific problems that will be analyzed during this study are as follows:

  i.   What is the size of the investment in each type of current assets?

  ii.  Is there appropriate investment in current assets to the total assets of DNPL?

  iii. Is there be  liquidity position in DNPL?

  iv.  Is overall profitability of DNPL is satisfactory?

## 1.5  Objectives of the Study

Working capital plays the crucial role of success or failure of any enterprises. The success of working capital as well as indianite working capital is harmful for business. The aspect of working capital concerned with short term financial decision. The aspect of financial management is concerned both short term and long term management of funds. The basic objective of this study is concerned with how Dabur Nepal Private Limited is managing its short term financial position.

The study is focused how the company is practicing its working capital management and what is its impact over the profitability of company. Current asset policy and current liability management is satisfactory or not. The general objective of the study is to examine the management of working capital in Dabur Nepal Private Limited.

The main objective of this study is to examine the working capital policy of DNPL. The following are the specific objectives of the study:

  i.    To study the working capital practice of DNPL.

  ii.   To study the impact of working capital on profitability.

  iii.  To analyze the current assets and current liabilities of DNPL.

  iv.   To suggest and recommend for the improvement of working capital management of DNPL.

## 1.6  Significance of the Study

An organization needs not only fixed capital but also the current assets. Working capital is nothing but the capital needed to run day-to-day operation of the business, such as wages, freight, raw materials, etc. This

study provides information about working capital management of DNPL. This study is important for:

    i.      BOD and Management of DNPL.

    ii.     Further Researcher

    iii.    Prospective Investors

## 1.7  Limitations of the Study

Every research has its own limitation the main focus of the study is to analyze and examine the financial position of Dabur Nepal Private Limited.

Most of private business companies does not provide actual financial data. Financial data are manipulated which brings great limitation for the research work. Financial statement may not disclose the true financial information.

In the case of companies of private sector internal information for outsiders is not easy. Due to the vast competition in the market company tries to make outsiders unknown about the different types of strategy and policies.

So the decision is fully based on the available financial statement and annual report of the company.

Therefore, due to time constraint and area of study covered by this research, it has certain limitations. These are as follows:

a.    This study is only done for the study of working capital management of DNPL.

b.    This study has covered only secondary data.

c.    Data from F/Y 2002/03 to the F/Y 2006/07 is tabulated and processed for drawing conclusions.

d.    Most of the data are collected from financial statements. Therefore, the accuracy of the research work solely depends on the data provided by the concerned company.

e.    This study has been conducted to fulfill the requirements of the MBS program of T.U. for the prescribed time not for generalization purposes.

## 1.8   Plan of Study

**Chapter I:  Introduction**

This chapter describes the general background, profile of the company, focus of the study, statement of the problem, objectives of the study, significance of the study and limitation of the study.

**Chapter II: Review of literature**

This chapter contains the theoretical analysis and brief review of related literature available. It also includes a discussion on the conceptual reviews as well as review of major studies in general.

**Chapter III: Research methodology**

This chapter deals with the research methodology, which consist of research design, sources of data, and information along with different analytical as well as statistical tools and techniques.

**Chapter IV: Presentation & analysis of data**

Chapter 4 deals with data collection procedure, presentation and analysis of data by using different financial and statistical tools and techniques.

## Chapter V: Summary, conclusions & recommendations

The last chapter five includes summary, conclusions and recommendations.

The bibliography and appendices have been incorporated at the end of the study.

# CHAPTER - II
# REVIEW OF LITERATURE

## 2.1  Conceptual Framework

Every manufacturing firm needs various types of assets in order to carry out its functions without any interruption. They are fixed and current assets. Some fixed assets have physical existence and are required to produce goods and services over a long period. This type of fixed asset is called tangible asset. It includes land, building, plants, machinery, furniture, and so on. However, some other fixed assets do not generate goods and services directly. However, it reflects the right of the firm.  It is called intangible fixed assets. It represents patents, copyrights, trademarks, and goodwill. Both fixed asset are written off over a period. Current asset are those resources of the firm, which are either held in the form of cash or expected to be converted into cash within an operating cycle of the business. It includes cash, marketable securities, and account receivable, stock of raw materials, work-in-process, and finished goods. Among these, some assets are requiring to meet the need of regular production and some for day-today expenses and short term obligations. Current liabilities are those claims of outsiders, which are expecting to be matured within an accounting year. It includes creditors, bills payable and outstanding expenses.

Working capital management is concerned with the problem that arises in the management of the current assets and current liabilities. It affects the overall functional areas of the firm. Thus, the success or failure of any manufacturing firms virtually depends upon the efficiency of working capital management. Therefore, it is crucial aspect of any firm.

Working capital is the life-blood and controlling nerve center for any types of business organization because without proper control upon it no business organization can run smoothly. As the management is current assets and current liabilities is necessary for day-to-day operations of any organization as it deals with that part of assets, which are transformed from one form during the course of manufacturing cycle. Therefore, the role of working capital management of significant for every business organization. They have been done a number of studies on working capital management from different experts in various enterprises

The main purpose of this chapter is to review the available literature on working capital management in the context of Nepalese enterprises including the available information of DNPL.

## 2.2 Review of Books

For the making this study easier, related literature from some books on working capital management are studied.

### 2.2.1 Concept of Working Capital

There are two concepts of working capital.

    a. Gross Working Capital

    b. Networking capital

Working capital management is the effective lifeblood of any business. Hence, the management of working capital plays a vital role for existing of any public enterprises. It is the centers of the routine day-to-day administration of current assets and current liabilities. Therefore, working capital management in public enterprises is very important mainly for

four reasons. Firstly, public enterprises must need to determine the adequacy of investment in current assets and otherwise it could seriously erode their liquidity base. Secondly, they must select the type of current assets suitable for investment to arise their operational efficiency. Thirdly, they are required to ascertain the turnover of current assets, which determine the profitability of the concerns. Lastly, they must find out the appropriate sources of funds to finance the current assets.

Proper management of working capital must ensure, adequate amount of working capital as per need of business firms. It should be in good health and efficiently circulated. To have adequate healthy and efficient circulation of working capital is necessary that working capital be properly determined and allocated to its various segments effectively controlled and regularly reviewed.

Working capital management is usually described as involving the administration of these assets namely cash, marketable securities, receivables and inventories and the administration of current liabilities. It means working capital management is concerned with the problem that arises in attempting to manage the current assets, current liabilities and the inter-relationship that exist between them.

Working capital refers to a firm's investment in short term assets, cash, short-term security, account receivables, and inventories. Gross working capital is defined as firm's total current assets. Net working capital is defined as current assets minus current liabilities. If the term "working capital" is used without further qualification, it generally refers to gross working capital.

Working capital management is concerned with the problems that arise in attempting to manage the current assets, the current liabilities and inter-relationship that exists between them. The current assets refers to those assets which is in ordinary course of business can be, or will be, turned into cash within one year without undergoing a diminution in value and without disrupting the operation of the firm. The major current assets are cash, marketable securities account receivable and inventory. Current liabilities are those liabilities, which are intended at their inception to be paid in the ordinary course of business within a year, out of the current assets or earnings of the concern. The basic current liabilities are account payable, bills payable, bank overdraft and outstanding expenses. The goal of working capital management is to manage the firms current assets and current liabilities in such a way that a satisfactory level of working capital is maintained. This is so because if the firm cannot maintain to satisfactory level of working capital, it is likely to become insolvent and may be forced into bankruptcy. The current assets should be large enough to cover its current liabilities in order to ensure a reasonable margin of safety. Each of current assets must be managed efficiently in order to maintain that liquidity of the firm while not keeping too high level of any one of them. Each of the short term source of financing must be continuously managed to ensure that they are obtained and used in to the best possible way. The interaction between current assets and current liabilities is, therefore, the main theme of the theory of working capital management.

There are specially two concepts of working capital-gross and net. Gross working capital refers of the firms investment in current assets. Current assts are the assets which can be converted into cash within an accounting

year and includes cash, short-term securities, debtors, bills receivables and stock.

Net working capital refers to the difference between current assets and current liabilities. Current liabilities are those claims of outsiders, which are expected to mature for payment within an accounting year, and include creditors, bills payable, bank overdraft and outstanding expenses or accrued income. Net working capital can be positive or negative. A positive net working capital arises when current assets exceed current liabilities. A negative working capital occurs when liabilities are in excess of current assets.

According to the net concept, working capital refers to the difference between current assets and current liabilities. In other words, it is that part of current assets financed with long-term funds. It focuses the liquidity position of the firm and suggests extending which working capital need to be financed by permanent source of funds. It is not very useful for comparing the performance of different firms as a measure of liquidity of the same firm over a time.

## 2.2.2 Types of Working Capital

Working capital can be classified into two parts – permanent working capital and variable working capital. These two types of working capital are necessary for continuous production and sales without any interruptions.
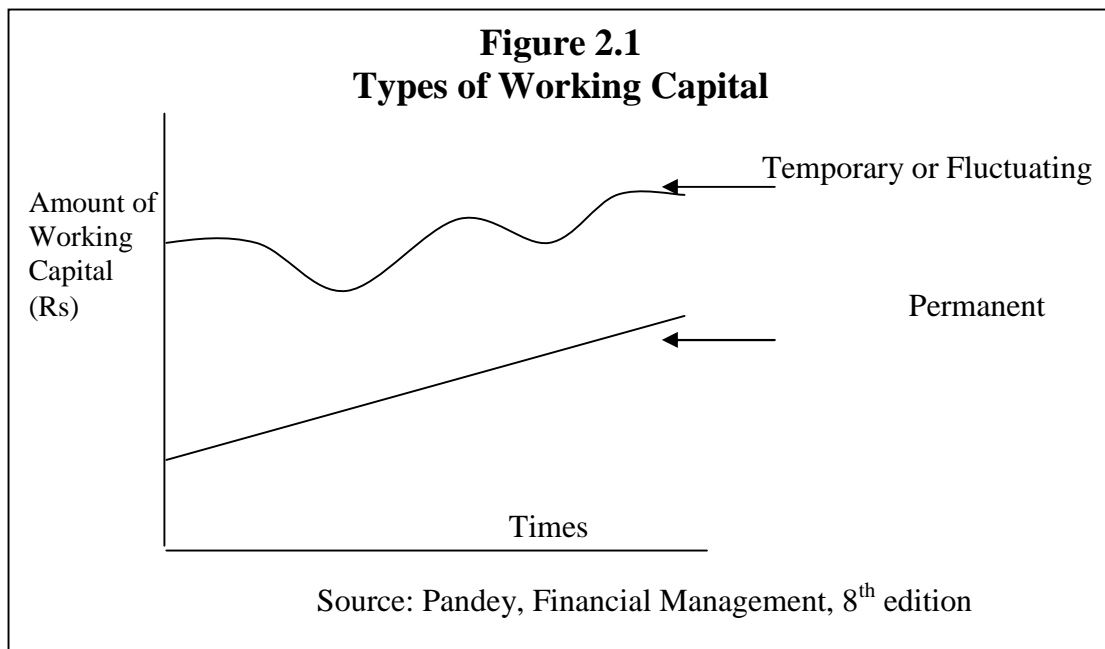
a.      **Permanent Working Capital:**

Permanent working capital refers to that level of currents assets, which is required on a continuous basis over the entire year. A manufacturing

concern holds certain minimum amount of working capital to ensure uninterrupted production and sales functions. This portion of working capital is directly related to the firm's expansion of operation capacity.

**b.      Temporary/ Variable working capital:**

Working capital which is temporarily or intermittently employed should be called variable working capital. Variable working capital is the additional amount of current assets i.e. particularly cash, receivables and inventories that is required during the more active duration of business.
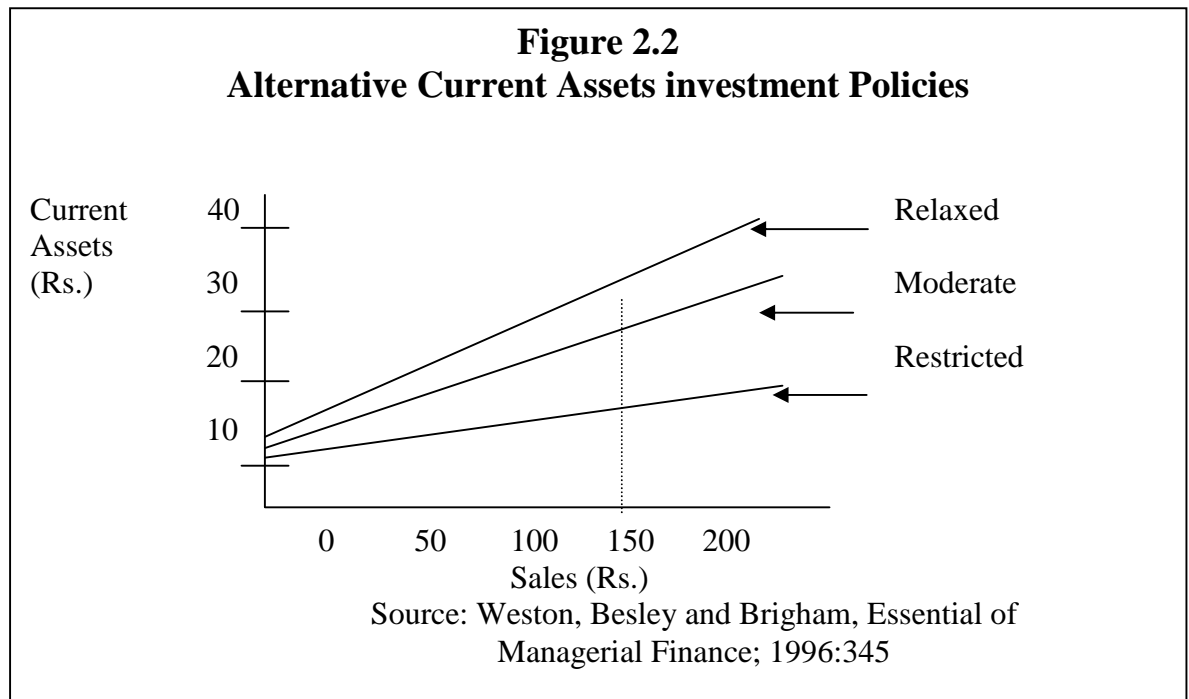
**Figure 2.1**
**Types of Working Capital**

Amount of
Working
Capital
(Rs)

Temporary or Fluctuating

Permanent

Times

Source: Pandey, Financial Management, 8<sup>th</sup> edition

## 2.2.3. Working Capital Policy

Working capital policy refers to the firm's basic polices regarding (1) target levels for each category of current asset and (ii) how current assets will be financed. So, first of all, in working capital management, firm has to determine how much funds should be invested in working capital in gross concept. Every firm can adopt different financing policy according

to the financial manager's attitude towards the risk return trade off. One of the most important decisions of finance 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 working capital.

## A.     Current Assets Investment Policy:

Current assets investment policy refers to the policy regarding the total amount of current assets to be carried to supports the given level of sales. There are three alternative current assets investment policies-Relaxed, restricted, and moderate policy.



**Figure 2.2**
**Alternative Current Assets investment Policies**

Source: Weston, Besley and Brigham, Essential of Managerial Finance; 1996:345

## i.     Relaxed Policy

This is known as relaxed current assets investment policy. In this policy, the firm holds relatively large amount of cash, marketable securities, and inventory and cash conversion cycles. It also creates the longer receivable

collection period due to the liberal credit policy. Thus, this policy provides the lowest expected return on investment with the lower risk.

## ii.    Restricted Policy

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

## iii.    Moderate Policy

In moderate policy, a firm holds the amount of current assets in between the relaxed and restricted policies. Both risk and return are moderate in this policy.
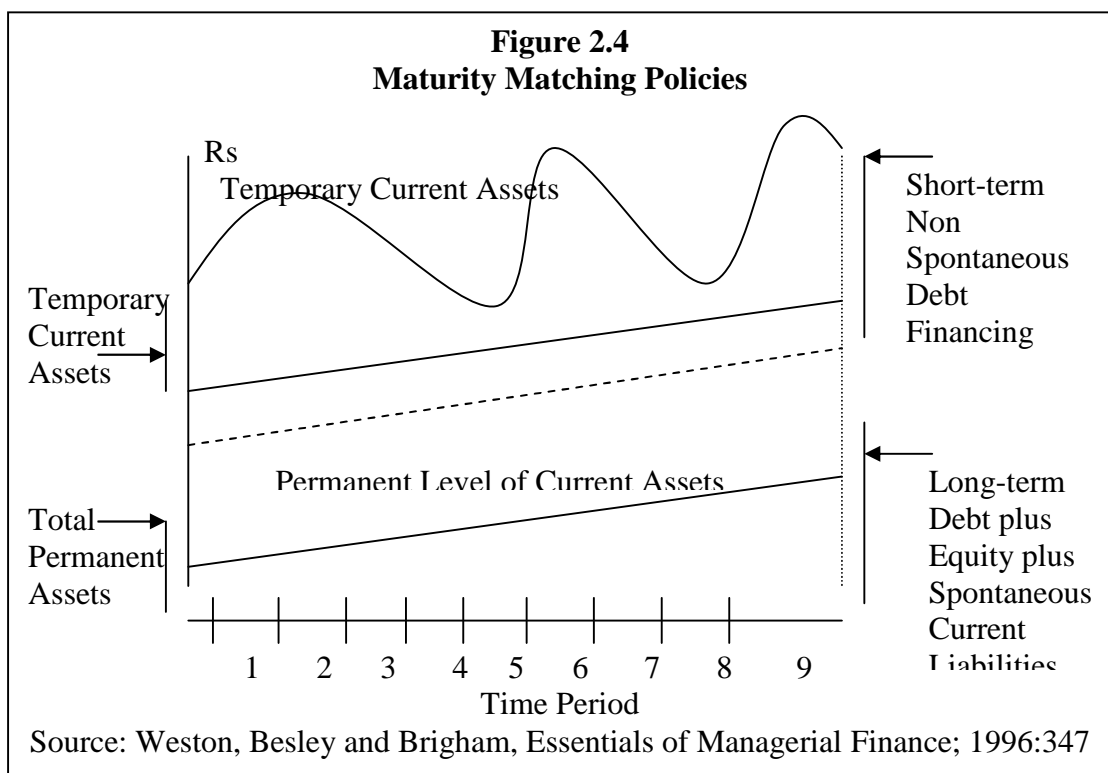
## B.    Current Assets Financing Policy

It is manner in which the permanent and temporary current assets are financed. Current assets are financed with the funds raised with different sources. But cost and risk affect the financing of may assets. Thus, current assets financing policy should clearly outline the sources of financing. There are three variants – aggressive, conservative and moderate policies of current assets financing.

## I.    Aggressive Policy

In an aggressive policy, the firm finances a part of its permanent current assets with short-term financing and rest with long-financing. In other words, the firm finances not only temporary current assets but also a part of the permanent assets with short-term financing.
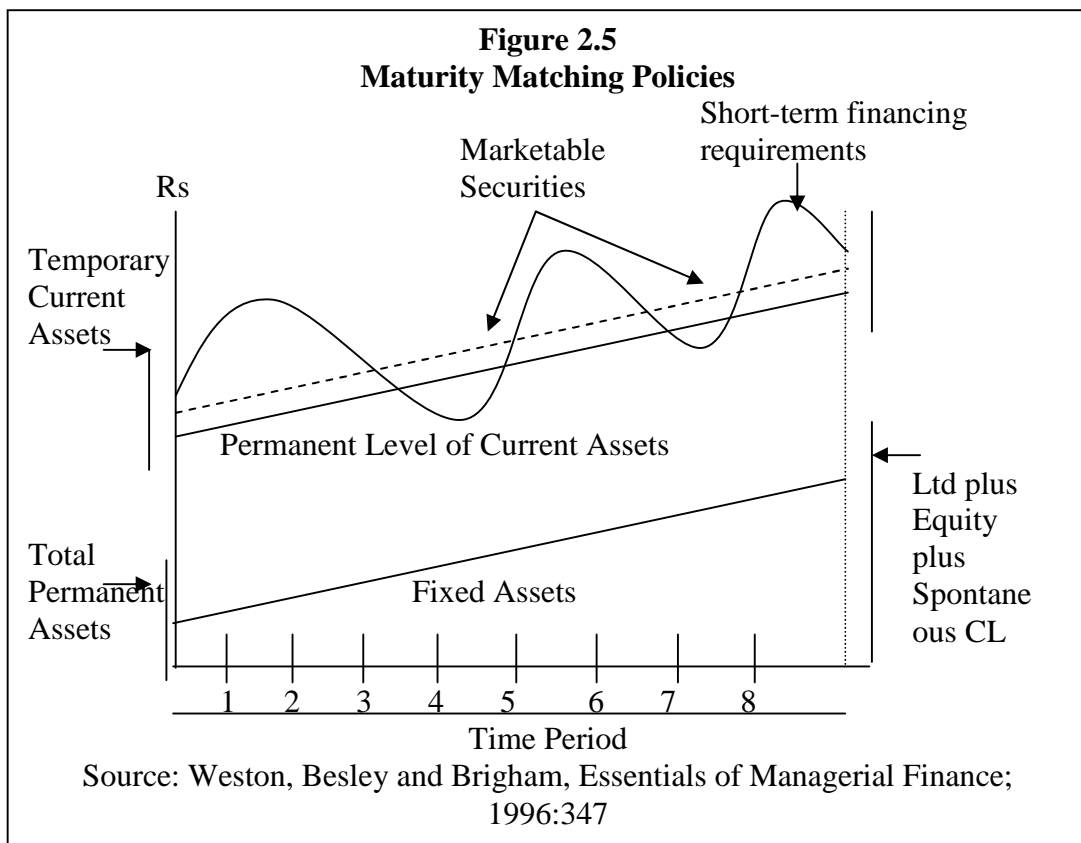
In general, interest rate increases with time i.e. shorter the times lower the interest rate. It is because leaders are risk adverse and risk generally increases with the length of leading period. Thus, under normal condition, the firm borrows on a short term financing rather than long term financing. On the other hand, if the firm finances its permanent current assets by short term financing, it runs risk of renewing the borrowing again and again. This continued financing exposes the firm to certain risk. It is because, in future interest expenses will fluctuate widely, and it may be difficult for the firm to raise funds during the stringent credit periods. In conclusion, there is higher risk, higher return and low liquidity position under this policy.



**Figure 2.4**
**Maturity Matching Policies**

Source: Weston, Besley and Brigham, Essentials of Managerial Finance; 1996:347

## II.     Conservative Policy

In conservation policy the firm uses long term financing to finance not only fixed and permanent current assets, but also part of the temporary

current assets. It means that firm depends more on the long – term source for financing needs. This policy leads to high level of current liabilities and higher interest cost. The risk and return are lower than of that of aggressive policy and liquidity position is higher than of aggressive one. The risk adverse management follows this policy.



**Figure 2.5**
**Maturity Matching Policies**

Source: Weston, Besley and Brigham, Essentials of Managerial Finance; 1996:347

## III. Moderate Policy

In this policy, the firm finances the permanent current assets with long term financing and temporary with short-term financing. It lies in between the aggressive and conservative policies. It leads to neither high nor low level of current assets and current liabilities. Temporary working capital is financed by short-term financing and permanent by long-term financing. Thus, no working capital is financed by long-term funds. Hence, net working capital is zero under this policy.

## 2.2.4 Objectives of Working Capital

Working capital is required to run the business smoothly and efficient. There is no doubt that a company cannot achieve its goals without proper use of working capital. That is why working capital is compared as a life-blood of any organization. The main objectives of arranging working capital are as follows:

> ➢ To fulfill the present need of business.

> ➢ To run the business smoothly.

> ➢ To perform the task as per objectives of business.

> ➢ To increase the attraction of business etc.

## 2.2.5 Need For Working Capital:

The need for working capital cannot be overemphasized. The firms' aim is 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, ever firm needs to hold the working capital components cash receivable, inventory etc. therefore, every firm needs working capital to meet the following motives.

**i.    The Transaction Motive:**

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

## ii. 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 and other factors such as strike, failure to provide service to important customer, unexpected slow down in collection of account receivable, cancellation of order for goods and some other unexpected emergency. Thus, the firm needs the working capital to meet any contingencies in future.

## iii. The Speculative Motive:

A speculative motive refers to the desire of a firm to take advantages of following opportunities.

a. Opportunity of profit making investment.

b. An opportunity to purchase raw materials at a reduced price on payment of immediate cash.

c. To speculative on interest rate and to make purchase at favorable price etc.

## 2.2.6 Financing of Working Capital

Every manufacturing concern or industry requires additional assets whether they are in stable or in growing conditions. The most important function of financial manager is to determine the level of working capital and decide how it is to be financed. Financing of any assets is concerned with two major factors i.e. 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.

I. Long-term financing

II. Short-term financing

III. Spontaneous financing

## I.     Long term financing:

Long term financing has high liquidity and low profitability. Ordinary share, debenture, preference share, retained earning and long-term debt are the major source of long-term financing.

## II.     Short Term Financing:

Firm must arrange short-term credit in advance. The source of short term financing of working capital are trade credit and bank borrowing.

## a.     Trade Credit:

It refers to the credit that a customer gets from suppliers of goods in the normal course of business. The buying firms did not have to 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 bill payable. It depends upon the term of trade credit.

## b.     Bank Credit:

Bank credit is the primary institutional sources for working capital financing. For the purpose of bank credit, amount of working capital requirement has to be estimated by the borrowers and bank are

approached with the necessary supporting data. After available of this data, bank determines the maximum credit based on the margin requirement of the security. The types of loan provided by commercial banks are loan arrangement, commercial papers etc.

### III.  Spontaneous Financing

Spontaneous financing arises from the nominal operation of the firms. The two major source of such financing are trade credit (i.e. credit and bills payable) 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 working capital with spontaneous sources as much as possible. In practical aspect, the real choice of current assets financing are either short-term or long-term sources. Thus, the financing manager concentrates his power in short-term versus long-term financing. Hence, the financing of working capital depends upon the working capital policy, which is perfectly dominated by management attitude towards the risk-return.

## 2.2.7 Determinants of Working Capital

The importance of efficient working capital management is an aspect of over all financial management. Thus, a firm plans its operation with adequate working capital requirement or it should have neither excess nor inadequate working capital. However, there are no sets of rules or formulae to determine the working capital requirements of the firm. It is because of a large number of factors that influence the working capital requirement of the firm. 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.

**i.     Nature of Business:**

The working capital requirements for a company are related to the kind of business it conducts. Public utilities have the lowest requirement for current assets because they have only cash sales and supply services, not products. In manufacturing companies, stocks in trade represent a large investment. Trading and financial firms require a large sum of money as working capital.

**ii.     Size of Business:**

The size of business also has a important bearing in determining working capital needs of a firm. A firm with large-scale operation will need more working capital than a smaller firm.

**iii.     Manufacturing Cycle:**

Working capital requirements of an enterprise is also influenced by the manufacturing or production cycle. It refers to the time involved to make the finished goods from the raw materials. During the process of manufacturing cycle, funds are tied-up. The longer the manufacturing cycle, the larger will be the working capital requirement and vice-versa.

#### iv. Production Policy:

The policy whether to follow uniform level production plan or carrying production plan determines the working capital needs of the individual enterprise. Naturally, a firm following uniform production policy requires higher amount of working capital and vice-versa.

#### v. Credit Policy:

Credit policy also effects the working capital of a firm. Working capital 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 working capital. Conversely, if a firm follows the stringent credit policy, it requires less working capital.

#### vi. Availability of Credit:

Availability of credit facility is another factor that affects the working capital requirements. If the creditors provide a liberal credit terms, then the firm will need less working capital and vice-versa. In other works, the firm can get credit facilities easily on favorable conditions required for operating the firm smoothly.

#### vii. Growth and Expansion of Business:

A growing firm has to invest funds in fixed assets in order to sustain its growing production and sales. This increase investment in current assets to support enlarges scale of operation to maintain good credit relations.

### viii. Price Level Change:

Price level changes also affect the working capital requirement of a firm. Generally, a firm requires maintaining the higher amount of working capital if the price level rises. Because the same level of current assets needs more funds due to the increasing price. In conclusion the implication of changing price level on working capital position will vary depending on the concerned firms.

### ix. Operating Efficiency:

Operating efficiency is also important factor, which influences the working capital requirement of the firm. It refers to the efficient utilization of available resources at minimum cost. Thus, financial manger can contribute to strong working capital position through operating efficiency. If a firm has strong operating efficiency then it needs lesser amount of working capital and vice-versa.

### x. Profit Margin:

The level of profit margin differs from firm to firm. It depends upon the nature and quality of product, marketing management and monopoly power in the market. If the firm deals with the high quality product, has a sound marketing management and enjoyed the monopoly power in the market then it earns quite high profit and vice-versa. Profit is a source to working capital because it contributes towards the working capital by generating more internal funds.

### xi. Level of Taxes:

The level of Taxes also influence working capital requirement. The amount of taxes to be paid in advance is determined by the prevailing tax

regulation. However, the firms profit is not constant or cannot be predetermined. Tax liability in a sense of short-term liquidity is payable in cash. Therefore, the amount of provision for tax is one of the important aspects of working capital planning. If tax liability is increased then the firm needs to increase the working capital and vice-versa.

## xii.    Cash Requirements:

Cash is one of the current assets, which is essential for the successful operations of the production cycle. Cash should be adequate and properly utilized. Adequate cash is also required to maintain good credit relations.

## xiii.    Business Fluctuations:

The situation whether an organization operation in boom or recession or depression period also determine the working capital needs of the organization..

## xiv.    Changes in Technology:

Technological developments related to the production process have a sharp impact on the need for working capital. Changes in technology will need additional amount of working capital due to fresh investment in new fixed assets.

## 2.2.8 Working Capital Cash Flow Cycle

The continuing flow from cash to supplier, to inventory, to account receivable and back into cash is known as working capital cash flow cycle / operating cycle. It continuously repeats. The cycle demonstrates the conversion of raw materials and labour to cash. Hence, this concept is also called cash conversion cycle model (Weston and Brigham; 1987:405). Cash conversion cycle model has been applied to more complex business and it is useful when analyzing the effectiveness of a firm's working capital management. There are following four factors of cash conversion cycle model.

### 1.    Inventory Conversion Period (ICP)

The length of time required converting raw material into finished goods and then to sell these goods could be defined as inventory conversion period. This period indicates the efficiency of the firm in selling its products. Inventory turnover is calculated by dividing the cost of goods sold by average inventory. It can be shown as follows:

$$\text{Inventory Conversion Period} = \frac{360}{\textit{Inventory Turnover}}$$

$$\text{Inventory Turnover} = \frac{\textit{sales}}{\textit{Stock}}$$

$$\text{Inventory Conversion Period} = \frac{\textit{Inventroy x Days in Year}}{\textit{Sales}}$$

### 2.    Receivable Conversion Period (RCP)

Receivable conversion period indicates the number of days debtor's turnover into cash. It analyses to determine collection of debtors and also

the efficiency of collection effects. It is one of the important financial tools for the measurement of cash conversion cycle. Generally, the longer the collection period, the more efficient is the management of credit. RCP is also know as average collection period or days sales outstanding (DSO). RCP can be calculated as follows:

$$\text{Receivable Turnover} = \frac{Sales}{Re\,ceivable}$$

$$\text{Receivable Conversion Period} = \frac{360}{Re\,ceivable\,Turnover}$$

### 3. Payable Deferral Period (PDP)

Time required to purchase raw material and labour and the payment of cash for them are called payable deferral period. It indicates the speed of creditors payable. A high payable conversion period is favorable for the company but too much higher period also can hamper the credit worthiness of the company. The payable deferral period can be calculated using following formula.

$$\text{Payable Deferral Period} = \frac{Payable\ x\ days\ in\ Year}{Purchase}$$

### 4. Cash Conversion Cycle

Cash conversion Cycle is an important financial tool and also a quick and convenient way to analyze the ongoing liquidity of the firm over time. It generally measures the length of time that firm has funds ties up in working capital. Cash Conversion Cycle can be calculated by using following formula:

Cash Conversion Cycle = Inventory Conversion Period + Receivable Conversion Period – Payable Deferral Period

As we know that inventory and receivable are cash inflow of business and PDP is cash outflow of business. So, for the calculation of conversion cycle, RCP & ICP should be added up and PDP should be deducted.

## 2.3   Review of Related Journals/ Articles

This part mainly focuses on the review of articles/journals published by different management experts in the field of working capital management.

Dr. M.K. Shrestha in his study "Working capital Management in Public Enterprises" states that manager often lacks basic knowledge of working capital and its overall impact on the operative efficiency and financial viability of public enterprises which are Birgunj Sugar Development Corporation, National Trading Ltd., Royal Drugs Ltd., National Construction company of Nepal, Harisidhhi Brick & Tile Factory, Nepal Dairy Ghee Industry Ltd. and Chandeswori Textile Factory Ltd. The study has pointed at certain policy such as deficient financial planning, negligence of working capital management. deviation between liquidity and turnover etc. He has suggested some measures for their effective operation. The problem can be sorted through identification of needed funds, development of management information system, determination of sound combination of short-term source to finance working capital requirements.

R.S. Pradhan has published another article relating to working capital management. He studied on "The Demand for Working Capital by Nepalese Corporation". He analyzed the selected nine manufacturing

public corporation with the 12 years data from 1973-1984. Regression education has been adopted for the analysis. He has summarized that the earlier studies concerning about the demand for cash and inventories by business firm did not report unanimous findings. A lot of controversies exist in respect to the presence of economics of scale, roles of capital cost, capacity utilization rates and the speed with which actual cash and inventories are adjusted to describe cash and inventories respectively. The pooled regression results show the presence of economics of scale with respect to the demand for working capital and its various components. The regression results suggest strongly that the demand for working capital and its components is function of both sales and their cost. The estimated result show that the inclusion of capacity utilization variable in model seems to have contributed to the demand function cash and net working capital only. The effect of capacity utilization on the demand for inventories receivables and gross working capital is doubtful.

D.R. Acharya has published another article relating to working capital management. He has described the two major problems-operational problems and organizational problems, regarding the working capital management in Nepalese PE's. The operational problems he found are increase of current liabilities than current assets. Not allowing the current ratio of 2:1 and slow turnover of inventory. Similarly, change in working capital in relation to fixed capital had very low impacts over the profitability, thin transmutation of capital employed to sales, absent of apathetic management information system, break even analysis, funds flow analysis, and ratio analysis were either not done or ineffective for performance evaluation. Finally, monitoring of the proper functioning of working capital management has never been considered managerial job.

In the second part he has listed the organizational problems in the PE's. In most of the PE's there is lack of regular internal and external audit system as well as evaluation of financial results. Similarly, very few PE's have been able to present their capital requirement, functioning of finance department is not satisfactory and some PE's are even facing the under utilization of capacity.

Pradhan and Koirala had jointly conducted a study on "Working Capital Management of Nepalese Corporations". They had focused on evaluation of working capital of selected manufacturing and non-manufacturing public enterprises. This study was concentrated in the size of investment in current assets, significance of current assets management. The major finding of the study were as follows:

- Investment on total assets had declined over a period of time in both the manufacturing corporations. However, the manufacturing corporations consistently had more investment in cash and receivables as compared to non-manufacturing corporations.

- Inventory management was of great significance in manufacturing corporations and the management of cash and receivables was of great significance in non-manufacturing corporations.

- Management of working capital was more difficult than that of fixed capital.

- The major motive for holding cash in Nepalese corporations was to provide a reserve for routine net outflows of cash to keep on the production process.

## 2.4 Review of Related Thesis

### 1.  Deependra Raj Sharma's Study

Dependra Raj sharma (1999) has carried out his research on "A Study on Working Capital Management of Nepal Battery Company Limited (NBCL)". The main objectives of his study are as follows:

⟩ To analyze the liquidity, composition of working capital, assets utilization and profitability position of NBCL.

⟩ To study the relationship between sales and different variables of working capital in NBCL.

The major findings of his study are as follows:

⟩ There is unsignificant inventory management policy, unnecessary tie up of working capital and less utilization of working capital in NBCL.

⟩ There is insignificant relationship in between inventory into sales. This indicates the inefficiency in turning its inventory into sales.

⟩ There is good liquidity position of the company.

He also found that there is an operating inefficiency in the company and by reducing operating expenses; the company can improve its profitability.

### 2.  Naresh Kunwar's Study

Naresh Kunwar (2000) has carried out his study on "A study on Working Capital Management of Pharmaceutical Industry of Nepal with Special Reference to Royal Drugs Limited." His basic objective of the study is to evaluate the relationship between selected variables regarding working

capital and to examine the management of working capital in RDL. The major findings of the study are as follows.

) Inventory holds the largest portion of current assets among cash and bank balance and receivable.

) Company is not able enough to utilize current assets properly, there is unsatisfactory inventory management system and poor liquidity position.

) The overall return position of the company is also not in favorable condition because if inefficient utilization of current assets, total assets and shareholders wealth.

Therefore the management of working capital in RDL is not in satisfactory position.

**3.      Prem Kumar Shrestha's Study**

Prem Kumar Shrestha (1999) has carried out a research on "A Study on Working Capital Management in Bhrikuti Paper Mils Limited." His main objective is to analyze the current assets and current liabilities and their impact and relationship to each other. His major findings are as follows:

) Cash and Bank Balance holds the largest part of current assets.

) There is increasing trend in liquidity and decreasing trend in current assets.

) There is discouraging profitability caused by the low return on total investment of the mill.

## 4.    OM Birkram Gurung's Study

Gurung (2002) has carried out his research on "A Study on Working Capital Management of Nepal Lever Limited. "The main objective of his study is to examine the working capital management of Nepal Lever Limited. The major findings of his study are as follows:

⟩ Inventory holds the major portion of current assets followed by miscellaneous current assets, sundry debtors, cash and bank balance.

⟩ The liquidity position of NL Ltd. is satisfactory hut not perfect though increasing trend implies that liquidity position can be expected to be good in future.

⟩ There is not trade off between liquidity and profitability: however profitability of NL Ltd. is satisfactory.

## 5.    Basudev Shrestha's Study

Shrestha (2002) has carried out his research on "A Study in Working Capital Management of Dairy Development Corporation." The main objective of the study is to analyze the current assets and current liabilities and their impact and relationship to each other. The major findings of his study are as follows:

⟩ The major components of current assets in DDC are inventory, cash and bank balance, sundry debtors and miscellaneous current assets in which inventory hold the major portion respectively in each year.

) The company's investment in the form of working capital has been increasing. The average investment in current assets is lower with respect to fixed assets during the study period and DDC has no clear vision about the investment in current assets to fixed assets portion.

) The average receivable turnover and ACP is in fluctuating trend during the study period.

) There is ineffective liquidity position and unsatisfactory profitability ratio in DDC.

) The overall return position DDC is negative i.e. not in favorable condition. It is because of inefficient utilization of CA, TA and shareholder's wealth.

## 2.5 Research Gap

Review of literature is an essential part of all studies. It is a way to discover what other research in the end of our problem has uncovered. A critical review of literature helps the research through understanding and insights into previous research works that relates the present study. It also avoids investigating problem that has already been definitely answered. Therefore researcher seems to identify these new contributions and add them to the body of knowledge before researcher conducts own investigation. The purpose of literature review is this to find out what research have been conducted in ones chosen field of the study and what remains to be done. It provides to move ahead the past research work. It provides separation point to researcher from others. It establishes to a point of departure for future research in this research work. Since I have selected the DNPL and five Accounting years, for analysis because of this

period none of research is held till now. This analysis is taking recent years practices of Dabur Nepal PVT LTD in working capital management. Since DNPL is the only of the major company working with foreign investment in Nepal and its share in market is very good so the research is meaningful and useful.

# CHAPTER – III
# RESEARCH METHODOLOGY

## 3.1 Research Design

A research design is a plan for the collection and analysis of data. Research design consists of important procedure and techniques for guiding, analyzing and evaluating the study. Secondary data have been used in order to achieve the predetermined objectives of this research. This study is based on descriptive and analytical method. Thus, the data on DNPL of five years are collected and analyzed as per the need of this study.

## 3.2 Population and Sample

All the manufacturing & trading organizations are population. Out of them, only DNPL is taken as a sample.

## 3.3 Nature and Sources of Data

The data & information used in this study are secondary in nature. The main sources of secondary data are annual reports and audited financial statements of the company.

## 3.4 Collection of Data

Financial data required to achieve the set objectives of this 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 documents have been carried out.

## 3.5 Data Processing & Analysis

This study is mainly based on the secondary data. Thus, after collection of financial statement, master sheet of financial data was prepared and necessary financial data have been extracted and tabulated as per the need of this study. In order to process the data financial statement and other available information were reviewed. These data were grouped in different tables and charts according to their nature and analytical & statistical tools are used for analyzing quantitative data to reach true & sincere conclusion.

### 3.5.1 Analytical Tools

The analytical tools used for this study is financial ratio analysis.

**Ratio Analysis**

Ratio analysis is an essential tool of financial analysis, which helps in identifying finance strengths and weakness of any manufacturing concern. The ratio is calculated by dividing one component to another to show their corresponding relationship with each other.

**i.     Percentage of Current Assets to Sales (CAS):-**

Sales are only that activity which generates fund from outside. So it is the most important parts of manufacturing industries. The amount invested on current assets is to support the given level of sales. It is calculated as:

$$CAS \ X \ \frac{CurrentAssets}{Sales} x100 \ \%$$

As the percentage of CAS increases the risk and profitability also increases.

## ii.    Percentage of Current Assets t Fixed Assets (CAFA):-

For the success f any organization, firm should invest in current assets as well as fixed assets to support a particular level of output.

It is calculated as:

$$CAFA \; X \; \frac{Current\,Assets}{Fixed\,Assets} \, x100 \; \%$$

## iii.    Sundry Debtors to Current Assets (SDCA):

This ratio shows the percentage of current assets in the form of debtors. This ratio is calculated by dividing sundry debtors by current assets.

$$SDCA \; X \; \frac{Sundry\,Debtors}{Current\,Assets} \, x100 \; \%$$

## iv.    Inventories to Current Assets (ICA):-

This ratio is calculated by dividing inventories by current assets. This ratio shows the percentage of inventories to current assets.

$$ICA \; X \; \frac{Inventories}{Current\,Assets} \, x100 \; \%$$

The increase in the ratio is an indication of weak current assets management of the firm.

## v.    Cash & Bank balance to Current Assets (CBCA):-

This ratio shows the percentage of cash & bank balance to current assets. It is calculated as:

$$CBCA \text{ X } \frac{Cash \& Bank}{Current\ Assets} x100 \text{ \%}$$

Higher the percentages lower the risk and profitability of the business.

### vi. Miscellaneous Current Assets to Current Assets (MCACA):-

This ratio shows the percentage of current assets in the form of Miscellaneous. current assets. It is given by:

$$MCACA \text{ X } \frac{Miscellaneous.Current\ Assets}{Current\ Assets} x100 \text{ \%}$$

### vii. Sundry Creditors to Current Liabilities (SCCL):-

This ratio shows the percentage of current liabilities in the form of sundry creditors. It can be calculated as:

$$SCCL \text{ X } \frac{Sundry\ Creditors}{Current\ Liabilities} x100 \text{ \%}$$

### viii. Provisions of Current Liabilities (PCL):-

It shows the percentage of current liabilities in the form of provisions. It is given by:

$$PCL \text{ X } \frac{Pr\ ovisions}{Current\ Liabilities} x100 \text{ \%}$$

### ix. Current ratio. (CR)

This ratio is computed as dividing current assets by current liabilities. The high indicates the liquidity position of company is strong and able to pay current obligation or bills .Generally, the current ratio of 2:1 is considered

satisfactory. More ratios indicate the greater amount of working capital and fewer ratios indicates lesser amount of working capital. It is given by:

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

## x.    Quick Ratio (QR):

This ratio is computed as dividing current assets by current liabilities. The quick assets do not include the amount invested in the inventories. It is reliable to measure the company's liquidity. Generally, the company with quick ratio of 1:1 is considered to be in sound position. It is given by:

$$QR \ X \frac{Quick\ Assets}{Current\ Liabilities}$$

## xi.    Inventory Turnover Ratio (ITR)

This ratio establishes the relationship between costs of goods sold  and average inventory or sales and closing inventory. The objective of this ratio is to measure the ability of the firm to utilize its inventory. This ratio is expressed as:

$$ITR \ X \frac{Sales}{Clo\sin g\ Inventory}$$

It indicates the speed with which the inventory is converted into sales. Generally, high ratio indicates either the same volume of sales has been maintained with lower investment in stock or the volume of sales has increased without any increase in the amount of stocks.

(a) Inventory Conversion Period:

The inventory conversion period is the average length of time required to convert material into finished goods and then to sell those goods. It is amount of time the product remains in inventory in various stages of completion.

$$Inventory\ Conversion\ Period\ X \frac{Inventory}{\dfrac{Cost\ of\ goods\ sold\ /\ sales}{365}}$$

## xii. Receivable or Debtors Turnover Ratio (RTR):

The liquidity position of any firms depends upon the quality of debtors to a great extent. The receivable turnover indicates the collection efficiency of the firm. The higher ratio indicates the efficient management of credit & vice-versa. The receivable turnover ratio is given by:

$$RTR\ X \frac{Credit\ Sales}{Debtors}$$

## xiii. Total Assets Turnover (TATR):

This ratio establishes the relationship between net sales and total assets. The objective of computing this ratio is to determine the efficiency with which the total assets are utilized.

$$TATR\ X \frac{Sales}{Total\ Assets}$$

It indicates the firm's ability to generate sales per rupee of investment in total assets.

(b) Average Collection Period/Days of sales outstanding (DSO)

Average length of time required to collect account ratio receivables.

$$DSO \; X \dfrac{Sundry \quad Debtors}{\dfrac{Sales}{365}}$$

### xiv.   Gross Profit Margin (GPM)

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

$$GPM \; X \; \dfrac{Gross\,\Pr ofit}{Sales} x100 \; \%$$

### xv.   Net profit Margin (NPM):

Net Profit margin is obtain after deduction all operating expenses and income tax from gross profit. It is 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 computed by dividing net profit by sales and given by:

$$NPM \; X \; \dfrac{Net\,\Pr ofit\,After\,Tax}{Sales} x100 \; \%$$

### xvi.   Return on Total Assets (ROA)

This ratio studies the relationship between net profit after tax and total assets. This ratio is computed by dividing net profit after tax by total assets.

$$ROA \; X \; \dfrac{Net\,\Pr ofit\,After\,Tax}{Total\,Assets} x100 \; \%$$

### 3.5.2 Statistical Tools

A brief introduction of the statistical tools that have been used in this study is given below:

**Karl's Pearson's Correlation Coefficient (r):**

In order to test significance of the relationship in between two variables during the period of this study, Karl Pearson's correlation coefficients (r) is used and is calculated as:

$$r \text{ X} \frac{XY}{\sqrt{X^2} \sqrt{Y^2}}$$

Where,

$$X \text{ X} f_x \text{ Z } \bar{x} \text{ A\& } Y \text{ X} f_y \text{ Z } \bar{y} \text{ A}$$
$$x \text{ X } First \ var iable \ x$$
$$y \text{ X } Second \ var iable \ y$$
$$\bar{x} \text{ X } Mean \ of \ var iable \ x$$
$$\bar{y} \text{ X } Mean \ of \ var iable \ y$$

**Probable Error (PE):**

$$PE \text{ X} 0.6745 \ x \ \frac{1 \text{ Z} f r \text{ A}}{\sqrt{n}}$$

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

## 3.6   Definitions of the Operational Terms

The operational 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 that the working capital covers total volume of current assets of DNPL.

**II.   Current Assets**

Those assets which are convertible or meant to be converted into cash within a year's time. Current assets include inventory, cash & bank balance, sundry debtors, prepaid expenses, loans and advances.

**III.  Inventories**

It includes the stores & spares, raw material, packing materials, stock in process, finished goods and materials in transit.

**IV.   Receivable**

It includes receivables from the debtors which are over six months & others.

**V.    Prepaid, Advances, Loans**

It includes the advance to employees, other advances, security deposits, advance to suppliers, prepaid expenses, insurance claim etc.

**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. Current Liabilities

Liabilities which fall due to payment in relative short period, normally no more than one year. Current liabilities include sundry creditors, short-term loans & provisions.

## VIII. Sundry Creditor

It includes total amount purchases and others, which are to be paid to the creditors.

# CHAPTER-IV

# PRESENTATION AND ANALYSIS OF DATA

## 4.1 Introduction

The main objective of this chapter is to fulfill the objective of the study by presenting data and analyzing them with the help of various tools followed by methodology. This chapter will present the analysis of components of working capital of DNPL. It will present composition of current assets and current liabilities, relationship between current assets and fixed assets, turnover position, liquidity position, profitability position and financing policies of DNPL etc.

## 4.2 Working Capital Policy

Working capital policy refers to the firm's basic polices regarding the target level for each category of current assets and liabilities. Working capital management refers to the administration of all current assets and current liabilities in a proper way.

Every firm wants to maximize the wealth of its shareholders. In order to achieve this target, it has to perform many functions. For this purpose, firm has to determine the suitable current assets investment policy, maintain proper relation of current assets with fixed and sales, and finance the current assets with short-term as well long-term sources. Thus, the better performance of current assets is the integral part of working capital management.

## 4.2.1 Current Assets Investment Policy

Every firms needs current assets as well as fixed assets to operate its activities effectively. Current assets policy refers to the policy regarding the total amount of current assets required to support the given level of sales. Firm may follow the different investment policy according to their attitude towards the risk and the nature of the business. The current assets policy of the DNPL has been analyzed here in the terms relationship between current assets with fixed assets and current assets with sales.

## 4.2.1.1 Ratio of Current Assets to Fixed Assets (CAFA)

For the purpose of success of any manufacturing concerns, firms should invest in current assets as well as fixed assets to support a particular level of output. Therefore, the firm should determine the proper portion of current assets with fixed assets. The level of current assets can be measured by relating current assets (CA) to fixed assets (FA). Dividing current assets by fixed assets gives CAFA ratio. Assuming a constant level of fixed assets, a higher CAFA ratio indicates a conservative current assets policy and lower CAFA ratio means an aggressive policy. Conservative policy indicates a greater liquidity and lower risk, while an aggressive policy indicates higher risk and poor liquidity.

# Table No. 1

## Ratio of Current Assets to Fixed Assets

| Fiscal Years | Current assets (Rs in lakhs) | Fixed assets (Rs in lakhs) | CAFA (in times) |
|---|---|---|---|
| 2002/03 | 14341.66 | 8358.79 | 1.72 |
| 2003/04 | 14608.52 | 7758.36 | 1.88 |
| 2004/05 | 14342.91 | 9099.66 | 1.58 |
| 2005/06 | 15233.93 | 10250.32 | 1.49 |
| 2006/07 | 15397.28 | 9799.53 | 1.57 |
| Average | 14784.86 | 9053.33 | 1.63 |

Source: Based on Appendix 6

The average current assets and fixed assets of DNPL during the study period are Rs. 14784.86 lakhs and Rs. 9053.33 lakhs respectively. Although company's investment in current assets is increasing but in F/Y 2004/05 investment in current assets is decrease.

Investment in fixed assets is fluctuated. Investment in fixed asset in F/Y 2003/04 is decreased and increased in F/Y 2005/06 again decreased in F/Y 2006/07. The ratio of current assets to fixed assets of DNPL is presented in above table 1. This table shows that the ratio of current assets to fixed assets is fluctuating during the study period. It varies from 1.49 to 1.88 times during the study period and the average CAFA ratio is 1.63 times. In the table, the trend of current to fixed assets is fluctuating year by year.

**Figure No. 1**

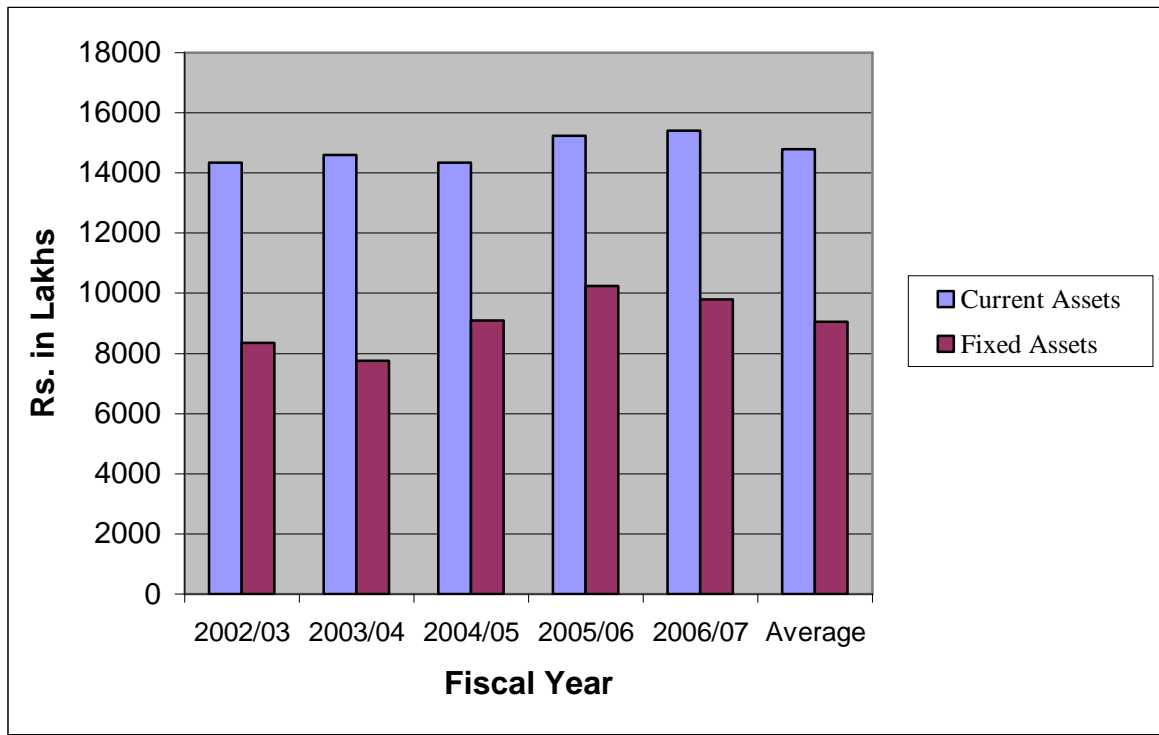**Current Assets and Fixed Assets**



Figure 1 shows the current assets and fixed assets of DNPL. From this figure, it is clear that the investment in current assets is higher than fixed assets. Thus diagram clearly shows that the company's current assets policy changing aggressive from conservative one.

## 4.2.1 Percentage of Current Assets to Sales

Sales are only that activity which generates cash inflow. So it is vital for manufacturing company like DNPL. The survival and growth of every manufacturing firm depend on the proportion of sale of the product which they produce. The company's sales policy depends upon the available of resources and demand for the product. It is greatly affected by the financial policy and their strategic planning. Therefore, the coordination

between these elements of the company is the most important. Thus, the company invests in current assets to support the given level of sales. The amount of investment in current assets is to support the given level of sales, which depends upon the current assets investment policy and the attitude of management. When a firm holds relatively large amount of current assets to support a given level of sales then it is called fat cat (relaxed policy) policy. When a firm holds relatively minimum amount of current assets to support sales then it is called lean and mean policy or (restricted policy) and between these two policies is called a moderate policy. For the purpose of analysis of investment policy of current assets, percentage of current assets to sales has been used.

**Table No. 2**

**Ratio of Current Assets to Sales**

| Fiscal Years | Current assets (Rs in lakhs) | Sales (Rs in lakhs) | CA to sales % |
|---|---|---|---|
| 2002/03 | 14341.68 | 26995.05 | 53.13 |
| 2003/04 | 14608.52 | 30177.02 | 48.41 |
| 2004/05 | 14342.91 | 27287.90 | 52 |
| 2005/06 | 15233.93 | 32270.23 | 47.21 |
| 2006/07 | 15397.28 | 36608.41 | 42.01 |
| Average | 14784.87 | 30667.72 | 48.55 |

Source: Based on Appendixes 6 and 7.

The percentage of current assets to sales of DNPL is presented in table 2. The percentage of current assets to sales is also fluctuating during the study period. It varies from 42.01% to 53.13% more than 50% of assets are invested in current assets in the F/Y 2002/03 and 2004/05 and the average investment in current assets to sales is 48.55% which shows that in order to maximize the sales the company is investing moderate amount in current assets. There facts suggests that the company is following moderate policy.

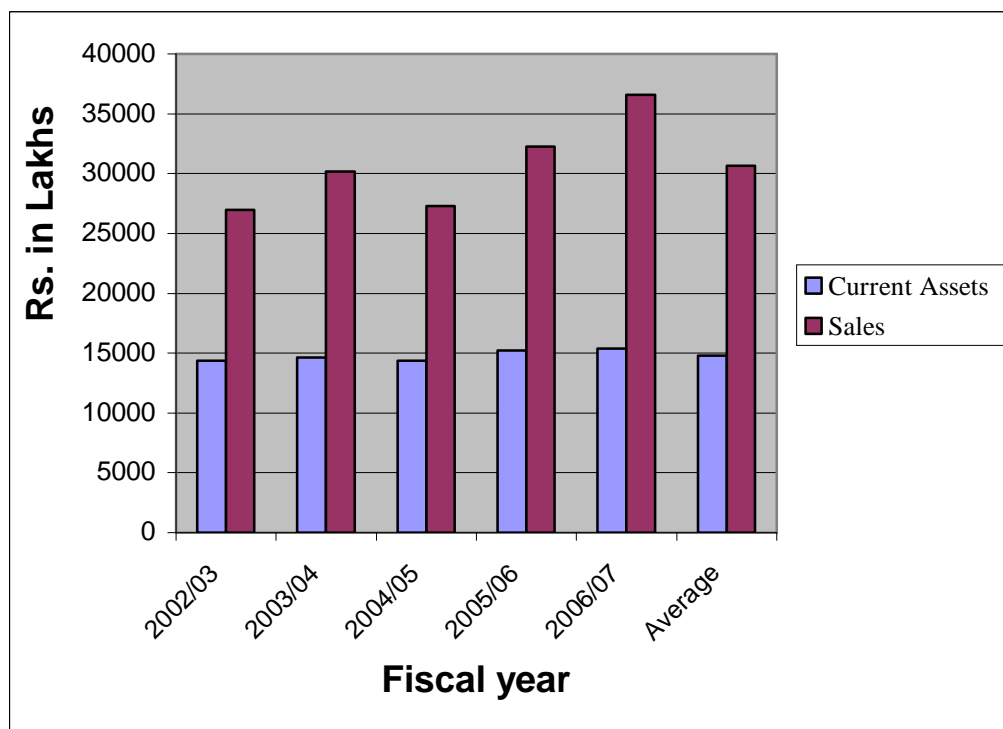**Figure No. 2**

**Current Assets and Sales**



Figure 2: shows the proportion of current assets and sales of DNPL. It is clear from the figure that the company is investing more in current assets in order to maximize the sales. Although current assets and sales except in F/Y (2004/05) is decreasing and increasing every year during the observed period but the percentage of current assets to sales is

fluctuating. Thus the diagram clearly shows that the company is using a moderate current assets investment policy.

## 4.2.2 Current Assets Financing Policy

Every manufacturing concern needs the working capital for its regular operation. Working capital is divided into two parts; permanent and temporary. The operation of permanent and temporary working capital depends on the nature and size of the firm and it is also affected by the attitude of the management towards the risk and return. The access of the firm in sources of fund also affects the working capital management. The firm should find out the required amount of working capital. Firm has to raise funds required for working capital from different sources like short-term, long-term and spontaneous financing. However the firm uses different financing sources according to their financing policy i.e. aggressive, conservative and moderate. Firm should maintain the proper level of working capital by financing the current assets from appropriate sources.

# Table No. 3

## Financing of Current Assets

| Fiscal Years | Current assets (Rs in lakhs) | Short-term Financing | | Long-term Financing | |
|---|---|---|---|---|---|
| | | (Rs in lakhs) | % | (Rs in lakhs) | % |
| 2002/03 | 14341.66 | 4676.68 | 32.61 | 9664.99 | 67.39 |
| 2003/04 | 14608.52 | 8806.19 | 60.28 | 5802.33 | 39.72 |
| 2004/05 | 14342.91 | 9578.19 | 66.78 | 4764.62 | 33.22 |
| 2005/06 | 15233.93 | 11749.61 | 77.13 | 3484.26 | 22.87 |
| 2006/07 | 15397.28 | 7313.25 | 47.50 | 8084.03 | 52.50 |
| Average | 14784.86 | 8424.82 | 56.99 | 6360.046 | 43.01 |

Source: Based on Appendix 6

The above table 3 show that the DNPL has financed its working capital both with short-term and long term financing. The amount of short-term financing is greater than long-term financing except in F/Y 2002/03 and F/Y 2006/07. The average percentage of short-term and long term financing to current assets of DNPL for five years are 56.99% and 43.01% respectively. The higher percentage of short-term financing used by the company to finance its current assets clearly suggests that the company is following a Aggressive policy.

**Figure No.3**

**Financing of Current Assets**
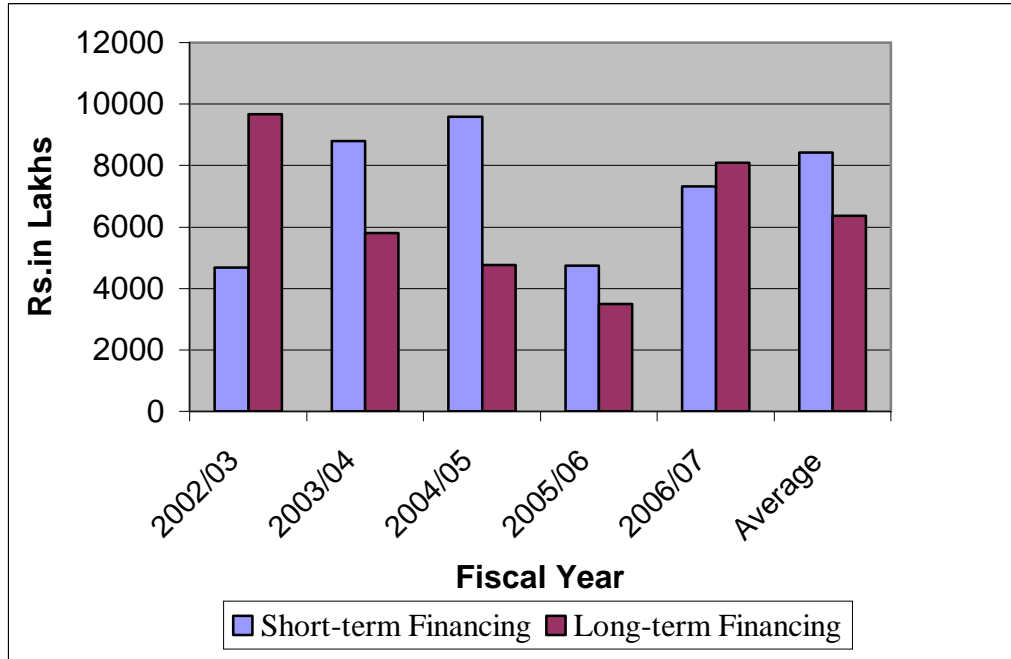


Figure 3 shows that the amount of short-term and long-term financing used by DNPL to finance its current assets. It is clear from the figure that the company is using more short-term source to finance its current assets except in F/Y 2002/03 and F/Y 2006/07.

## 4.3 Turnover Position

The behaviour of working capital utilization and improvement can be analyzed with the help of turnover ratio. These ratios measure the effectiveness with which a firm uses its available resources. These ratios are called turnover ratios since they indicate the efficiency with which the resources are being converted into sales (turnover).

The turnover ratio and conversion period depends on the firm's working capital policy. If the firm follows a conservative policy, it will have low inventory turnover ratio and high conversion period and vice-versa.

## 4.3.1 Inventory Turnover Ratio (ITR) and Inventory Conversion Period (ICP)

Inventories are the stock of the product, a company manufactures for the sales and the inventories are the components that make up a product. Inventory is the major part of the current assets. The shortage of required inventory results irregular production and hamper the production process. In other hand the excess inventory causes unnecessary holding of capital which increases the cost. These ratios measure the effectiveness with which a firm utilizes its inventory.

**Table No. 4**

**Inventory Turnover Ratio and Inventory Conversion Period**

| Fiscal Years | Sales (Rs in lakhs) | Inventory (Rs in lakhs) | ITR (in times) | ICP (in days) |
|---|---|---|---|---|
| 2002/03 | 26995.05 | 5368.78 | 5.03 | 72.59  73 |
| 2003/04 | 30177.02 | 6403.04 | 4.71 | 77.45  78 |
| 2004/05 | 27287.90 | 7939.92 | 1.44 | 106.20  107 |
| 2005/06 | 32270.23 | 8557.15 | 3.77 | 96.78  97 |
| 2006/07 | 36608.41 | 8829.26 | 4.15 | 88.03  89 |
| Average | 30667.72 | 7419.63 | 4.13 | 88.30  89 |

Source: Based on Appendixes 6 and 7.

The above table shows the ITR and ICP of DNPL. The inventory turnover is fluctuating between 3.44 to 5.03 times during the study

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period. The average inventory turnover is 4.13 times and the average sales and inventory of DNLP during the five years study period are Rs. 30667.72 lakhs and Rs. 7419.63 lakhs respectively. The inventory conversion period of DNPL is increasing up to F/Y 2004/05. In F/Y 2005/06 study observes that the inventory conversion period is decreasing in 97 days. On average it will take DNPL 89 days to convert its inventory into sales which is very high. Thus there is a poor utilization of inventory.

## 4.3.1 Receivable or Debtors Turnover Ratio (RTR) and Average Collection Period (ACP)

Receivable is the major component of current assets. It indicates the efficiency of the firm with the collection of book debts. The higher the ratio, the better it is, since it would indicate the debts are being collected more promptly.

**Table No. 5**

**Debtors Turnover Ratio and Average Collection Period**

| Fiscal Years | Sales (Rs in lakhs) | Sundry Debtors (Rs in lakhs) | RTR (in times) | ACP (in days) |
|---|---|---|---|---|
| 2002/03 | 26995.05 | 2471.57 | 10.92 | 33.42  34 |
| 2003/04 | 30177.02 | 2217.45 | 13.61 | 26.82  27 |
| 2004/05 | 27287.90 | 1564.92 | 17.44 | 20.93  21 |
| 2005/06 | 32270.23 | 2302.81 | 14.01 | 26.05  27 |
| 2006/07 | 36608.41 | 1883.38 | 19.44 | 18.78  19 |
| Average | 30667.72 | 2088.03 | 14.69 | 24.85  25 |

Source: Based on Appendixes 6 and 7

The above table 5 shows the RTR and ACP of DNPL during the study period. The RTR during the observed periods is fluctuation between 10.92 to 19.44 times and the ACP of DNPL is fluctuating between 21 to 34 days. On average the firm rules 25 days to collect in book debts.

### 4.3.2 Total Assets Turnover Ratio (TATR)

This ratio shows the relationship between sales and total assets. The main objective of this ratio is to determine the efficiency with which the total assets ate utilized.

**Table No. 6**

**Total Assets Turnover Ratio (TATR)**

| Fiscal Years | Sales (Rs in lakhs) | Total Assets (Rs in lakhs) | TATR (in times) |
|---|---|---|---|
| 2002/03 | 26995.05 | 22700.45 | 1.19 |
| 2003/04 | 30177.02 | 22366.88 | 1.35 |
| 2004/05 | 27287.90 | 23442.57 | 1.16 |
| 2005/06 | 32270.23 | 25484.25 | 1.27 |
| 2006/07 | 36608.41 | 25196.81 | 1.45 |
| Average | 30667.72 | 23838.19 | 1.29 |

Source: Based on Appendixes 6 and 7

The above table 5 show the TATR of DNPL during the five years study period. The TATR is fluctuating below 1.16 to 1.45 times. The average sales and total assets are Rs. 30667.72 lakhs and Rs.23838.16 lakhs respectively. The sales are in increasing trend except in F/Y 2004/05 and

Total assets are is fluctuating during the study period. The company's average TATR during the observed period is 1.29 times which indicates that the firm has to invest Rs. 1 in its total assets in order to generate sales of Rs.1.29.

## 4.4 Liquidity Position

Liquidity is crucial for firm's daily operation. The first and foremost objective of adopting working capital policy is to maintain appropriate and optimum level of liquidity in order to enable the enterprises to meet current short-term obligation when they become due for the payment. Liquidity is a prerequisite for the avoidance of technical insolvency and ultimately for the survival of the enterprises. However, it is a very crucial problem in maintaining the appropriate liquidity in any company as it indicates risk return trade off with higher or lower liquidity level. Higher liquidity reduces the risk but decreases the profitability and vice-versa.

### 4.4.1 Current Ratio (CR)

Current ratio measures the short-term solvency of the firm. This ratio is the crude measurement of liquidity position of a firm. In this study also, this ratio has been calculated by dividing the current assets by current liabilities. Current assets includes: sundry debtors, inventory cash etc. which can be converted into cash within an accounting year. Current liabilities includes; sundry creditors and provisions.
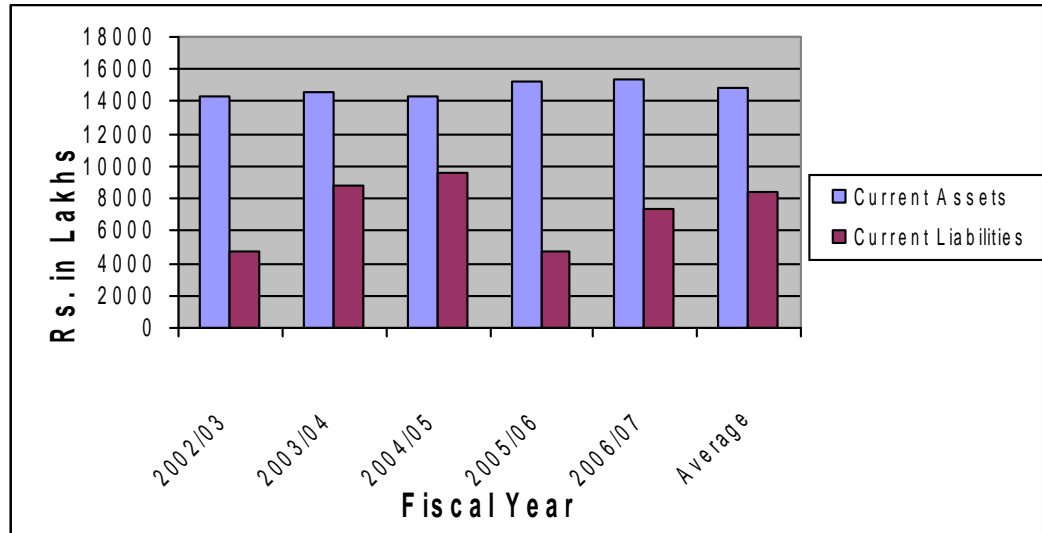
**Table No. 7**

**Current Ratio**

| Fiscal Years | Current Assets (Rs in lakhs) | Current Liabilities (Rs. in lakhs) | Current Ratio (in times) |
|---|---|---|---|
| 2002/03 | 14341.66 | 4676.68 | 3.07 |
| 2003/04 | 14608.52 | 8806.19 | 1.66 |
| 2004/05 | 14342.91 | 9578.29 | 1.50 |
| 2005/06 | 15233.93 | 11749.61 | 1.30 |
| 2006/07 | 15397.28 | 7313.25 | 2.10 |
| Average | 14784.86 | 8424.82 | 1.75 |

Source: Based on Appendix 6

The above table shows the current ratio of DNPL during the study period. The CR during the observed period was fluctuating through out the period. The average CR is 1.75 less than the standard 2.1. The CR is highest in F/Y 2002/03 and lowest in F/Y 2005/06. It indicates that current liabilities are fully unsecured with the current assets and the company is not in a positive to pay its obligation as and when they will mature.

**Figure No. 4**

**Current Assets and Current Liabilities**



The above figure shows the current assets and current liabilities position of DNPL during the five years study period. Firm has more current assets then current liabilities but does not meet the ratio 2:1. Thus the company has poor liquidity position.

## 4.4.2 Quick Ratio (QR)

Current ratio measures the short-term solvency in gross term. It include inventory too. Thus it does not measure the actual liquidity position of the firm. Therefore, QR has been used to measure the liquidity position of DNPL. For the purpose of calculation of this ratio, inventories are excluded from total current assets.

**Table No. 8**

**Quick Ratio**

| Fiscal Years | Quick Assets (Rs in lakhs) | Current Liabilities (Rs in lakhs) | Quick Ratio (in times) |
|---|---|---|---|
| 2002/03 | 8972.89 | 4676.68 | 1.92 |
| 2003/04 | 8205.48 | 8806.19 | 0.93 |
| 2004/05 | 6402.99 | 9578.29 | 0.67 |
| 2005/06 | 6676.79 | 11749.68 | 0.57 |
| 2006/07 | 6568.02 | 7313.25 | 0.90 |
| Average | 7365.23 | 8424.82 | 0.87 |

Source: Based on Appendix 6

Table 8 shows the liquidity position of DNPL in net term. The average quick assets are Rs. 7365.23 lands and average current liabilities are Rs. 8424.82 lakhs The Q.R. is in fluctuating order during the observed period. Average Q.R. of company is 0. 87 times which is less than standard 1:1. The Q.R. is less then average. The low Q.R. of the firm suggests that the company has poor liquidity position.

**Figure No. 5**

**Quick Ratio**
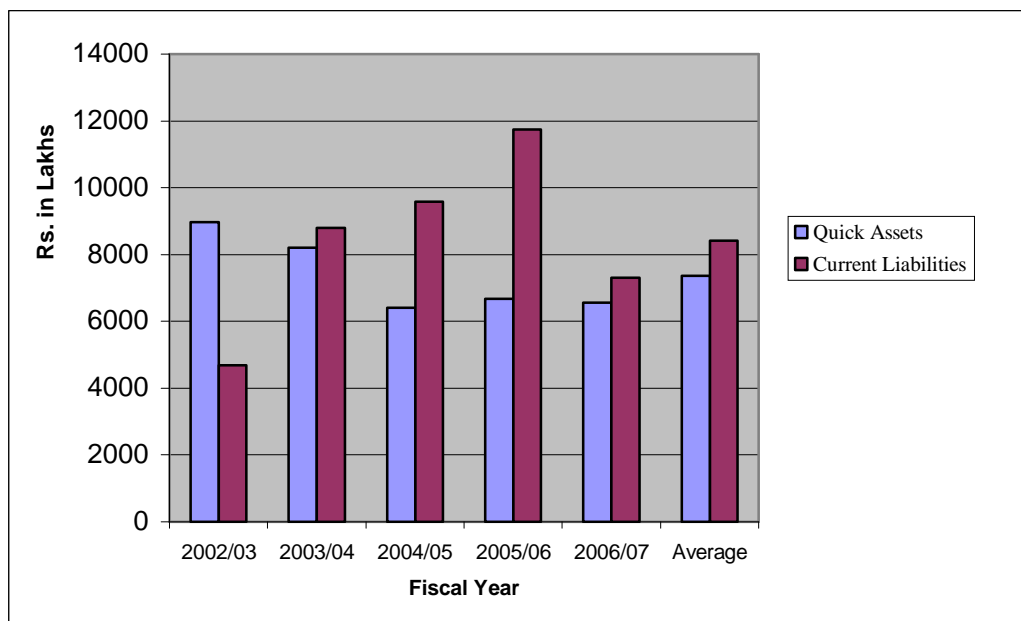


The above figure 5 shows the relation of quick assets and current liabilities of the firm during the five year period. Quick assets are fluctuating and current liabilities is in increasing trend during the first four years. The amount of quick assets is less than current liabilities except in F/Y 2002/03. The low ratio of Q.R. proves that the liquidity position of DNPL is poor.

## 4.5 Profitability Position

A company should earn profits to survive and grow over a period. Profit is a basic objective of commercial enterprises. Profitability is a measure of operating efficiency and the search for it provides incentives to achieve efficiency. The profitability position of the firm also depends on the working capital policy. The firm applying a conservative working capital policy has a low profitability ratio and the firm with an aggressive policy

has a high profitability ratio. The profitability of a firm can measured with the help of the following ratio.

## 4.5.1 Gross Profit Margin (GMP)

Earning the profit is the main objective of every business. The objective of calculating this ratio is to determine the efficiency with which production or purchase operations is carried on. The gross profit is the excess of sales over cost of goods sold. The GPM of DNPL is presented below:

**Table No. 9**

**Gross Profit Margin**

| Fiscal Years | Gross profit (Rs in lakhs) | Sales (Rs. in lakhs) | GPM (%) |
|---|---|---|---|
| 2002/03 | 6206.46 | 26995.05 | 23.0 |
| 2003/04 | 6508.17 | 30177.02 | 21.6 |
| 2004/05 | 5127.18 | 27287.90 | 18.8 |
| 2005/06 | 6001.08 | 32270.23 | 18.6 |
| 2006/07 | 6257.65 | 36608.41 | 17.1 |
| Average | 6020.11 | 30667.72 | 19.63 |

Source: Based on Appendix 7

The above table shows the percentage of gross profit to sales. The average gross profit, sales and gross profit margin of DNPL during the study periods are Rs.6020.11 lakhs and 30667.72 lakhs and 19.63% respectively. The GPM is in decreasing trend. The highest GPM is 23.0%

in F/Y 2002/03 and lowest is 17.1% in F/Y 2006/07. The average GPM is greater than the final three years of study periods. Thus the efficiency of purchase operations or production is decling.

## 4.5.2 Net Profit Margin (NPM)

As stated earlier, earning the profit is the main objective of every business firm. So, the analysis of net profit margin can be meaningful. The NPM is also known as net profit 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. The ratio has been calculated and presented below:

**Table No. 10**

**Net Profit Margin**

| Fiscal Years | Net profit after tax (Rs in lakhs) | Sales (Rs. in lakhs) | NPM (%) |
|---|---|---|---|
| 2002/03 | 1151.84 | 26995.05 | 4.26 |
| 2003/04 | 1212.73 | 30177.02 | 4.02 |
| 2004/05 | 453.43 | 27287.90 | 1.67 |
| 2005/06 | 121.28 | 32270.23 | 0.4 |
| 2006/07 | 303.75 | 36608.41 | 0.83 |
| Average | 648.41 | 30667.72 | 2.11 |

Source: Based on Appendixes 6 and 7

The above mentioned table shows the percentage of net profit after tax to sales. NPM is decreasing during the first four years. It varies from 4.26% to 0.4%. The NPM is least in F/Y 2005/06 and highest in F/Y 2002/03. Over all average of the DNPL's NPM is 2.11%. It means that there is a profit of 2.11 paisa per rupees sales of DNPL. Although the NPM is greater than the overall average NPM during the first two year of the study but it is less than the overall average in the final three years. The company's overall average net profit after tax and sales are Rs. 684.41 lakhs and Rs. 30667.72 lakhs respectively. The net profit after tax is greater than its overall average only in F/Y 2002/03 and 2003/04 and the sales are less than the average sales in F/Y first three years. The relationship between sales and net profit after tax is presented below.

**Figure No. 6**

**Net profit After tax and Sales**
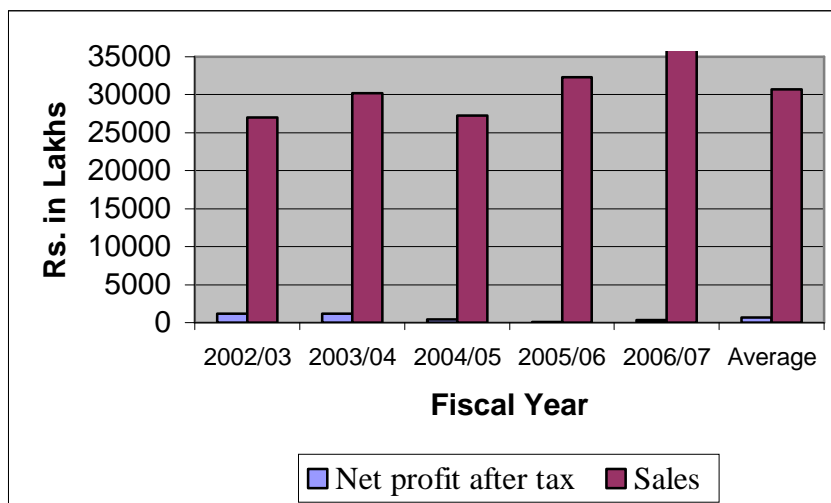


The figure no.6 shows the amount of net profit after tax and sales during the five years period in a graphical form. Sales is in fluctuating trend during the observed period but the net profit after tax is in decrease tread

except in F/Y 2006/07, which shows that the company's profitability position is decling.

## 4.5.3 Return on Total Assets (ROA)

Return on total assets ratio shows the relationship between the total assets and net profit after tax. The ratio helps to understand the utilization of assets of the firm it measures the profitability of all financial resources invested in the firm's assets. It gives the earning power to the firm from utilizing total investment.

**Table No. 11**

**Return on Total Assets**

| Fiscal Years | NPAT (Rs in lakhs) | Total Assets (Rs. in lakhs) | ROA (%) |
|---|---|---|---|
| 2002/03 | 1150.84 | 22700.46 | 5.07 |
| 2003/04 | 1212.73 | 22366.88 | 5.42 |
| 2004/05 | 453.43 | 23442.57 | 1.93 |
| 2005/06 | 121.28 | 25484.26 | 0.47 |
| 2006/07 | 303.75 | 25196.81 | 1.20 |
| Average | 648.41 | 23838.20 | 2.72 |

Source: Based on Appendixes 6 and 7

The above mentioned table show the ROA of DNPL. The overall average of NPAT is Rs. 648.4. Total assets and ROA are Rs.23838.20 lakhs and 2.72% respectively. The ROA is decreasing up the first fours years

increasing in the F/Y 2006/07. It varies from 5.07% to 0.47. The average ROA is less than first two F/Y but greater than the final three F/Y's.

## 4.6 Analysis of Current Assets and Current Liabilities

To operate the business, different kinds of assets are needed. For the day-to-day business operation various kinds of current assets are required. Current assets are those assets which can be converted into cash within an accounting year. During the operation of business various liabilities are created. Current liabilities are those liabilities which are expected to mature within the accounting year. Therefore, the current assets and current liabilities of DNPL are analyzed below:

### 4.6.1 Composition of Current Assets

The success and failure of any business depends on its effective utilization of resources which depends on the daily business activities. For smooth running of a business, appropriate level of current assets i.e. gross working capital should be maintained by the company.

A high ratio of current ratio in total assets does not always convey a high liquidity position because the current assets consists of cash and bank balance, inventories, sundry debtors and miscellaneous current assets (loan and advance, deposits and other receivables, prepaid expenses etc.) Moreover, except cash, receivables and inventories have to wait for conversion into cash. Therefore, they are less liquid. Hence, for qualitative consideration of the current assets and its composition should be seriously examined. The quality of current assets can be judged with the individual holding of inventories, sundry debtors, cash and bank balance and miscellaneous current assets to total current assets holding. The relationship has been established by computing the ratio of sundry

debtors, inventories, cash and bank balance and miscellaneous current assets to total current assets as below:

**Table No. 12**

**Composition of Current Assets (Rs. in Lakhs)**

| Fiscal Years | Inventory | | Sundry Debtors | | Cash & Bank Balance | | Miscellaneous Current Assets | | Total CA |
|---|---|---|---|---|---|---|---|---|---|
| | Rs. | % | Rs. | % | Rs. | % | Rs. | % | Rs. |
| 2002/03 | 5368.78 | 37.43 | 2471.57 | 17.23 | 42.34 | 0.3 | 6458.98 | 45.04 | 14341.67 |
| 2003/04 | 6403.04 | 43.83 | 2217.45 | 15.18 | 106.86 | 0.73 | 5881.17 | 40.26 | 14608.52 |
| 2004/05 | 7939.92 | 55.36 | 1504.92 | 10.91 | 74.84 | 0.52 | 4763.23 | 33.21 | 14342.91 |
| 2005/06 | 8557.15 | 56.17 | 2302.81 | 15.12 | 19.05 | 0.12 | 4354.93 | 28.59 | 15233.93 |
| 2006/07 | 8829.26 | 57.34 | 1883.38 | 12.23 | 104.79 | 0.68 | 4579.84 | 29.75 | 15397.28 |
| Average | 7419.63 | 50.18 | 2088.03 | 14.12 | 69.58 | 0.47 | 5207.63 | 35.23 | 14784.86 |

Source: Based on Appendix 6

Table 12 show the composition of current assets of DNPL. In this table percentage indicates the proportion of individual current assets to total current assets. In this table all the components of current assets are fluctuating during the study period.

The overall average of current assets is Rs.14784.86 lakhs which is less than final two years of current assets.

### 4.6.1.1 Inventory to Current Assets (ICA)

The company's average inventory to current assets is 50.18% and the overall average inventory during the study period is Rs.7419.63 lakhs. The inventory holds largest proportion in total current assets of DNPL. The inventory to current assets is increasing trend in the observed period. The proportion of inventory to current assets is between 37.43% and 57.34%. Company's inventory includes stores and spares, raw materials, packing materials, stock in process, finished goods and material in transit.

### 4.6.1.2 Sundry Debtors to Current Assets (SDCA)

According to table 12, the average amount of receivable or sundry debtors during the five years observed period is Rs.2088.03 lakhs. The ratio of SDCA is fluctuating below 10.91% to 17.23%. The SDCA is highest in F/Y 2002/03 and lowest in F/Y 2004/05. The overall average SDCA of DNPL is 14.22%.

### 4.6.1.3 Cash and Bank Balance to Current Assets (CBCA)

The table 12 shows the percentage of CBCA. The CBCA holds the least portion in total current assets of DNPL. The average CBCA is 0.47% which is less than the F/Y 2003/04, F/Y 2004/05 and F/Y 2006/07. In the table cash and bank balance is also fluctuating during the observed period. The overall average cash and bank balance is Rs.69.58 lakhs. The CBCA is notably higher in F/Y 2003/04 and F/Y 2006/07.

### 4.6.1.4 Miscellaneous Current Assets to Current Assets (MCACA)

Miscellaneous current assets are another major component of current assets. It includes the amount of prepaid expenses, advance to employees, advance to suppliers, deposits and loans. The average MCACA is 35.23%

which is less than the MCACA calculated in F/Y's 2002/03 to 2003/04. The proportion of MCACA is in decreasing trend except in F/Y 2006/07. The highest percentage of MCACA is in F/Y 2002/03 and lowest in F/Y 2005/06.

**Figure No. 7**

**Composition of Current Assets**
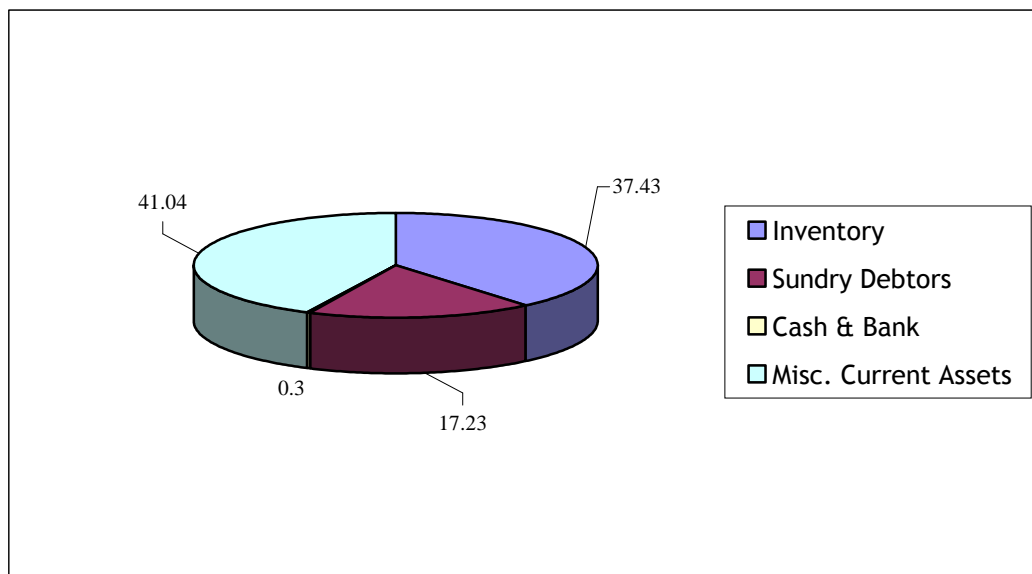


## 4.6.2 Composition of Current Liabilities

Current liabilities are the integral part of the working capital policy. Current liabilities are defined as all the payment that has to be paid by the company within an accounting period. It includes sundry creditors and provisions like provision for taxation, provision for housing, provision for bonus, provision for earned leave salary etc. Firm should maintain the optimum level of liquidity in order to enable the organization to meet the current obligations.

**Table No. 13**

**Composition of Current Liabilities**

| Fiscal Years | Sundry creditors (Rs. in lakhs) | | Provisions (Rs. in lakhs) | | Total current liabilities (Rs. in lakhs) |
|---|---|---|---|---|---|
| | Rs. | % | Rs. | % | Rs. |
| 2002/03 | 3388.86 | 72.46 | 1287.82 | 27.54 | 4676.68 |
| 2003/04 | 7032.13 | 79.85 | 1774.06 | 20.15 | 8808.19 |
| 2004/05 | 7686.35 | 80.25 | 1891.94 | 19.75 | 9578.29 |
| 2005/06 | 10067.14 | 85.68 | 1682.54 | 14.32 | 11749.68 |
| 2006/07 | 6408.09 | 87.62 | 905.17 | 12.38 | 7313.25 |
| Average | 6916.51 | 81.17 | 1508.31 | 18.83 | 8424.82 |

Source: Based on Appendix 6

The above table shows the composition of current liabilities. The average total current liabilities of the company is Rs.8424.82 lakhs. In the table, current liabilities consists of sundry creditors and provisions. The sundry creditors hold the largest portion of current liabilities of DNPL. The sundry creditors mainly consist of acceptances, advance against supplies and expenses creditors for goods, creditors for expansions and other liabilities and interest accrued not due. The average sundry creditors of DNPL during the five year study period is Rs 6916.51 lakhs and the average sundry creditors to total current liabilities is 81.17%. The company's sundry creditors to total current liabilities ratio is in increasing trend and the highest ratio is in F/Y 2006/07 i.e. 87.62 and the lowest

ratio is in F/Y 2002/03 which is 72.46%. However the proportion of sundry creditor to total current liabilities is in increasing trend.

Another component of current liabilities is provisions. Provisions includes provision for taxation, provision for housing, provision for bonus, provision for earned leave salary. The overall average of provisions of DNPL during the study period is Rs.1508.31 lakhs. The ratio of provision to current liabilities is in decreasing trend. The average provision to total current liabilities is 18.83%.

**Figure No. 8**

**Composition of Current Liabilities**
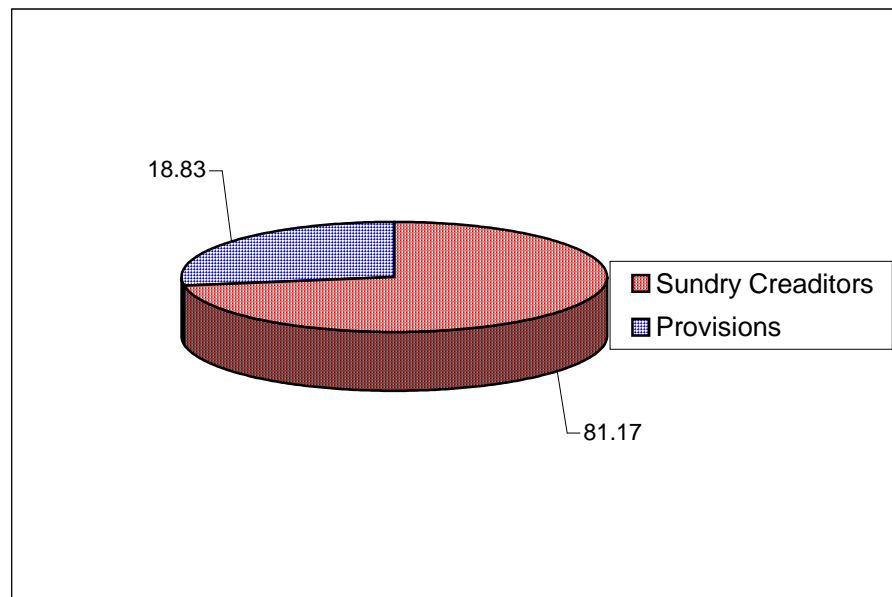


## 4.7 Statistical Analysis of Working Capital

The financial performance of a manufacturing company is directly related to their ability to manage working capital efficiently and effectively. The working capital used in this study is of gross concept i.e. total current assets. The use of financial tools has already given adequate trust in

showing the analysis of various variables to determine the working capital management. To make the analysis more fruitful and weighty certain statistica1 tools have been used. Here, Karl Pearson's coefficient of correlation (r) and probable error (PE)   are used to show the relationship between the gross working capital and other variables (net profit after tax, gross profit, sales, fixed assets and current liabilities) and their results are presented below.

**Table No. 14**

**Relationship Between Gross Working Capital and Other Variables**

| Variables | Correlation (r) | Probable Error (P.E.) | Remarks |
|---|---|---|---|
| CA to NPAT | -0.43 | 0.25 | Not Significant |
| CA to FA | 0.74 | 0.14 | Not Significant |
| CA to sales | 0.95 | 0.03 | Highly Significant |
| CA to GP | 0.34 | 0.27 | Not Significant |
| CA to CL | 0.34 | 0.27 | Not Significant |

Source: Based in Appendixes 1,2,3,4 and 5

There is adverse relationship between current assets and net profit after tax. It's 'r' is -0.43 but P.E. is 0.25 However 'r' is not greater than six times of its not significant. Hence there is no significant impact on net profit after tax due to increase or decrease in working capital.

The Karl Pearson's coefficient of correlation 'r' between current assets and fixed assets is +0.74, Although r is greater than PE but is less than six

times of its P.E., therefore there is no significant relationship between gross working capital and fixed assets increase or decrease in working capital does not affect the fixed assets of DNPL.

There is positive relationship between current assets and sales i.e. increase in working capital will increase the sales. The correlation coefficient 'r' between current assets and sales is +0.95 and its P.E. is 0.03. The 'r' is six times more than its P.E. which shows that there is a very high degree of positive correlation exist between current assets and sales of DNPL. Hence there is a significant relationship between gross working capital and sales of DNPL i.e. income in gross working capital will leads to income in sales and vice- versa.

According to table 14 'r' between current assets and gross profit +0.34 and the PE is 0.27. Although 'r' is greater than its P.E. but it is less than the six times of it's P.E. therefore there is no significant relationship between current assets and gross profit. But there is a positive and moderate degree of relationship exist between gross working capital and gross profit.

The Karl Pearson's coefficient of correlation between current assets and current liabilities is +0.34 which is less than the six times of its P.E. therefore there is no significant relationship between current assets and current liabilities.

## 4.8 Major Findings of the Study

The major findings of this study are concluded in the following points:

i.      The proportion of current assets to fixed assets is fluctuating during the observed period. It has varied from 1.49 to 1.88%

during the study period. The overall average of current assets to fixed assets is 1.63%. Hence, the current assets investment policy of the company is shifting towards the aggressive policy.

ii.  The current assets to sales is also fluctuating during the study period. It is increasing and decreasing each year. The maximum ratio is 53.13% in F/Y 2002/03 and the minimum ratio is 42.0 % in F/Y 2006/07 and the overall average percentage of current assets to sales is 48.55% which shows that the company is investing moderate amount of current assets in order to maximize its sales. Thus, a company is practicing a moderate asset investment policy.

iii.  The company is financing its current assets mostly from short-term financing except in F/Y 2002/03 and F/Y 2006/07 and overall average percentage of short-term & long-term financing to current assets of DNPL for five years are 56.99% and 43.01% respectively. Since the company is financing more than 55% of its working capital through the short-term sources, it is following a aggressive working capital policy.

iv.  The inventory turnover is fluctuating during the study period. It has varied from 3.44 to 5.03 times during the study period. It is highest in F/Y 2002/03 & lowest in F/Y 2004/05 and the overall average is 4.13 times. Normally DNPL takes 89 days to convert the inventory into sales, which is very high thus the inventory turnover is not satisfactory.

v.    The average receivable turnover the DNPL is 14.69 times and average collection period is 25 days which is lower that of the theoretical concept of net 30 days. The average collection period of DNPL is satisfactory.

vi.   The total assets turnover of the company is in fluctuating trend. It is increasing & decreasing each year during the study period. It is highest in F/Y 2006/07 & lowest in F/Y 2004/05 and the overall average is 1.29 times which means that the firm's has to invest Rs.1 in its total assets in order to generate sales of Rs.1.29.

vii.  The liquidity position of the DNPL is analyzed with the help of current ratio & quick ratio. The current ratio of the company is ranging between 1.3 to 3.07 times during the study period in fluctuating trend. The overall average current ratio is 1.75 times which is less than the norm of 2:1. The quick ratio of the company ranges from 1.92 to 0.57 times. The quick ratio of the company is in decreasing trend except in F/Y 2006/07. It is maximum in F/Y 2002/03 and minimum in F/Y 2005/06 and the overall average quick ratio is 0.87 times, which is also less than the standard ratio of 1:1. Hence, the company has poor liquidity position.

viii. Profitability is one of the measures of overall efficiency of the management. The profitability position of the firm is analyzed with the help of gross profit margin, net profit margin and return on total assets. The GPM & NPM is in decreasing trend whereas ROA is decreasing up to F/Y 2005/06 and increasing in F/Y 2006/07 during the study

period. The GPM & NPM is highest in F/Y 2002/03 and lowest in F/Y 2006/07 and F/Y 2005/06 respectively while ROA is highest is F/Y 2003/04 and lowest in F/Y 2005/06. The average GPM, NPM and ROA are 19.63%, 2.11% and 2.72% respectively. Although the company is posting a profit but the overall profitability position of DNPL is in decreasing trend during the study period.

ix.   The major components of current assets in DNPL are inventories, sundry debtors, cash & bank balance and miscellaneous current assets. Among them inventory holds the major portion of current assets. The average proportions of inventories, debtors, cash & bank and miscellaneous current assets are 50.18%, 14.22%, 0.47% & 35.23 % respectively during the study period. It is found that of total current assets, inventory, holds the largest portion followed by miscellaneous current assets, sundry debtors and cash & bank balance respectively. The overall average of total current assets of DNPL during the study period is Rs. 14784.86.The current assets seem to be fluctuating.

x.   Sundry creditors have held the major portion of current liabilities of DNPL. The average percentages of sundry creditors and provisions to total current liabilities are 81.17% and 18.83% respectively. The minimum percentage of sundry creditors to total current liabilities is 72.46% in F/Y 2002/03 and maximum is 87.62% in F/Y 2006/07. Proportions of sundry creditors is in increasing and proportion of provision is in decreasing every year. The

provision current liabilities vary from 27.54% to 12.38%. The overall average of total current liabilities of DNPL during the study periods is Rs. 842.82 lakhs and is increasing every year except in F/Y 2006/07.

xi. Karl Pearson's efficient of correlation between net profit after tax fixed assets, sales gross profit and current liabilities to current assets are -0.43, +0.74, +0.95, +0.34, + 0.34 respectively. There is highly significant and positive relation correlation between CA and sales. Positive correlation but not significant relationship between CA and FA, CA and GP and CA and CL and negative correlation but not significant relationship exist between CA and NPAT of DNPL during the study period.

# CHAPTER- V

# SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

## 5.1 Summary

The first chapter focuses on the brief introduction of the study, industrialization and its role in Nepal. It attempts to introduce DNPL. Some of the questions have been raised regarding the working capital management of DNPL. It has also attempted to set the objectives, significance and limitations of the study. Finally it presents plan of study.

The second chapter deals with the review of literature which includes the conceptual framework, different views of different writers regarding the working capital management, books and journals/articles. Review of literature section has also attempted to review the studies done so far on the same topic on different organizations.

Research Methodology is studied in the third chapter. It has included the research design. It presents the nature and sources of data, data collection and processing techniques and. financial & statistical tools used. Financial ratios like current ratio, current assets to fixed assets, cash & bank, inventory, miscellaneous current assets and debtors to current assets, turnover ratio and profitability ratios have been used. Karl Pearson's coefficient of correlation and probable error have been used to analyze the trade off between working capital and other variables (net profit after tax, sales, gross profit, current liabilities and fixed assets)

The fourth chapter includes the presentation and analysis of data derived from DNPL. To analyze the working capital policy proportion of current assets to fixed assets, current assets to sales and proportion of current assets to short-term sources & long-term sources are used. It has also analyzed impact of working capital on the liquidity, turnover and profitability position and the composition of current assets and current liabilities are analyzed. Finally, the relationship between working capital and other variables (net profit after tax, sales, fixed assets, gross profit & current liabilities) are analyzed with help of Karl Pearson's coefficient of correlation and probable error.

According to study, the trend of current assets to fixed assets is fluctuating. The average ratio is 1.63 and the CAFA ratio is in fluctuating trend. The average proportion of current assets to sales is 48.55% which show that the company is financing its sales by investing large amount in current assets. The company is financing its current assets by using long-term as well as short-term source but the proportion of short-term is greater than the long-term source. The average proportion of short-term as well as long-term source to current assets is 56.99% and 43.01%. These data shows that the DNPL is following a aggressive policy.

The inventory turnover of the company is fluctuating between 3.44 to 5.03 times during the study period with overall average of 4.13 times and the average ICP is 89 days. The receivables turnover is fluctuating between 10.92 to 19.44 times and the ACP is fluctuating between 21 to 34 days. The average total assets turnover is 1.29 times with the highest ratio in F/Y 2006/07 and the lowest ratio in F/Y 2002/03.

Liquidity is crucial for the daily operation of a business. The DNPL current ratio and quick ratio are less than standard. Both the current as

well as quick ratio is in decreasing trend except in the F/Y 2006/07 with the overall average of 1.75 and 0.87 times respectively. Profit is basic objectives of any commercial firm. A company should earn the profit to survive. The profitability position of DNPL is analyzed with the help of GMP, NPM and ROA. The GPM is in decreasing trend are NPM and ROA is also decreasing up to F/Y 2005/06 and increasing in F/Y 2006/07. The GPM, NPM and ROA with the overall average of 19.63%, 2.11% and 2.72% respectively.

Current assets DNPL consists of inventory, sundry debtors, cash and bank balance and miscellaneous current assets. An inventory and miscellaneous current assets holds the major portion of current assets. The overall average of current assets during the observed period is Rs.14784.86 lakhs and the average percentage of inventory, sundry debtors cash and bank and miscellaneous current assets to total current assets are 50.18%, 14.12%, 0.47% and 35.23% respectively.

In the analysis of relationship between gross working capital and other variables, there is a very low degree of correlation exist between CA or NPAT and moderate correlation exist between CA and FA, CA and GP, CA and CL but not significant and a highly positive correlation and significant relationship between CA and sales.

## 5.2 Conclusion

For a smooth operation of a business a sound management of working capital is required. Gross working capital management is the management of currents assets of the firm. Different firm can adopt different working capital policy according to the management attitude towards risk-return trade off.

The fluctuating trend of CAFA ratio, large investment in current assets to improve the sales and the greater use of short-term source to finance the current assets proves that the DNPL is practicing the aggressive working capital policy.

For the analysis of turnover position, inventory ratio has been calculated. The highest portion of inventory is hold by the raw materials. Inventory turnover is very low and is not up to the standard. Receivable turnover of the company is matching the standard. Hence, the receivables turnover of the company is satisfactory.

The current ratio & quick ratio of the DNPL is less than the standard. The average CR & QR during the study period is 1.75 and 0.87 times both the ratio are in decreasing trend except in the F/Y 2006/07. Hence, the company has poor liquidity position.

The company is posting a profit but the profitability ratios are in decreasing trend except in F/Y 2006/07 during the study period. Profitability position of DNPL in deterioration.

All the components of current assets except inventory are fluctuating during the study period. But the inventory is in increasing trend in every year. Inventory holds the major portion of current assets which is understandable because DNPL is a manufacturing company which also sales its products in the foreign market. Sundry creditors hold the 81.17% of total current liabilities and there is a highly significant relationship between CA and sales of DNPL.

The statistical analysis gives the mixed results regarding the various factors of working capital. Correlation between current assets and sales shows the highly significant relation where as between current assets and net profit

after tax current assets and fixed assets, current asses to gross profit and current assets to current liabilities shows insignificant relation.

## 5.3 Recommendation

On the basis of findings of the study following recommendations for the overall improvement of the working capital management are forwarded to the management of DNPL.

a) Inventory turnover positive of DNPL is very low with high conversion period. Thus, the management is advised to reduce its conversion period and increase the turnover ratio. For this the management should improve the inventory turnover position, for inventory turnover management should reduce the inventory or the optimum level should be adjusted according to the sales and production. An effective inventory turnover should be introduced in order to control inventory in accordance with their value and importance and thus maintain good inventory position.

b) DNPL has low liquidity position. The low liquidity makes the current liabilities fully unsecured with current assets and company is not able to pay its obligation as and when they will mature but the unnecessary capital is not tied up in maintaining low liquidity which can be used in other factors. Therefore the management is advised to increase the liquidity ratio to the standard 2.1.

c) The profitability position of DNPL is decreasing every year except in F/Y 2006/07, which is not a good sign. The decline in profit because poor liquidity position and poor assets management. The decline in profit is due to aggressive policy adopted by the management. Thus, the management adopted the short-term

financing policy. Management advised the short-term as well as long-term so as to increase the profit.

d) The current assets and current liabilities of DNPL are not good position CR. & QR shows there are less current assets and current liabilities. But in  F/Y 2002/03, and CR. & QR ratio match the standard 2.1. But in rest of the years CR and Q.R. ratio have been lower during the study period shows that the percentage of current liabilities has increased more than percentage of current assets which is serious one. Thus, company should reduce the amount of current liabilities in the near future.

e) Risk is the opportunity for the business to make profit. Thus the management should not consider it as a danger. For the efficient utilization of current assets the management should first identify its strengths and weakness and then the strength should be utilized to take the opportunity in the business. To develop managerial ability to take risk there should be training participation in management conferences, foreign enterprises tour etc for the managerial level employees.

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## Calculation of coefficient of correlation of Current Assets (CA) and Net profit after tax (NPAT)

| Fiscal Years | CA (x) | NPAT (y) | X | Y | $X^2$ | $Y^2$ | XY |
|---|---|---|---|---|---|---|---|
| 2002/03 | 143.42 | 11.51 | -4.43 | 5.02 | 19.63 | 25.20 | -22.24 |
| 2003/04 | 146.09 | 12.13 | -1.76 | 5.64 | 3.098 | 31.81 | -9.93 |
| 2004/05 | 143.43 | 4.54 | -4.42 | -1.95 | 19.54 | 3.80 | 8.62 |
| 2005/06 | 152.34 | 1.23 | 4.49 | -2 | 20.16 | 4 | -8.98 |
| 2006/07 | 153.97 | 3.04 | 6.12 | -0.37 | 37.45 | 0.14 | -2.26 |
| n = 5 | x= 739.25 | y = 32.45 | | | $X^2$= 99.88 | $Y^2$= 64.95 | XY=-34.79 |

Here,

$$\bar{x} \ X \frac{x}{n} \ X \frac{739.25}{5} \ X147.85 \ \text{and} \ \bar{y} \ X \frac{y}{n} \ X \frac{32.45}{5} \ X6.49$$

$$\text{where} \ X \ X(x \ Z\bar{x}) \ \& \ Y \ X(y \ Z\bar{y})$$

$$r \ X \frac{XY}{\sqrt{X^2} \ \sqrt{Y^2}}$$

$$= \frac{Z34.79}{\sqrt{99.88} \ \sqrt{64.95}} = -0.43$$

Probable Error P (E) = $0.6745 \ | \ \P Z(r^2)'$

$$= 0.6745 \ | \ \frac{1 Z(Z0.43)^2}{\sqrt{5}} = 0.25$$

# Appendix: 2

## Calculation of coefficient of correlation of Current Assets (CA) and Fixed Assets (FA)

| Fiscal Years | CA (x) | FA (y) | X | Y | $X^2$ | $Y^2$ | XY |
|---|---|---|---|---|---|---|---|
| 2002/03 | 143.42 | 83.59 | -4.43 | -6.94 | 19.63 | 48.16 | 30.74 |
| 2003/04 | 146.09 | 77.59 | -1.76 | -12.94 | 3.10 | 167.44 | 22.77 |
| 2004/05 | 143.43 | 90.99 | -4.42 | 0.46 | 19.54 | 0.21 | -2.03 |
| 2005/06 | 152.34 | 102.50 | 4.49 | 11.97 | 20.16 | 143.28 | 53.74 |
| 2006/07 | 153.97 | 97.99 | 6.12 | 7.46 | 37.45 | 55.65 | 45.65 |
| n = 5 | x = 739.25 | y= 452.66 | | | $X^2$= 99.88 | $Y^2$=414.74 | XY= 450.86 |

Here,

$$\bar{x} = \frac{x}{n} = \frac{739.25}{5} = 147.85 \text{ and } \bar{y} = \frac{y}{n} = \frac{452.66}{5} = 90.53$$

$$\text{where } X = (x - \bar{x}) \& Y = (y - \bar{y})$$

$$r = \frac{XY}{\sqrt{X^2} \sqrt{Y^2}}$$

$$= \frac{150.86}{\sqrt{99.88} \sqrt{414.74}} = 0.74$$

$$\text{Probable Error (PE)} = 0.6745 \left| \frac{1-(r^2)}{\sqrt{n}} \right.$$

$$= 0.6745 \left| \frac{1-(0.74)^2}{\sqrt{5}} \right. = 0.14$$

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## Calculation of coefficient of correlation of Current Assets (CA) and Sales (S)

| Fiscal Years | CA (x) | FA (y) | X | Y | $X^2$ | $Y^2$ | XY |
|---|---|---|---|---|---|---|---|
| 2002/03 | 143.42 | 269.95 | -4.43 | -36.72 | 19.63 | 1348.36 | 162.67 |
| 2003/04 | 146.09 | 301.77 | -1.76 | -4.9 | 3.10 | 24.01 | 8.62 |
| 2004/05 | 143.43 | 272.88 | -4.42 | -33.79 | 19.54 | 1141.76 | 149.35 |
| 2005/06 | 152.34 | 322.70 | 4.49 | 16.03 | 20.16 | 256.96 | 71.97 |
| 2006/07 | 153.97 | 366.08 | 6.12 | 59.41 | 37.45 | 3529.55 | 363.59 |
| n = 5 | x = 739.25 | y= 1533.38 | | | $X^2$= 99.88 | $Y^2$=6300.64 | XY= 756.20 |

Here,

$$\bar{x} \text{ X} \frac{x}{n} \text{ X} \frac{739.25}{5} \text{ X}147.85 \text{ and } \bar{y} \text{ X} \frac{y}{n} \text{ X} \frac{1533.38}{5} \text{ X}306.67$$

where $X \text{ X}(x \text{ Z}\bar{x}) \& Y \text{ X}(y \text{ Z}\bar{y})$

$$r \text{ X} \frac{XY}{\text{)} X^2 \text{ )} Y^2}$$

$$= \frac{\text{Z}756.20}{\text{)}99.88 \quad \text{)}6300.64} = 0.95$$

Probable Error (PE) $= 0.6745 \mid \frac{1\,\text{Z}(r^2)}{\text{)}5}$

$$= 0.6745 \mid \frac{1\,\text{Z}(0.95)^2}{\text{)}5} = 0.03$$

# Appendix: 4

## Calculation of coefficient of correlation of Current Assets (CA) and Gross Profit (GP)

| Fiscal Years | CA (x) | FA (y) | X | Y | $X^2$ | $Y^2$ | XY |
|---|---|---|---|---|---|---|---|
| 2002/03 | 143.42 | 62.06 | -4.43 | 1.86 | 19.63 | 3.46 | -8.24 |
| 2003/04 | 146.09 | 65.08 | -1.76 | 4.88 | 3.10 | 23.81 | -8.59 |
| 2004/05 | 143.43 | 51.27 | -4.42 | -8.93 | 19.54 | 79.74 | 39.47 |
| 2005/06 | 152.34 | 60.01 | 4.49 | -0.19 | 20.16 | 0.04 | -0.85 |
| 2006/07 | 153.97 | 62.58 | 6.12 | 2.38 | 37.45 | 5.67 | 14.56 |
| n = 5 | x= 739.25 | y= 1533.38 | | | $X^2$= 99.88 | $Y^2$=112.72 | XY = 36.35 |

Here,

$$\bar{x} = \frac{x}{n} = \frac{739.25}{5} = 147.85 \text{ and } \bar{y} = \frac{y}{n} = \frac{301.00}{5} = 60.20$$

where $X = (x - \bar{x}) \& Y = (y - \bar{y})$

$$r = \frac{XY}{\sqrt{X^2} \ \sqrt{Y^2}}$$

$$= \frac{36.35}{\sqrt{99.88} \ \sqrt{112.72}} = 0.34$$

Probable Error (PE) $= 0.6745 \left| \frac{1-(r^2)}{\sqrt{n}} \right.$

$$= 0.6745 \left| \frac{1-(0.34)^2}{\sqrt{5}} \right. = 0.27$$

## Calculation of coefficient of correlation of Current Assets (CA) and Current Liabilities (CL)

| Fiscal Years | CA (x) | FA (y) | X | Y | $X^2$ | $Y^2$ | XY |
|---|---|---|---|---|---|---|---|
| 2002/03 | 143.42 | 46.77 | -4.43 | -37.48 | 19.63 | 1404.75 | 166.04 |
| 2003/04 | 146.09 | 88.06 | -1.76 | 3.81 | 3.10 | 14.52 | -6.71 |
| 2004/05 | 143.43 | 95.78 | -4.42 | 11.53 | 19.54 | 132.94 | -50.96 |
| 2005/06 | 152.34 | 117.49 | 4.49 | 33.24 | 20.16 | 1104.89 | 149.25 |
| 2006/07 | 153.97 | 73.13 | 6.12 | -11.12 | 37.45 | 123.65 | -68.05 |
| n = 5 | x= 739.25 | y= 421.23 | | | $X^2$= 9.88 | $Y^2$=2780.75 | XY=189.57 |

Here,

$$\bar{x} = \frac{x}{n} = \frac{739.25}{5} = 147.85 \text{ and } \bar{y} = \frac{y}{n} = \frac{421.23}{5} = 84.25$$

$$\text{where } X = (x - \bar{x}) \ \& \ Y = (y - \bar{y})$$

$$r = \frac{XY}{\sqrt{X^2} \ \sqrt{Y^2}}$$

$$= \frac{189.57}{\sqrt{99.88} \ \sqrt{2780.75}} = 0.34$$

Probable Error (PE) $= 0.6745 \times \dfrac{1 - (r^2)}{\sqrt{n}}$

$$= 0.6745 \times \frac{1 - (0.34)^2}{\sqrt{5}} = 0.27$$

## Comparative Balance Sheet of Dabur Nepal Private Limited

**(Units Rs. in Lakhs)**

| Fiscal Years | 2002/03 | 2003/04 | 2004/05 | 2005/06 | 2006/07 |
|---|---|---|---|---|---|
| **Sources of Fund:** | | | | | |
| Share Capital | 798.52 | 798.52 | 798.52 | 798.52 | 798.52 |
| Share premium account | 600.00 | 600.00 | 600.00 | 600.00 | 600.00 |
| Reserve and surplus | 659.30 | 759.30 | 859.30 | 859.30 | 859.30 |
| Profit and loss account | 4663.55 | 5419.19 | 5439.04 | 5496.08 | 5555.35 |
| Working capital loan | 7312.38 | 5848.45 | 6004.84 | 5534.67 | 9763.66 |
| Long term loans | 4077.00 | 214.92 | 207.89 | 496.20 | 321.86 |
| **Total** | **18110.75** | **13640.38** | **13909.59** | **13784.77** | **17898.69** |
| **Application of Funds:** | | | | | |
| Fixed Assets (Net) | 8358.79 | 7758.36 | 9099.66 | 10250.32 | 9799.53 |
| Investment | 86.98 | 19.30 | - | 19.98 | - |
| **Current Assets:** | | | | | |
| Inventories | 5368.78 | 6403.04 | 7939.92 | 8557.15 | 8829.26 |
| Sundry Debtors | 2471.57 | 2217.45 | 1564.92 | 2302.81 | 1883.38 |
| Cash and Bank Balance | 42.34 | 106.86 | 74.84 | 19.05 | 104.79 |
| Advance Deposits and Other Receivable | 6458.98 | 5881.17 | 4763.23 | 4354.93 | 4579.84 |
| **Total current assets** | **14341.67** | **14608.52** | **14342.91** | **15233.94** | 15397.28 |
| Current liabilities and provision | 4676.68 | 8806.19 | 9578.29 | 11749.68 | 7313.25 |
| Net Current Assets | 9664.99 | 5802.33 | 4764.62 | 3484.26 | 8084.03 |
| Preliminary and P.O. expenses | - | 60.39 | 45.31 | 30.22 | 15.13 |
| **Total** | **18110.76** | **13640.38** | **13909.59** | **13784.78** | **17898.69** |

# Appendix -7

## Comparative Income Statement of Dabur Nepal Private Limited

(Units Rs. in Lakhs)

| For the Period of Ending | 2002/03 | 2003/04 | 2004/05 | 2005/06 | 2006/07 |
|---|---|---|---|---|---|
| Sales Income | 26995.05 | 30177.02 | 27287.90 | 32270.23 | 36608.41 |
| Cost of sales | 20788.60 | 23668.85 | 22160.72 | 26269.15 | 30350.75 |
| **Gross profit** | **6206.45** | **6508.17** | **5127.18** | **6001.08** | **6257.65** |
| Other income | 91.37 | 135.35 | 255.51 | 141.89 | 206.57 |
| **Total income** | **6297.82** | **6643.52** | **5372.69** | **6142.97** | **6464.22** |
| Administrative and selling expenses | 2139.60 | 2595.48 | 2953.65 | 3849.37 | 4260.8 |
| Financial expenses | 1215.33 | 854.75 | 631.69 | 734.06 | 572.78 |
| Depreciation | 1077.88 | 1024.95 | 1041.76 | 1259.79 | 1289.13 |
| **Total expenses** | **4432.81** | **4475.18** | **4627.10** | **5843.22** | **6122.71** |
| Profit before extraordinary items | 1865.01 | 2168.34 | 745.59 | 299.75 | 341.51 |
| Write off and extraordinary items | 196.18 | 300.29 | 38.22 | - | - |
| Net profit before provision | 1668.82 | 1868.05 | 707.37 | 299.75 | 341.51 |
| Provision for housing and bonus | 241.98 | 270.86 | 102.57 | 43.47 | 13.02 |
| Provision for tax | 276.00 | 384.46 | 151.37 | 135.00 | 24.74 |
| **Net profit after tax** | **1150.85** | **1212.73** | **453.43** | **121.28** | **303.75** |