

# CHAPTER ONE

## INTRODUCTION

### 1.1 Background

The term working capital, sometime called gross working capital, generally refers to current assets. It is defined as current assets minus current liabilities (Weston and Brigham, 1996. P 332). Working capital is the part of the capital of a company that is employed in its trading operations. It consists of current assets less current liabilities. In the normal trade cycle the supply of goods by suppliers, the sale of stock to debtors, payment of debts in cash, and the use of cash to pay suppliers, the working capital is the aggregate of the net assets involved, sometimes called the working assets. Short-term financial management is the term now widely used in place of working capital management. The concept of working capital management covers all decisions of the organization involving cash flows in the short run with emphasis on the management of investments in current assets and their financing. Working capital is defined as debt originally scheduled for repayment within one year. Working capital management includes a number of aspects that make it an important topic for study.

- a. Surveys indicate that the largest portion of financial managers time is devoted to the day by day internal operations of the firms, which can appropriately be subsumed under the heading of working capital management.
- b. Characteristically current assets represent more than half the total assets of a business firm. Because they represent such a large investment and because this investment tends to be relatively

volatile, current assets are worthy of the financial managers careful attention.

- c. Working capital management is particularly important for small firms. Although such firms can minimize their investment in fixed assets by renting or leasing plant and equipment, they can not avoid investment in cash, receivables, and inventories. Therefore, current assets are particularly significant for the financial manager of small firm. Further, because a small firm has relatively limited access to the long-term capital markets, it must necessarily rely heavily on trade credit and short-term bank loans, both of which affect working capital by increasing current liabilities.

Improper working capital management is one of the main causes of failure of public manufacturing enterprises. One of the important areas of day-to-day management of a firm's operation is the management of working capital. Working capital refers to current asset and current liabilities. This is defined as the management of all the short-term assets used in daily operations. The proper management of a firm's working capital is very much crucial to the financial manager in this competitive scenario. The effective management of working capital is the primary means of achieving the firm's goal of adequate liquidity. The basic goal of working capital management is to manage the firms current assets and liabilities in such a way that a satisfactory level of working capital is maintained. Importance of working capital has increased. A firm must have working capital to operate and survive. In many industries, working capital constitutes a relatively large percentage of total assets (Bajracharya and Bhattarai, 2007. PP 272-274).

Working capital plays vital role in the success or failure of business. The working capital is the lifeblood and controlling nerve center of the business. The excess working capital as well as short working capital is harmful for business. The aspect of working capital is concerned with short term financing decision. It has received much attention in the literature of finance. Because of the earlier emphasis of financial management was more on long term financial decision, which led to the growth and development of many useful theories concerning these decisions as compared to short term financing decision.

However in recent years it has been realized that the area of working capital intricately interwoven with the success or failure of enterprises. Today one may come across with such situation where shortage of funds for working capital as well as the uncontrolled over expansion of working capital has caused much business to fail and in less serve caused, has situated their growth. This aspect of financial management is equally applicable to the small and as well as large-scale enterprises. The only difference is that in small firm's, working capital management may be the factor that decides success of failure where as in longer firm's, efficient working capital management can significantly affect the firms risk return and share price.

Therefore, working capital management has highly implication for the organizational effectiveness. Organization having effective working capital management has higher success potential where as in efficiency of working capital management is the indication of unsuccessful of organization. Thus, the need for effective working capital management might be a major strategy for organizational success.

Working capital is required for daily business operation. The management of working capital largely depends upon the policy adopted by the organization. It was found through the interviews that there is no set of policies regarding working capital management formulated and the need of working capital is not estimated with any systematic study in Nepalese public enterprises. A large liquidity position is maintained in the form of cash where no reasonable logic can be seen behind this. Therefore perfect combination of working capital should be maintained so that profit of the organization would maximize. Thus, it is more appropriate to consider the working capital management in Dairy Development Corporation.

Many previous studies has focused only on the working capital situation of the organization. But the new and major issue is whether the organization followed the policy of working capital or not. An another major issue is what the future strategies to be improve the working capital and what the factors to be considers for effective working capital management. In this aspect present study may be a valuable piece of work.

## **1.2 Introduction of Dairy Development Corporation**

In an agricultural country like Nepal, effective mobilization of the agricultural resources is very necessary of the economic development of the country. In order to mobilize the resources from tradition lives stock industry of the country the establishment of dairy industry is essential. But there was lack of initiative from the private sector in establishing such a diary industry in the modern commercial scale through these were high perspective for scale industry. So, the first five years plan stressed up on the need of developing a modern diary in public sector. As a result

third plan period the DDC was established in 1969 under the corporation act 1964, with the main objective of providing guaranteed market and fair price to the rural milk producer and supplying hygienic pasteurized and other standard dairy product to the urban consumer. Prior to the establishment of the corporation a separate Dairy Development Board was constituted to carry out the task of dairy development in Nepal.

The Dairy development activities in Nepal started in Tusal villages of Kavre district along with the establishment of " Central Dairy Plant" on experimental basis with a small scale milk processing plant under the department of agriculture in the year 2010 B.S at the initiative of Dairy Development Board.

The Dairy Development commission was formed in 2012 B.S. Since the demand of milk and dairy products has been increasing day to day the dairy plant become necessary. The "Central Dairy Plant". which was established in 2010 B.S at Bhotahity shifted to Lainchaur in 2013 B.S. due to the inadequacy of space. The Dairy Development commission was constituted to guide the Dairy Development section. At that time Dairy experts were provided by Swiss association for Technical Assistance. Then it starts milk collection processing and marketing activities from 2014. The Dairy Development commission was converted into Dairy Business Development in 2019. Ultimately in B.S 2026 sharawan 1, the DDC was established under the corporation Act, 2021 by the government but its performance is not so good. It is financial supported by foreign grants and loans such as World Food Programmers (WEP), New Zealand and Denis Government.

Before establishment of DDC, there is no potential market for the farmers. To provide the reasonable price for the milk products of the rural

side and also pasteurized milk DDC has been working from its setup. The demand of milk is increasing order because rapid increase in populations. So, the DDC is trying to collect milk occupation base. DDC has its branch office in different parts of countries such as Kathmandu, Biratnagar, Hetauda, Pokhara, Lumbini and produce different products like pasteurized milk, dahi, ice-cream, butter, panir, cheese, ghee.

### **1.3 Focus of the Study**

Every firm or organization needs various types of assets to run the business. Some assets are required to meet the needs of regular works and some to meet the expansion and short term obligation of a firm while others are required to meet the long term operation of the business. So management has to manage properly different types of assets especially required to run the operation of the firm smoothly. To carry out daily operations besides the manpower, equipment etc one of the major components is working capital.

Working capital can be regarded as the life blood of the enterprises. It refers to the administration of all aspects of the current assets and current liabilities. It plays vital role in every organization whether they are trading manufacturing, or service. In order to complete the rivals in the market, working capital management is the vital part of any firm. Since it affects all functional areas of any firm, the firm should have sound working capital management in order to survive in the market.

The study on financial management practices, working capital occupies an important place in Nepalese enterprises too. Financial management has never received so much of attention as in the recent years mainly due to the growth in the number and size of enterprises the one hand and on the other, to some extent increase in the number of business failures. Proper

financial management is the great importance for every business enterprises from the point of view of achieving success. In this aspect working capital plays a significant role in every aspect of the business activities. Lack of knowledge about managing working capital properly results finally to the liquidation of an enterprises. Neither excess working capitals nor less working capital is good for the company. So ,it has to be managed in such a way that it will be just adequate for maintaining solvency and continuing business. Adequate working capital brings security and confidence with numerous advantages such as better terms of goods purchased, cash discount, bank loan on lower interest rate etc.

So this study focuses on how working capital is managed in Nepalese service industry with special reference to the public enterprises of Nepal, Dairy Development Corporation.

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

One of the major problems that the Nepalese organizations are facing is with working capital management. Most of the Nepalese public enterprises still lack such orientation and they could not able to build effective working capital management. DDC may not be aloof from this fact. However, it is necessary to assesses the level of working capital in DDC. The working capital management, undoubtedly is a prime concern of any organization which influences almost all functions. The organization are generally found to concentrate on acquisition of the working capital but not through proper analysis of trade- off between risk and return. They do not pay more attention on effective utilization in spite of high level of importance of optimum level and efficient use of working capital.

There is lack of such scientific and empirical research that could identify the issues of working capital management of DDC. Adequate level of working capital or liquidity is determined by how an organization maintains its current assets and manages its current liabilities. In this regard, the performance of DDC is to be analyzed in term of its working capital management. This study will attempts to find the facts and suggestion in connection with some major issues which can also be regarded as problem of working capital management. Therefore, the following issues can be taken as the research questions of the present research.

1. Does DDC adopt the working capital management policies and practices?
2. What is the proportion of investment in current assets to total assets and fixed assets?
3. How working capital affects sales and net profit in DDC?
4. Is DDC able to mange working capital properly?
5. What is the composition of working capital in DDC?

### **1.5 Objective of the Study**

Unbalanced capital is harmful for manufacturing as well as business organization. Basic objective of present study is to examine the working capital management policy and practices of government owned public enterprises with special reference to DDC. It also aimed to find out the relationship of working capital and net profit of that organization. Moreover, overall objectives of the study can be specified as follows.

- a. To determine the structure and utilization of working capital of DDC.
- b. To examine the effect of working capital on net profit and sales in DDC.

- c To examine the working capital management policies and practices adopted by DDC.

## **1.6 Significance of the Study**

Profitability is the outcome of effective management of an organization. It can be a major objective of the organization. In this regard, working capital management may be a strong indicator for determining profit. Because the proper management of working capital helps to increase sales and the sales definitely increases the profit of the organization. Most of the researcher focused on the sales planning and profit planning of the organization. Few researchers were conducted on the working capital management but were unable to give casual linkage between the working capital on profit and sales and future strategies to support working capital management. For that purpose, present study may be a valuable piece of study in the field of Nepalese public enterprises especially in DDC. It seems very valuable for both academicians as well as practioners. This is helpful for future researchers for important guidelines.

## **1.7 Limitations of the Study**

The present study concerns only with DDC due to time and resource constraints. Thus, it may not be a representative because of small sample. However, it provides some clues about the facts. More specifically the following factors have limited the scope of the study.

1. The main focus of this study is working capital management of DDC not with other financial areas.
2. The study is concerned with study only one public enterprises i.e. DDC.
3. The study is based on secondary data along with primary data.

4. The study is limited to informations available for last five years data from 2001/02 to 2005/06.
5. Simple statistical and financial tools are used for data analysis.
6. Published financial statement and other related information is the basic source of secondary source of information where as the opinion of employees collected through structured questionnaire is the basic source of primary information. The researcher collected opinion of employees without any bias.
7. The study is purely for academic purpose as a partial fulfillment of the requirement of Master of business studies. It is, thus conducted on prescribed format.

## **1.8 Organization of the Study**

Present study is organized in systematic way of analysis and presentation. It is designed in such a way that the stated objectives of the study can easily fulfilled. For research purpose, it is divided into five chapters as per the TU format. First chapter of the study deals about the basic assumption of the study and plan of the study. It also introduces about the concept and highlights the importance of this study. This chapter basically presents research issues, importance significance of the study, objective of the study and limitation of the study. Second chapter explains the theoretical issues of working capital management. It also explains the survey of previous scholar, which is helpful to understand the concept, importance of working capital on based on detail review of literature. Similarly, the third chapter is related to research methodology, that is adopted by the researchers to analyze the information. Simply it deals about the research design, sample and population of the study, data collection procedure, data collection techniques and tools and techniques employed.

In the same way, results are presented in chapter four. It includes presentation of data, analysis of data, interpretation of data and presents the findings the study. Lastly, summary, conclusion recommendation of the present research is included in the chapter five.

Bibliography and Appendix are also included to provide clear ideas about relevant calculation, the book and articles being referred.

## **CHAPTER TWO**

### **REVIEW OF LITERATURE**

#### **2.1 Background**

Review of literature is a process of learning and understanding the concept of the related literature thoroughly. It helps the researchers to provide knowledge about the development and progress made by the earlier scholars on the concerned field of the study. It also helps the research work, undertaken by him. Most of the earlier researchers have reviewed on working capital management by considering only calculation financial ratio. In the present study, researcher has tried to use financial as well as statistical tools to meet the diversified objectives for working capital management. The researcher has also tried to find out the relation of working capital to net profit as well as the impact of various components of working capital on net profit sales. After analyzing the above facts, the researcher has also tried to study about strategies and policies and practices of management for working capital management. Thus, more focus is given to various dimensions of the concept. Few earlier related researches have been reviewed in this chapter.

#### **2.2 Conceptual Framework of Working Capital Management**

Most firms have a large amount of cash invested in working capital, as well as substantial amounts of short-term payables as a source of financing. For instance, according to the National Bank of Belgium, in 1997 accounts receivables and inventories were respectively 17% and 10% of total assets of all Belgian non-financial firms. Accounts payable were 13% of total assets of these firms. It can be expected that the way in which working capital is managed will have a significant impact on the profitability of firms. Accordingly, for many firms working capital

management (WCM) is a very important component of their financial management. Firms may have an optimal level working capital that maximizes their value. On the one hand, large inventory and a generous trade credit policy may lead to higher sales larger inventory reduces the risk of a stock-out. Trade credit may stimulate sales because it allows customers to assess product quality before paying. Because suppliers may have significant cost advantages over financial institutions in providing credit to their customers, it can be an inexpensive source of credit for customers. The flip side of granting trade credit and keeping inventories is that money is locked up in working capital.

Proper financial management is the great essence for every business organization from the point of view of achieving entire success. In this aspect, working capital management plays a significant role in every concern including trading organizations. Trading organizations as the major aspects of the country, which support in the development of national economy. To run daily trading activities of the company, besides manpower, equipment etc. one of the major components is working capital. Simply, the term working capital management refers to the administration of all aspects of current assets and current liabilities, which affect the overall day-to-day functional areas of the organization. For instance, without cash bills can not be paid, without receivable the firm can not allow timing difference between delivering goods or services and collecting the money to pay for them, without inventories the firm can not provide immediate deliveries. Thus, sometimes, the success or failure of any concern virtually depends upon the efficiency of working capital management.

"It is not simple for the manger to determine the suitable current assets investment policy, maintain proper relation-of making about the working

capital may be harmful of the organizations and finally may create the situations of pushing the organization into liquidation. Therefore, it is must to maintain the good balance of the working capital. It should be neither excess nor less, just adequate to the business firm. Adequate working capital brings security, confident and continued existence of the business. In order hand, excess investment could affect profitability and inadequate amount of working capital can threaten solvency to the firm."(Pandey, 1999. P 808). So, many authors have compared the working capital as lifeblood and controlling nerve center. Without it, one cannot imagine the future life of any concern. It is said that good working capital management is a component of good financial management and will help to enhance financial performance.

### **2.2.1 Concept of the Working Capital**

There are two concepts of working capital,

#### **Gross Working Capital**

"The term gross working capital is regarded the firm's total current assets. It focuses only the optimum in current assets and financing of current assets".(Khan and Jain, 1999. P 54).

"It consists of cash, marketable securities, receivables and inventories. From the management viewpoint, gross working capital deals with the problem of managing individual current assets in the day-to-day operations" (Kuchhal,1988. P 157). Current assets are the most powerful part of any organization. It can effect the profitability and can create the problem in daily operations. It also enables a firm to plan and control funds to maximize the return on investment. This concept is also known as qualitative concept.

## **Net working capital**

Net working capital defined as the difference between current assets and current liabilities. It focuses the liquidity position of the firm in long run. Net working capital can be positive or negative. Positive net working capital will arise when current exceed current liabilities and negative net working capital arises when current liabilities exceed current assets. Positive working capital helps to increase the profit but in reverse negative working capital may harmful to the company. So, net working capital can be more useful for the analysis of the trade-off between profitability and risk. The concept of net working capital is also the equally important in every organization. It enables a firm to determine how much amount is left for operational requirement. Net working capital is not very useful for comparing the performance of different firms as a measure of liquidity, but it is quite useful for internal control. It is also known as quantitative concept.

### **2.2.2 Types of Working Capital Management**

There are two types working capital management.

#### **Permanent working capital**

"Permanent working capital is the minimum amount of current assets required throughout the year to conduct a business on a continuous and uninterrupted basis, even during the dullest season of the year. It will remain permanently in the business and will not be returned until the business is would up" (Khan and Jain, 1999. P 55). But it could vary from year to year depending upon the growth of the company and the stage of the business cycle in which it operates.

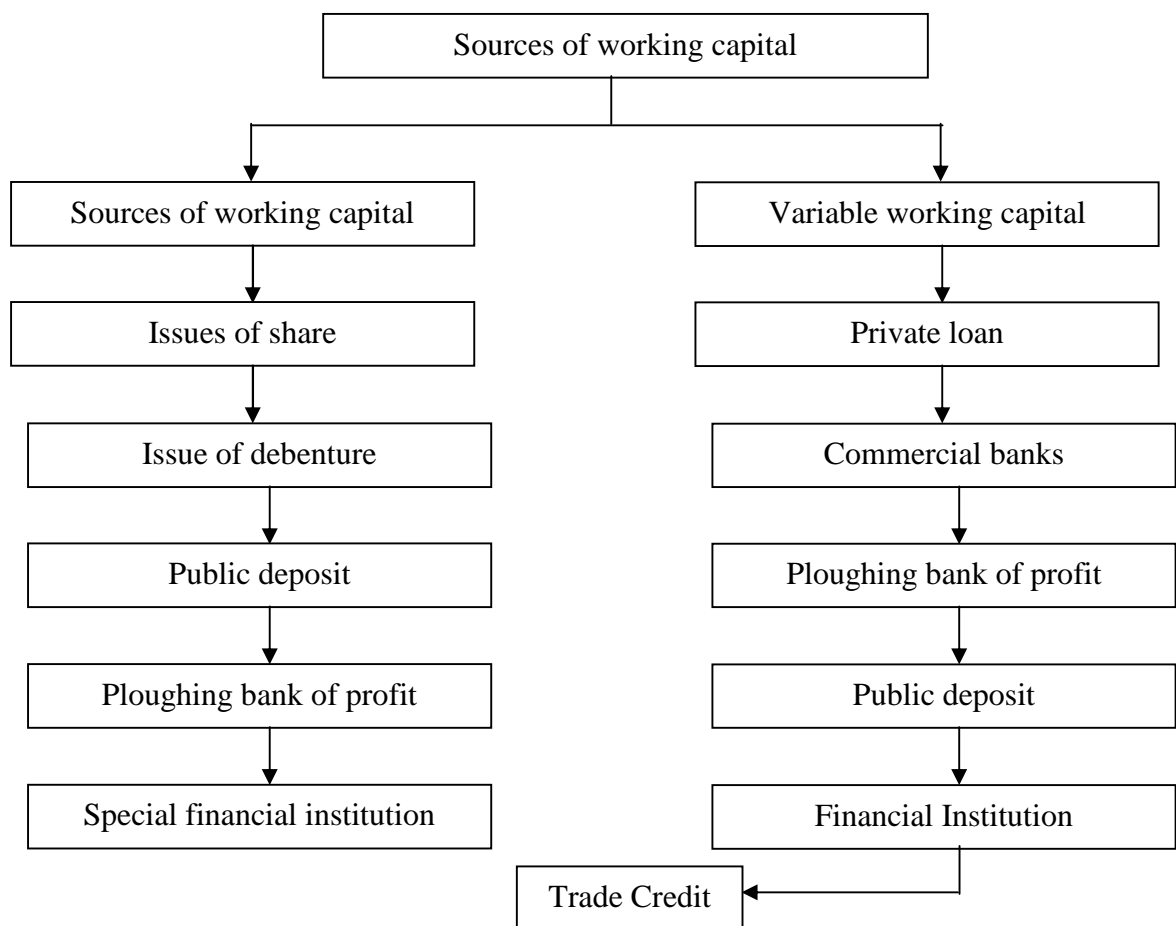
Business firm could not be able to survive itself in the competitive market without permanent working capital. For instance, every business enterprises has to maintain a minimum stock of raw materials, work in progress finished products spare parts etc. It always requires money for the payment of wages and salaries throughout the year (Kuchhal, 1988. P 36).

### **Temporary Working Capital**

Temporary working capital is also known as variable, seasonal and fluctuate working capital. It represents the extra working capital, required at certain times during the operating year to meet some special exigency. It may required in seasonal change of business and certain abnormal conditions like strikes, lookouts, dull market conditions, cut-throat competition etc. Therefore the firm to meet liquidity requirements that will last only temporarily creates temporary working capital.

### **2.2.3 Sources of Working Capital**

The requirement of the working capital depends upon the organization, objectives, time situation and time period. This suggests that dependence on only one or specific sources of capital may create obstacles and problems. Therefore, the enterprise has to use combination of one or more sources of capital in management of WC. After ascertaining the amount of WC needed to the enterprises, permanent capital can be collected from capital market whereas variable WC can be collected from money market. According to nature of WC, following different sources may be available: (Kuchhal, 1998. PP 267-268).



### 2.2.4 Working Capital Policy

Working capital policy refers to the firm's basic policies relating (1) the target level for each category of current assets and (2) how current assets will be financed. There are basically two policies in working capital management to examine the above two issues.

#### Current Assets Investment Policies

Current Assets investment policy refers to the policy regarding the total amount of current assets to be carried out to support the given level of sales. There are three alternative current assets investment policies-Relaxed, Moderate and Restricted. Under each policy, a different amount of working capital is carried to support each level of sales.

Relaxed current Assets investment policy: In this, the firm holds relatively large amount of current assets i.e. cash, marketable securities, inventory and receivables to support the given level of sales. This policy creates the longer receivable collection period due to the liberal credit policy. It also used to create longer inventory and cash conversion cycles. So, the policy provides the lowest expected return on investment with lower to the customers.

Modern Current Assets Investment Policy: In modern policy, firm holds the amount of current assets in between the relaxed and restricted policies. Both risk and return are moderate in this policy.

Maturity Matching Policy: In restricted policy, firm holds the minimum amount of cash, marketable securities, inventory and receivable to support the given level of sales. This policy tends to reduce cash conversion cycle, receivable conversion cycle and inventory. The policy follows a tight credit policy, under which, firm used to bear the great risk of losing sales.

### **Working Capital Financing Policy**

As current assets plays crucial role in any concern, it is must that working capital financing policy should clearly outline the different sources of financing in current assets. The manner in which the permanent and temporary current assets are financed constitutes the firm's working capital financing policy. There are three working capital financing policies-Maturity Matching, Aggressive and Conservative.

Maturity matching policy: Under this policy, the firm uses long term financing to finance permanent current assets and short term financing to finance temporary or variable current assets. This situation may not be

realized due to the uncertainty about the expected lives of assets. Maturity matching policy lies in between the aggressive and conservative policies. There is neither high nor profitability in the company, while under this policy. Therefore, if the firm attempts to match assets and liability's maturities, we call this a moderate (maturity matching or self-liquidating working capital financing policy).

**Aggressive policy:** under this policy, the firm finances not only in temporary current assets but also finances in a part of the permanent current assets with short term financing and firm may even finance in a part of their fixed assets with long term financing. This policy relies heavily on short term financing which makes the firm more risky. There will be complicated for the firm to raise the funds during the stringent credit. Hence, there is higher risk, higher return and low liquidity position under this aggressive policy.

**Conservative Policy:** In the conservative policy, firm uses long term financing to finance not only in permanent and fixed current assets with long term financing. Conservative policy temporary also meets some all of the seasonal demands. It is comparatively less risky earns lower return. So, this policy is also known as very safe financing policy.

### **2.2.5 Need for Working Capital**

The need for working capital to run the day-to-day business activities cannot be overemphasized. It helps to achieve entire goal of the business and maximize the wealth of shareholders. Business firm generally holds cash for these three purposes. They are as follows (Pandey, 1998. P36).

**Transaction Motive:** The transaction motive refers to the holding of cash to meet day-to-day routine cash requirement of business. It helps business to run smoothly and uninterrupted basis .

**Precautionary Motive:** The precautionary motive refers to the holding of cash to meet the random and unforeseen fluctuations in cash flow i.e. unpredictable change in demand and supply, strikes, failure of important customers, unexpected slow down in collection of account receivable etc.

**Speculative motive:** The speculative motive refers to the desire of a firm of a firm to take advantages of opportunities, which present themselves at unexpected moment for example they can make purchase at favorable or reduce price on payment of immediate cash, speculate on interest rate etc.

### **2.2.6 Financing of Working Capital**

The most important function of financial manager is to determine the level of working capital and to decide how it is to be financed to meet the organizational goal. Financing of working capital is concerned with two major factors-cost and risk. Therefore, only appropriate financing of working capital led the business firm. Firm can adopt different financing policies among them mainly three are given below.

**Long Term Financing:** The sources of long term financing refer to the ordinary share capital, preference share capital, debentures, and long-term debt from financial institutions and retained earnings. Long term financing will reduce the cost of business. In short, we can say that long term financing has high liquidity and low profitability.

**Short Term Financing:** The sources of short term financing refer to the working capital funds from bank, public deposits, commercial papers etc. The short term financing is obtained for a period less than one year.

**Spontaneous Financing:** Spontaneous financing refers to the automatic source of short-term funds arising in the normal course of a business. The two major sources of spontaneous financing are trade credit and outstanding expenses. There is no explicit cost of spontaneous financing. Therefore, the financial manager always would like to finance its working capital with spontaneous sources because the real choice of current assets financing of the manager in reality, is in between short term or long term sources of finance.

### **2.2.7 Determinations of Working Capital Requirement**

Since, there are not set rules to determine the working capital; the firm itself should manage working capital in proper way by considering the need of business." The total working capital requirement is determined by a wide variety of factors" (Khan and Jain, 1999. P 36). These factors sometimes, could affect different enterprises differently and they to vary from time to time. Generally, the following factors affect the working capital requirement of the firm.

**Nature of Business:** Working capital requirement of a firm are basically related to the nature of business. Trading and financial firms need large sum of money to be invested in working capital. Inversely, public utilities need limited working capital only for the use of cash sales and supply services. "Working capital only for the manufacturing concerns to fall between the two extreme requirements of trading firm and public utilities" (Pandey, 1999. P 56)

**Production Policies:** Production policies are also the factor, which affects in determining the working capital requirement of any or organization. For instance, if a firm produces seasonal products, then it will be sold in certain month of the year and which will keep inventories at minimum

level, this make working capital increase. In the way, if the work of business done manually, the amount of working capital required will be more.

**Manufacturing Process:** The requirement of working capital increases due to the length of their manufacturing process or production cycle in any concern and vice versa.

**Growth and Expansion of Business:** Gross and expansion of business is also another factor, which affects to determine the requirement of working capital. If the firm grows, it naturally cost more working capital than those static ones and vice versa.

**Divided policy:** Divided policy also may be the factor affecting working capital requirement. the payment of divided consumes cash balance, which decreases the working capital. Inversely, if firm does not pay divided to the shareholders, working capital will be increased.

**Business Cycle Fluctuation:** Naturally the recession period need more working capital than in the period of boom and recovery. So, business cycle fluctuation is another determinant of working capital requirement.

**Credit Policy:** If the firm follows liberal credit policy, it has to invest more in working capital. On the other hand, if firm follows the stringent credit policy, it has to invest only fewer amount in working capital.

**Price Level Change:** Price level change is also affects the requirement of working capital. A firm requires maintaining the higher amount of working capital if the price level rises because it needs more funds due to increase in price and vice versa.

### **2.2.8 Area of Working Capital Management**

The working capital management covers the following areas.

#### **Current Assets**

Current assets are those assets which can be converted into cash within an accounting year. They are sundry debtors, receivable, bank balance or cash investors etc.

#### **Current Liabilities**

Current liabilities are those claims of outsiders which are expected to mature for payment within an accounting year. They are creditors, bank overdraft, outstanding expenses, bills payable, tax, proposed dividend etc.

#### **Structuring, Investing and financing**

Structuring of long term liabilities, short term liability, fixed assets and current assets with its every account is guided by working capital policy. Level of investing each component of current asset, short-term and long term financing mix strategy, and implementation of these are the main functional area of working capital management.

### **2.3 Review of Related Studies**

Pradhan and Koirala, (1983) had jointly published an article on " Some Reflection on working capital management in Nepalese Corporations." The article basically aims to find out the difficulty, importance and problem of current assets management and also aims to find out the motive for holding cash and inventory. The study uses only primary data to find out the basic constraints and distributed 200 questionnaires. For the purpose of the study, they use both manufacturing public corporations as a sample companies. Analyzing the collected data the major finding of the study are as follows.

- a. In manufacturing corporations, working capital as well as fixed capital both in difficult to manage. However, in non-manufacturing corporations working capital is more difficult to manage as compared to fixed capital.
- b. The management of current assets had more problems as compared management of accounts receivable and inventory management is problematic to manufacturing corporations and the management of cash and receivable is more problematic to non manufacturing corporations.
- c. To provide a reserve for routine net outflows of cash is there major motive for holding cash in Nepalese Corporations.
- d. The major reason for holding inventories is to facilitate spinout operation of production and sales.

The major factor affection the larger invention in receivable is found to be the liberal credit policy followed by Nepalese corporation. The late paying practice of customers is also responsible for larger investment in receivables. However, corporations are reluctant to take inefficient collection of trade credits as one of the major factor affecting receivables.

Shrestha, (1983) had carried out his article on, "Working capital management in public enterprises: A study on financial results and constraints". In this article he had considered ten-selected PEs to measure their working capital need in those PEs. He had mainly focus on the liquidity, turn over and profitability position of that PEs. In the analysis, he had focused that four PEs had maintained adequate position; Two PEs had excessive liquidity position and rest four enterprises had failed to maintain desirable liquidity position. About turnover, four had adequate turnover, one had high turnover and remaining other PEs do not sum to achieve satisfactory turnover of net working capital. He also found

that six PEs are operating at losses and four of them are being able to active some percentage of profit. After analyzing these constraints, he had bought certain policy issues. They are as follows.

- a. There is a lack of suitable financing planning for determining their working capital needs in PEs.
- b. The management of PEs was being unable to given attention to working capital management.
- c. There exists no proper consistency between liquidity position and turnover of assets.

PEs being unable to show positive relationship between turnover and return on net working capital.

He had made some suggestion measures to overcome from the above policy issues i.e. identification of needed funds, regular checks, development of management information system. Positive attitude towards risk and profit and determination of right combination of short-term source of funds to finance working capital needs.

Pradhan, (1986) studied on " Management of Working Capital" which generally includes short term borrowing and investment by the selected manufacturing public enterprises (PEs) of Nepal. The research is based on the study of nine manufacturing public enterprises of Nepal for the duration of ten years from 1973 to 1982 A.D. The major objectives of the study are to examine the behavior and management of working capital in manufacturing PEs of Nepal. He has also dealt with another issues viz liquidity position, structure of working capital, nature of working capital utilization and demand for working capital and its various components with changing value of sales in that PEs. The study used a variety of

financial ratios to accomplish the objectives. His major findings are as follows.

- a. In his study, he reveals that most of selected PEs achieved a trade off between risk and return there by following neither an aggressive nor a conservative approach. Almost all the selected enterprises have a positive net working capital.
- b. The liquidity measures showed a poor liquidity position in majority of public enterprises positive cash flow of negative EBT or they have excessive net current debt. The selected PEs have on an average, 1/2 of the total assets is in the form of current assets.
- c. The share of inventories is the largest followed by receivable and cash in most. Turnover ratio shows that there has been improvement in utilization of current assets but not in net working capital utilization in the majority of PEs.

In this study, he found out that cash followed by inventories. So the inclusion of capacity utilization in the models did not seem to have contributed much to the demand function of working capital and its various components.

Further, more, the regression result shows that the level of working capital and its components in enterprises desires to hold depended not only sales on holding cost too.

Acharya, (1988) has published his article regarding " problem and impediment if the management of working capital in Nepalese enterprises. "It is said in the article that working capital management, especially in public sector has been a relatively weak area. He has described operational problems and organizational problems as a two major problems faced by the Nepalese PEs regarding the working capital

management. In the operational problem it has found the problems as follows.

Increase of current liabilities than current assets, not following the current ratio 2:1, slow inventory turnover in PEs change in working capital in relation to fixed capital had very low impacts over the profitability, PEs have not followed the conventional proportion of debt and equity as 1:1, very thin transmutation of capital employed into sales absent or apathetic information management system and the performance evaluation tools and techniques like Break even analysis, Funds Flow Analysis, Ratio Analysis etc were either undone or ineffective in most PEs monitoring of the proper functioning of working capital management has never been considered a managerial job.

Secondly, in the organizational problems he has found the following listed problems. Lack of regular evaluation of financial as well as regular internal and external audit system, most of PEs being unable to present their capital requirements with proper justifications, functioning of finance department was not satisfactory, some PEs are facing the problem of under utilization of capacity.

He has made some suggestions and recommendations too overcome the problems and to make an efficient use of funds for minimizing the risk of loss to attain the profit objectives.

- a. PEs should keep their consumers alive to consumption of their commodity.
- b. PEs should take care of negatively affecting policies directives from HMG Nepal itself.
- c. PEs is also suggested to avoid the system of crisis decision, which prevailed frequently in their operations.

- d. PEs should avoid fictitious holding of assets immediately.
- e. Finance staff must be acquainted with the modern scientific tool used for the presentation and analysis of data.

Lastly, he has suggested optimizing its level of investment as a point of time. Neither over nor investment because both of these situation will erode the efficiency of the concern.

#### **2.4 Review of Previous Thesis**

Tamrakar, (1978) has conducted the research on: "A study on Management of Working Capital in National Trading Limited." The main objectives of this study were to analyze then the importance of the working capital in long run and to evaluate the relation between the different components of current assets and current liabilities. The major findings of this research were as follows:

- a. There is very low inventory turnover and high collection period of outstanding debt.
- b. There is an improper financing of current assets and low earning capacity in the National Trading Limited.

From his study he has drawn the conclusion that the working capital management of NTL, in general, is poor.

Giri, (1986) has conducted his study on "Working Capital Management: A case study of Balaju Textile Industry Limited". His main objectives are to point out the need to control in each type of cash over a period of time and to know nature of financing cash or not. He also tried to show that there has been change in the variability of inventory in the over a period of time. The major findings of his study were as follows:

- a. There is extremely low utilization of plant capacity and lack of efficient management of the corporation, which has caused to bear losses for the company.
- b. There has operational inefficiency and very poor liquidity position deteriorating year after year.

There is no efficient and productive use of working capital. Therefore, there is no significant improvement of working capital position in BTIL. All the findings indicate the poor performance of corporations.

Shrestha, (1991) has carried out his study on "A study on Working Capital Management of Dairy Development Corporation (DDC) Nepal." His main objective is to analyze the relationship between sales and different variables of working capital. The major findings of his study are as follows:

- a. There is a high level of current assets in DDC.
- b. Inventory holds the major share of current assets followed by cash, receivable respectively.
- c. There is a high liquidity position and low level of working capital turnover in DDC.
- d. DDC has followed conservative working capital policy. Analysis found that there is no significance improvement in working capital over the 5 years of study period.

Gadtaula, (1993). has carried out his study on "Working Capital Management of Tea Development" His basic objective is to examine and measure the working capital structure of NTDC. The major findings of his study are as follows:

- a Inventory constitutes the most important and largest elements of working capital in NTDC.

- b. There is increasing trend of sundry debtors, which indicated slack position of the sales with accumulation of inventories
- c. Net working capital turnover ratio was lower indicating the inefficient utilization of working capital.

There was a poor liquidity position of the firm and lower risk of technical insolvency.

Sapkota, (1994) has conducted the research on "A study on Working Capital Management in Himal Cement Company Limited." His main objective is examine the position of current assets and current liabilities and to reveal the specific performance in working capital management of Himal Cement Company Limited. The major findings of his study are follows:

- a. Inventories, cash and receivables are the major component of current assets in HCCL where the inventories have hold here largest portion followed by cash and receivable respectively.
- b. There is improper utilization of current assets and liquidity as a problematic area.

He also concluded that the HCCL has followed ineffective management policy. Therefore funds, inventory control, cost control, selling process, investment is absence of proper guidelines policy in current assets and management responsibilities and lack of proper rules and regulation of the government policy.

Sharma, (1994) has carried out his research on "A Study on Working Capital Management of Nepal Battery Company Limited". The main objectives of studies are as follows:

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

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

The major finding of his study are as follows:

- a. There is unsound inventory management policy, unnecessary tie up of working capital and less utilization of working capital in NBLC.
- b. There is insignificant relationship in between inventory and sales. This indicates the inefficiency in turning its inventory into sales.

There was a good liquidity position of the company. He also found that there was an operating inefficiency in the company and by reducing operating expenses, the company can improve its profitability.

Shrestha, (1994) has carried out a research on "A Study on Working Capital Management in Bhrikuti Paper Mills Limited." His main objective is to analyze the current liabilities and their impact and relationship to each other. His major findings are as follows.

- a. Cash and Bank Balance holds the largest part of current assets.
- b. There is increasing trend in liquidity and decreasing trend in current assets turnover.

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

Pathak, (1994) has carried out his study on "An Evaluation of Working Capital Management in Nepal Lube Oil Ltd." His main objective is to apprise the working capital management of NLO with respect to cash, credit and inventory management, and relationship between sales and different variable of working capital. The major findings of the study are as follows:

- a. Cash holds relatively small portion of total assets but inventory holds large portion which cause to the large tie up of funds and less of profitability.
- b. There is inefficiency in collecting receivables are not affected by sales.
- c. There is unfavorable liquidity position in NLO and following moderate financing policy.

Yogi, (1995) has conducted his research on "A Study on Working Capital Management of Nepal Lever Limited." His main objectives of the study are as follows:

- a. To analyze the liquidity, composition of working capital, assets utilization and profitability position.
- b. To examine the relationship between liquidity and profitability of NLL.

His major findings of the study are as follows:

- a. Inventory holds the largest portion of the total assets followed by miscellaneous current assets, cash and bank balance and study debtors respectively.
- b. The liquidity position of the company is in increasing trend and it has found to be satisfactory.
- c. There is no proper utilization of current assets but inventory is increasing trend and it has found to be satisfactory level.
- d. Profitability position of the company is in continuously increasing trend, which seems satisfactory for the company.

Aryal,(1995) has carried out his study on "An Analysis on Working Capital Management with special reference to Hetauda Textile and Balaju Textile." The main objective of this study is to analyze the liquidity, long

term solvency, assets utilization and profitability position of both companies. The major findings of this study are as follows.

- a. The liquidity position of Hetauda textile Ltd is better than that of Balaju textile Ltd. But both companies have not followed a proper working capital policy.
- b. Total assets turnover of both companies is not satisfactory and there was not significance different of total assets turnover.
- c. Cash balance maintained by Balaju Textile Ltd. is better than that of Hetauda textile.
- d. Solvency position of Hetauda textile was better than that of Balaju textile.
- e. Profitability position of Hetauda textile is better than that of Balaju textile, however both companies have not good profitability position during the study period.

Sharma, (1999) has carried out his research on "A Study on Working Capital Management of manufacturing companies: Listed in Nepal Stock Exchange Limited in Nepal." His main objective is to find out the working capital practices of manufacturing companies. The major findings of the study are as follows:

- a Working capital policy shows that most of the manufacturing companies are following policy but opposite impact in revenue.
- b Most of the companies have negative return and is also found that there was unfavorable liquidity, profitability and turnover position.
- c Success and failure analysis also shows that most of the companies are financially unsound.

Therefore, it can be concluded that Nepalese manufacturing companies are suffering from sickness and it should be managed properly.

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. "His basic objectives of the study is 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 follows.

- a. Inventory holds the largest portion of current assets among cash and bank balance, receivable.
- b. Company is not able enough to utilize current assets properly; there is unsatisfactory inventory management system and poor liquidity position.
- c. The overall return position of the company is also not in favorable condition because of inefficient utilization of current assets, total assets and shareholders wealth.

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

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:

- a. Inventory holds the major portion of current assets followed by miscellaneous current assets, sundry debtors, cash and bank balance.
- b. The liquidity position of NL Ltd. is satisfactory but not perfect though increasing trend implies that liquidity position can be expected to be good in future.
- c. There is not trade off between liquidity and profitability; however profitability of NL Ltd. is satisfactory.

Aryal, (2002) has conducted his study on "Working Capital Management in Nepal Telecommunication Corporation." His study mainly aimed on examining the working capital position on NTC and to analyze and assess the size growth, liquidity, profitability and efficiency of working capital. The major findings of his study are as follows:

- a. There is sufficient amount of cash to meet the current obligation of the corporation, which indicated the sound liquidity position, and no problem or technical insolvency.
- b. All the variables of working capital as well as volume of sales are in increasing trend and the corporation is operating with (satisfactory profitability position) attractive profit.
- c. The corporation has been facing serious problem on outstanding debt collection. A significant portion of current assets is held by account receivable and average collection period is increasing every year.
- d. Overall capital structure of the company seems to be ideal for both the creditors and corporation.

Subedi, (2003) has conducted the research on " Working Capital Management of manufacturing companies listed in NEPSE". The main objectives of this study are to examine working capital management of the Nepalese manufacturing companies. It also analyzes the impact of working capital on profitability and examined the current assets and current liabilities policy of manufacturing companies.

The major findings of the study are as follows:

- a. The fluctuation in the assets holding leads to conclude leads that selected manufacturing companies do not seem to have seriously examined their working capital policy.

- b. Various manufacturing companies do not practice proper management of cash.
- c. The proper management of working capital highly depends upon the effective inventory management.
- d. Most of the Nepalese manufacturing companies have liquidity crises.

Tiwari, (2003) has conducted the research on "A Case Study on Working Capital Management" of DDC. The main objectives of this study is to examine the management of working capital in DDC. The major findings of his study are as follows.

- a. The current, the inventory holds the largest proportion.
- b. The current assets level with respect to total assets has increasing trend.
- c. The proportion of current assets to sales in fluctuating during the study period.
- d. Ratio of current liabilities to long-term liabilities is in increasing trend the study period.
- e. The turnover position of DDC are in fluctuating trend.

Dhakal, (2005) has conducted the research on "Working Capital Management of Nepal Telecom." His basic objectives are to examine the working capital management policy and practices of government owned public enterprises with special reference to Nepal telecom. The major findings of his study are as follows.

- a. Cash and bank balance constitutes the most important and largest element of working capital in NT.
- b. The growth trend of current assets is highly increasing than the total assets and net sales.

- c. Sales volume and net working capital volume during study period are averaged to get a sales variable and net working variable.
- d. The relationship between working capital and net profit of Nepal Telecom was found highly positive.

Karna, (2006) has conducted the research on "A Study of Working Capital Management in Nepalese Trading Companies". The main objective of his study is to examine the overall working capital management of Salt Trading Corporation Limited and National Trading Limited. The major finding of the study are as follows:

- a. The major components of current assets in NTL and STCL are inventories, receivables, cash and bank balance.
- b. The current assets with respect to total assets and fixed assets of NTL and STCL both are in fluctuating trend.
- c. Of the current assets, cash and bank balance hold the smallest portion and has fluctuating trend in both companies.
- d. Inventories are the major component of current assets.

Rayamajhi, (2007) has carried out his study on "A Study on Working Capital Management of Nepal Telecom". His basic objective is to examine the working capital policy of government owned public enterprises with special reference to Nepal Telecom. The major findings are as follows:

- a. The size of working capital largely affected the trade off between risk and profitability of the company.
- b. Cash and bank balance constitute the most important and largest element of working capital in NTC.
- c. NTC has a conservative working capital financing policy.

- d. The growth trend of current assets is higher than the total assets and net sales except last year of the study period where net sales growth rate is higher than the current assets and total assets.

Basnet, (2008) has conducted the research on "A Comparative Study on Working Capital management of National Trading Limited and Salt Trading Corporation Ltd." His basic objective is examine and measure the working capital structure of government trading section. The major findings of his study are as follows:

- a. The National Trading limited has higher ratio than the overall average inventory ratio and Salt Trading Limited has lower ratio than overall ratio.
- b. The ratio of receivable to current assets is in fluctuating trend.
- c. The overall return position of the company is also not in favourable condition because of inefficient utilization of current assets and total assets.

## **2.5 Review of International Articles**

Deloof, (2003) investigates the relation between working capital management (WCM) and corporate profitability for a sample of 1009 large Belgian non-financial firms during 1992-96 periods. Number of days accounts receivable, inventories and accounts payables are used as measures of trade credit and inventory policies. The cash conversion cycle is used as a comprehensive measure of WCM. The results suggest that managers can increase corporate profitability by reducing the number of days accounts receivable and inventories. Less profitable firms wait longer to pay their bills.

It was found there is a negative relation between gross operating income on the one hand and the measures of WCM (number of days accounts

receivable, inventories and accounts payable and cash conversion cycle) on the other hand. This is consistent with the view that the time lag between the expenditure for the purchases of raw materials and the collection of sales of finished goods can be too long, and that decreasing this time lag increases profitability. A shortcoming of Pearson correlations is that they do not allow to identify causes from consequences. A negative relation between number of days accounts payable and profitability is consistent with the view that less profitable firms wait longer to pay their bills. In that case, profitability affects accounts payable policy, and not vice versa. An alternative explanation for a negative relation between the number of days accounts payable and profitability could be that firms wait too long to pay their accounts payable. Speeding up payments to suppliers might increase profitability because Belgian firms often receive a substantial discount for prompt payment. However, in Belgian financial statements discounts received for prompt payment should be booked as financial income, and should not affect operating income.

The researcher also investigates the impact of WCM on corporate profitability. The determinants of gross operating income are investigated for all 5,045 firm year observation. The results was estimated with fixed effects and included number of days accounts receivable as a measure of accounts receivable policy. The coefficient of the accounts receivable variable is negative and highly significant, and implies that an increase in the number of days accounts receivable by 1 day is associated with a decline in gross operating income (divided by total assets minus financial assets) by 0.048%. The coefficients of the other variables included in the model are also highly significant. Gross operating income increase with firm size (measured by the natural logarithm of sales), sales growth and

fixed financial assets, and decreases with financial debt. Similarly, a significant negative relation was found between gross operating income and number of days inventories (p-value  $\frac{1}{4}$  0.015). In the same way, the result also showed a very significant negative relation between gross operating income and number of days accounts payable. This negative relation confirms the negative correlation between operating income and number of days accounts payable in the cash conversion cycle is included in regression. The coefficient of the cash conversion cycle variable is negative, but it is not significantly different from zero (p-value  $\frac{1}{4}$  0.0668). That is not a surprise: gross operating income declines with the number of days accounts receivable and inventories, but also with the number of days accounts payable, which is subtracted to calculate the cash conversion cycle. This suggests that managers can increase corporate profitability by reducing the number of days accounts receivable and inventories. An explanation for the negative relation between accounts payable and gross operating income is that less profitable firms wait longer to pay their bills. The determinants of gross operating income were estimated using plain OLS instead of fixed effects estimation, and include variability of income, 4 years dummies and 37 industry dummies as independent variables. OLS estimation does not take into account firm specific differences in profitability. The results are generally consistent with the results of regressions. Gross operating income decreases with number of days accounts receivable, inventories and accounts payable. One difference between fixed effects estimation and OLS estimation is that gross operating income decreases with the cash conversion cycle: the coefficient is highly significant (p-value  $\frac{1}{4}$  0.000).

A report issued in 1994 by the Forum for Private Business (FPB), a UK small business trade association, states that on average its respondents'

debtor accounts were paid more than 50 days beyond the agreed due date(1,2). The report indicates that SMEs had average gross debtors of at least £40 billion outstanding. This total was reduced by £20 billion when the SMEs' creditors were netted off, leaving a net balance of £20 billion to fund. This net balance was the amount owed to SMEs by non-SMEs and, coincidentally, equated almost exactly with the SMEs overdue debtor level. Netting overdue debtors and creditors leaves a net SME overdue balance of £10 billion. Again, this is the overdue balance owed to SMEs by non-SMEs, essentially by large companies with more than £5 million turnover. (The netting process should eliminate all intra-SME transactions.) To summarize this rather convoluted set of data, SMEs are effectively providing £20 billion of net funding to their larger customers. Half of this arises from net late payment of the SMEs debtor accounts. The small supplier often has little redress in this situation, believing strenuous collection effort could jeopardize his volume. The total interest incurred by small business to find £10 billion of late payments by larger companies will be about £1.5-£2.0 billion per annum. The SME cost to fund the total net debtor balance of £20 billion will be £3-£4 billion per annum. (These estimates are based on average business cycle SME borrowing rates of 15-20 percent). These are very large sums indeed. Most of this interest cost will, of course, be offset by interest savings in the larger companies, which is small consolation to the SMEs. However, the annual system on cost would £300-£500 million, based on a typical SME financing penalty of 3-5 per cent. What system-wide financial or operating benefits could conceivably arise from this situation? Somehow smaller companies must pass on their increased borrowing (and administrative) costs, although they frequently seem to perish in the attempt. Working capital starvation is generally credited as a major cause if not the major cause of small business failure in the UK. However, these

interest and administrative penalties cannot usually be quantified precisely by the SMEs larger customers. They are subsumed in the complex web of data developed during price negotiations. As result, these on costs can often be simply ignored, apparently on the principal that if a phenomenon is not readily apparent in the numbers, it does not exist. However, it is evident that there are significant penalties arising from this situation. Ultimately thee penalties must enter the product cost.

Refuse (1996) argues that attempt to improve working capital by delaying payment to creditors is counter productive to individuals and to the economy as a whole. Claims that are altering productive debtor and creditor levels for individuals tiers within a value system will rarely produce any benefit. Purposes that stock reduction generate system wide financial improvement and other important benefits. Urges those organizations seeking concentrated working capital reduction strategies to focus on stock management strategies based on " lean supply chain" techniques.

Holdren and Hollingshed (1999) integrates inventory control issues with corporate financial management and commercial lending practices. The first part of the paper considers inventory management techniques used by inventory holding businesses, and then explains how inventor segmentation techniques may be used by financial credit managers. Suggests ways inventory management influences the cost of working capital to businesses.

The researcher found five business benefits to be derived from employment of this approach:

1. Better risk and return management of the inventory.

2. The means to identify inventory SKUs that have little liquidation value, e.g. goods in process or "C" items that have or infrequent demand.
3. Greater confidence that the terms of the loan can be met.
4. A rational basis for assigning inventory loan interest rates therefore, a more effective loan marketing strategy.
5. An overall lower cost of borrowing for business.

## **2.6 Research Gap**

Many researchers have conducted in working capital management. In the previous researchers different statistical tools such as correlation analysis, ratio analysis and trend analysis has been used to identify the relationship between various components, which affect the working capital. In the present research researcher has used the statistical and financial tools such as ratio analysis, correlation analysis, and besides this new statistical tools multiple regression and ANOVA has been used to find out the impact of working capital with various variables such as profit, current assets, component of current assets, component of current liabilities. A part from this, the primary data has also been used to analyze the impact of working capital management and its effect on organizational efficiency, which may be a new concept for present research.

## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.1 Background**

The research methodology refers to the various sequential steps to be adopted by a researcher in studying a problem with certain objective in view. The present chapter is denoted to methodology applied in the study for the achievement of derived objective. Secondary as well as primary data are used to fulfill the objectives of the study. Secondary data are collected from annual report, financial and audited balance sheet and profit and loss account of the DDC where as opinion survey technique is adopted for collecting primary data.

Suitable tools and techniques are employed for the study. For research purpose financial as well as statistical tools are used. Financial tools are used the judgment about size and structure of working capital where as statistical tools are used to show the relationship between working capital and net profit and sales and to show the impact of working capitals to net profit and sales. Besides, it is also used to know the relation of working capital and organizational climate. Therefore in this chapter, focuses have been made on research design, nature and source of data, a description of research instrument, and the methods to collect and analyze the data.

#### **3.2 Research Design**

A research design is the arrangement of conditions for collection and analysis of data in a manner that aims to combine relevance to the research purpose with economy in procedure. Research design also can be defined as the plan, structure the strategy of investigation concerned so as to answer the research questions and to control variants. Thus, it is not

possible for the researcher to conduct a research project without a research design. In the present study, the researcher has followed descriptive as well as analytical research design to meet the stated objectives. Various financial parameters and effective research techniques are employed to identify the strength and weakness of the organization and to know the relationship and impact among various factors.

### **3.3 Nature and Source of Data**

Present study follows primary as well as secondary source of information as a source of data. Basic source of secondary information and data are annual financial reports published by concerned company. The supplementary data and information have been acquired from various newspaper, published and unpublished reports, related documents available in different libraries.

Questionnaire is used for primary data analysis. Researcher designed questionnaire by considering various factors of working capital management and organizational climate. Basic source of primary information are employees of concerned organization. In addition, answers on certain queries made to staffs of concerned organization. Besides, personal requires and discussion is also being conducted for clarification and verification of collected data and for recommendation. Out of the total 30 staffs working in finance department of Central office of DDC, the questionnaire is distributed to 30 staffs ranging from director level to the financial supervisor level.

### **3.4 Data Collection Techniques**

The necessary data have been collected from concerned organization. Data are also collected through various articles, journals, and published

and unpublished reports from different libraries including TU, Shanker Dev and Nepal Commerce Campus.

Similarly, individual data sheet is used to gather information about selected characteristics of the respondents. Selection of the items for 'individual data sheet' is primarily based on earlier international researchers and on the factors of working capital management. The instrument has seven items relating to working capital management and remaining seven items relating to organizational climate. Few demographic variables such as gender, age group, educational status, job level, job tenure and department are also designed and included in the instrument. The demographic variables are designed in nominal scale. All other variables are designed in six point Likert type scale '1= strongly disagree' and 6= strongly agree.

### **3.5 Data Collection Procedure**

The researcher personally visited the main office of the DDC. The researcher visited to the manager of the organization. And then collected data that are required for the study.

Convenient sampling technique is followed to collect opinion of more than 30 respondents to check the policies and practices of working capital management. In most of cases, meaning of the item and instruction to fill up the questionnaire are described to the respondents.

### **3.6 Data Analysis Tools and Techniques Employed**

Excel spreadsheet is used to tabulate and analyze the financial statement of organization. SPSS is used for tabulation and analysis. The financial, tools such as ratio analysis is used. Besides, many statistical tools are

used. Simple descriptive statistical tools such as frequencies, mean, standard deviation, correlation coefficient probable error are used.

### **3.6.1 Financial Tools**

#### **3.6.1.1 Leverage or Capital Structure Ratio**

Leverage ratio or capital structure ratio is also known as long term solvency ratio. It shows the composition of working capital with other, which are as under.

##### **i. Current Assets to Fixed Assets Ratio (CAFAR)**

This ratio shows the relationship between the current assets and fixed assets and can be calculated as

$$\text{CAFAR} = \frac{\text{Current Assets}}{\text{Fixed Assets}} \times 100$$

If the ratio is large, it indicates the sound working capital.

##### **ii. Current Assets to Total Assets Ratio (CATAR)**

The ratio of current assets to total assets indicates what percentage of the company's total assets are invested in the form of current assets. It is calculated as

$$\text{CATAR} = \frac{\text{Current Assets}}{\text{Total Assets}} \times 100$$

As the ratio increases the risk and profitability of the company would decrease. The low ratio indicates the small amount of working capital.

##### **iii. Inventories to Total Assets Ratio (ITAR)**

This ratio can be calculated as:

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

This ratio indicates the percentage of total assets invested in the form of inventories. Inventory is a part of working capital so, if the percentage increased the working capital automatically increased. The increase in the ratio indicates liberal inventory policy of materials in stock.

#### **iv. Inventory to Current Assets Ratio (ICAR)**

This ratio implies the percentage of current assets in the form of current assets in the form inventories and derived as

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

The increase in the ratio is an indication of liberal inventory policy followed by enterprises.

#### **v. Cash and Bank Balance to Current Assets Ratio (CBCAR)**

It is calculated as

$$\text{CBCAR} = \frac{\text{Cash and Bank Balance}}{\text{Total Assets}} \times 100$$

#### **vi. Cash and Bank Balance to Total Assets Ratio (CBTAR)**

This ratio is calculated as under and indicates what percentage of total assets is invested in cash and bank balance

$$\text{CBTAR} = \frac{\text{Cash and Bank Balance}}{\text{Total Assets}} \times 100$$

As the ratio increases the risk and profitability would decrease and if the ratio is greater the working capital would be greater.

### **vii. Receivables to Total Assets Ratio (RTAR)**

This ratio can be calculated as

$$\text{RTAR} = \frac{\text{Receivable}}{\text{Total Assets}} \times 100$$

This ratio indicates the percentage of total assets invested in the form of receivables. The increase in the ratio indicates the liberal credit policy followed by the company. The working capital is affected by the ratio because receivables are also a part of working capital, if the ratio increases the working capital also increases.

### **viii. Receivables to Current Assets Ratio (RCAR)**

This ratio indicates the share of receivables on current assets and it derived as

$$\text{RCAR} = \frac{\text{Receivable}}{\text{Current Assets}} \times 100$$

The low percentage indicates the greater working capital and vice versa. If the percentage is greater the factory is unable to collect receivables promptly.

### **3.6.1.2 Turnover Position**

By analyzing the various turnover ratios the factories turnover position can be known. The following ratios have been calculated.

#### **i. Current Assets Turnover Ratio (CATR)**

This ratio indicates the number of times the current assets are turned over during the year. It is computed by dividing sales by current assets, i.e., gross working capital.

$$\text{CATR} = \frac{\text{Sales}}{\text{Current Assets}} \times 100$$

As the ratio increases, it is utilization of current assets. If the ratio is low, a greater volume of working capital is there. Low ratio indicates greater working capital and high ratio indicates lower working capital.

**ii. Net Working Capital Turnover Ratio (NWTCR)**

It is computed by dividing sales by net working capital, i.e., difference of current assets and current liabilities

$$\text{NWCTR} = \frac{\text{Sales}}{\text{Net working Capital}} \times 100$$

**iii. Cash and Bank Balance Turnover Ratio (CBBTR)**

It is computed by dividing sales by cash and bank balance and it measures the speed with which cash moves through an enterprises operations.

$$\text{CBBTR} = \frac{\text{Sales}}{\text{Cash and Bank Balance}} \times 100$$

**iv. Receivables Turnover Ratio (RTR)**

This ratio is computed by dividing sales by the total amount of receivables.

$$\text{RTR} = \frac{\text{Sales}}{\text{Receivables}} \times 100$$

It indicates the number of times the receivables are turned over during the year. It gives the general measure of the productivity of the receivables investment. The higher ratio indicates the higher amount of working capital and lower ratio vice versa.

**v. Inventory Turnover Ratio (ITR)**

It is computed by dividing sales by inventory.

$$\text{ITR} = \frac{\text{Sales}}{\text{Inventory}} \times 100$$

This ratio shows the number of times inventory is replaced during the year. Higher inventory turnover indicates the good inventory management and lower turnover suggests the management should manage its inventory properly.

### **3.6.2 Statistical Tools**

#### **3.6.2.1 Standard Deviation (†)**

Standard deviation is the most popular and most useful members of dispersion and given uniform, correct and stable result (Joshi, 2005. P 158). The chief characteristic of standard deviation is based on mean. Mean doesn't give clear picture about two distributions with same average. Therefore, a standard deviation is superior to the mean deviation, mathematical treatment. It is the positive square root of average sum of squares of deviation of observation form arithmetic mean of the distribution. Different formulae can be used to calculate standard deviation, among them following formulae has been used here.

$$\dagger = \sqrt{\frac{\sum (x - \bar{x})^2}{N}}$$

#### **3.6.2.2 Correlation Co-efficient (r)**

Correlation co-efficient is defined as the association between the dependent variable and independent variable. It is a method of determining the relationship between these two variables. If the two variables are so related that change in the value of dependent variables, then it is said to have correlation coefficient (Shrestha and Silwal; 2059 P 323). It can be calculated by using method of Karl Pearson's correlation coefficient, which is a widely used mathematical method of correlation co-efficient between two variables.

$$r = \frac{N \sum dx.dy - \sum dx. \sum dy}{\sqrt{N \sum dx^2 - \sum(dx)^2} \sqrt{N \sum dy^2 - \sum(dy)^2}}$$

### Interpretation

- \* If  $r=0$ , there is no relationship between the variables.
- \* If  $r<0$ , there is negative relationship between the variables.
- \* If  $r>0$ , there is positive relationship between the variables.
- \* If  $r=+1$ , the relationship is perfectly positive.
- \* If  $r=-1$ , the relationship is perfectly negative.

### 3.6.2.3 Probable Error (PE)

The probable error of the correlation co-efficient is applicable for the measurement of reliability of the computed value of the correlation co-efficient 'r'. It is also denoted by P.E. It is calculated by the following formula.

$$\text{Probable Error (PE)} = \frac{0.6745(1-r^2)}{\sqrt{N}}$$

Where,

r= correlation co-efficient

N= Number of pairs observation

P.E is used to interpret whether the calculated value of 'r' is significant or not.

- i. If  $r < P.E$ , it is insignificant.
- ii. If  $r > P.E.$ , it is significant.
- iii.  $P.E. < r < 6PE$  nothing can concluded.

## **CHAPTER FOUR**

### **DATA PRESENTATION AND ANALYSIS**

#### **4.1 Background**

Basic objective of the study is aimed to analyze the working capital management adopted by DDC. It is also aimed to analyze the effect of working capital on net profit and sales. Management of working capital crucial aspect of financial management determines to a larger extent the success or failure of an enterprise. Most of the enterprises, often are suffering from different problems such as shortage of funds, irregular cash flow piling up of inventory, blocking of funds in receivables for long period due to lack of proper management of funds. A firm can choose appropriate combination of working capital only after systematic analysis of its different aspects. Considering the above facts and realities an attempt has been made in this present chapter to analyze and interpret the available empirical data in relation to various aspects of working capital management of DDC. Besides, the present chapter also explains the various findings of the study resulted form data analysis.

#### **4.2 Presentations and Analysis of Data**

An effort has been made in this section to analyze the working capital management of DDC. This section will present the analysis of structure and utilization of working capital. This section will also discuss the relationship of working capital and net profit and various components of working capital on net profit and sales. For the purpose, available data are tabulated and different financial and statistical tools are employed.

##### **4.2.1.1 Structure of Working Capital**

The Working Capital (WC) is affected by the nature of business and attitude of the management towards risk. There are various types of current assets that have been used in business organization. Some of them

have held high amount of current assets and some of them have occupied low amount, which affects the profitability liquidity position. The major components of working capital of DDC are inventory, receivable, cash and bank balance and loan advance and deposit. In this study section analysis of WC composition in relation to current assets fixed assets and total assets as ratio have been made.

**i. Total Current Assets (CA) on Total Assets (TA) and Fixed Assets (FA)**

This structure expresses the gross working capital portion that is held in TA and similarly in FA, which shows how many percentage of TA and FA has been invested on gross working capital. Following table presents the WC structure on TA and FA of DDC.

**Table 4.1**  
**Structure of CA on TA and FA**

(Rs in million)

Fiscal Year (FY)	CA	TA	CA to TA ratio (%)	CA	FA	CA to FA ratio (%)
2001/02	444.64	738.2	60.23	444.64	293.56	151.46
2000/03	450.76	737.02	61.16	450.76	286.26	157.46
2003/04	463.87	768.73	60.34	463.87	304.86	152.16
2004/05	497.81	771.43	64.53	497.81	273.62	181.93
2005/06	542.88	813.2	66.76	542.88	270.32	200.8
Mean	479.99	765.72	62.60	479.99	285.72	168.76

Source: Annual Reports of DDC.

The table no 4.1 shows the volume of current assets, fixed assets and total assets and the ratio of current assets on total assets and current assets on

fixed assets respectively. The volume of current assets seems to be increasing every year. The volume of total assets is also found in increasing trend. Thus, it can be said that the percentage of current assets on total assets has been increased every year except FY 2003/04. In the beginning period (FY 20001/2002), the percentage of current assets to total assets shared 60.23% which is increased to 66.76% in last year (FY 2005/006). In every FY, except 2001/2002 is found the large CA/TA ratio. Similarly, mean score of volume of current assets is found Rs479.99 million and volume of total assets is Rs765.72 million. As a result, the average percentage of current assets on total assets is appeared as 62.60%.It indicates that the portion of current assets on total assets in DDC is found in satisfactory level.

The table 4.1 also shows the clear picture of current assets and fixed assets of DDC and the ratio of current assets on fixed assets. It is found that the fixed assets are in fluctuating trend. In the beginning period (2001/002), the percentage is found 151.46% which is increased to 200.8%.Similarly, mean score of volume of fixed assets is found Rs285.72 million that resulted 168.76% of current assets over fixed assets. It can be concluded that the DDC maintained sufficient level of current assets over fixed assets.

## **ii Net Working Capital (NWC) on Total Assets (TA) and Fixed Assets (FA)**

NWC to TA ratio measures the NWC portion of TA and similarly NWC to FA ratio measures how much NWC has been invested with respected to fixed assets. NWC is difference between current assets and current liabilities. Following table presets the structure of net working capital on total assets and fixed assets.

**Table 4.2**  
**Structure of NWC on TA and FA**

(Rs in Million)

Fiscal Year	NWC	TA	NWC	NWC to TA ratio(%)	FA	NWC to FA ratio (%)
2001/02	46.2	738.2	6.26	46.2	293.56	15.74
2002/03	62.99	737.02	8.55	62.99	286.26	22
2003/04	119.04	768.73	15.48	119.04	304.86	39.01
2004/05	139.12	771.43	18.03	139.12	273.62	50.84
2005/06	117.88	813.2	14.50	117.88	270.32	43.61
Mean	97.05	765.72	12.56	97.05	285.72	34.24

Source: Annual Reports of DDC.

Note: Net working capital= current assets-current liabilities

The table no 4.2 presents the volume of net working capital, total assets and fixed assets and the relationship between net working capital and total assets and net working capital and fixed assets respectively. The volume of net working capital is increasing every year except FY 2005/2006. Average ratio of NWC to TA of DDC is 12.56%.The ratio of increment of net working capital is found slightly more rapid than total assets. Similarly, average net working capital is found Rs97.05 million and total assets is found is 765.72 million that resulted 12.56%.Thus it can be said that net working capital of DDC is not good position as compared total assets.

With respect to FA, in the beginning of the study period the ratio is 15.74% that is the lowest ratio compared to remaining ratios. The NWC to FA ratio of DDC is in increasingly trend except FY 2005/2006.In FY 2004/2005, the ratio is 50.84% which is the highest ratio during the study

period. Mean ratio of NWC to FA is 34.24%.It can be said that net working capital of DDC on FA is good position as compared to net working capital to total assets.

### iii Inventory on Total Assets (TA) and Current Assets (CA).

Inventory is one of major component of CA. Inventory to TA and CA ratio find the proportion of inventory with respect to TA and CA respectively. Inventory structure of DDC is presented in the table below.

**Table 4.3**  
**Structure of Inventory on TA and CA**

( Rs in million)

Fiscal Year (FY)	Inventory	TA	Inventory to TA ratio(%)	Inventory	CA	Inventory to CA ratio (%)
2001/02	165.71	738.2	22.45	165.71	444.64	37.27
2000/03	156.22	737.02	21.2	156.22	450.76	34.66
2003/04	169.22	768.73	22.01	169.22	463.87	36.48
2004/05	104.83	771.43	13.60	104.83	497.81	21.06
2005/06	169.20	813.2	20.81	169.20	542.88	31.17
Mean	153.04	765.72	20.01	153.04	479.99	32.13

Source: Annual Reports of DDC.

The Table no. 4.3 presents the volume of inventory and total assets. With respect total assets, the average portion of inventory on total assets of DDC is 20.01% Inventory to total assets ratio is in fluctuating trend. The largest portion of inventory to total assets is 22.45%. In FY 2004/005 13.60% is the smallest portion on total assets of DDC.

The table also shows the volume of inventory and current assets and the proportion of inventory to current assets. The table clearly shows that there is nominal share of inventory in current assets of DDC. Its volume is seemed to be fluctuating every year.

**iv Structure of Receivables on Current Assets (CA) and Total Assets (TA)**

The account receivables balance represents a very large amount of capital in many companies or organization. Although it is an asset, it is tied up and cannot be spent until it is collected. It is important fact that top management receives information, which measures the effectiveness of its credit and collection performance. The receivable must be in optimum level. Higher degree of receivables result high level of sales on credit portion and in the other hand, lower degree of it may cause negative result in sales level. The receivables should be managed in perfect combination. Thus it is logical to review the size of receivable in relation to current assets and total assets, which is presented as follows.

**Table 4.4**  
**Structure of Receivables on CA and TA**

(Rs in Million)

Fiscal Year	Receivables	CA	Receivables to CA ratio (%)	Receivables	TA	Receivables to TA ratio (%)
2001/02	4.61	444.64	1.04	4.61	783.2	0.59
2000/03	4.81	450.76	1.07	4.81	737.02	0.65
2003/04	2.86	463.87	0.62	2.86	768.73	0.37
2004/05	22.37	497.81	4.5	22.37	771.43	2.9
2005/06	13.19	542.88	2.43	13.19	813.2	1.62
Mean	9.57		1.82	9.57		1.22

Source: Annual Reports of DDC.

The Table no 4.4 shows the clear picture of the volume of receivables and current assets and the portion of receivables on current assets. It also indicates that the volume of receivables is found fluctuating during the study period, while the volume of current assets is found increasing year

by year. The portion of receivables to current assets is also in fluctuating trend. Thus the management should seriously be managed receivables in comparison to current assets.

With respect to total assets, the average receivables to total assets ratio of DDC is 1.22% during the study period. In the three fiscal year, they are below the average ratio and rest two years they are higher than average receivables to total assets ratio. The highest ratio is 2.9% in the fiscal year 2004/2005.

**v Structure of Cash and Bank Balance (CBB) on Total Assets (TA) and Current Assets (CA)**

The basic objective of cash management is to keep the investment in cash as low as possible while still operating the firms activities efficiently and effectively. Cash is necessary to pay bill, to purchase new materials and to pay debt. The company must hold cash to meet these requirements. The following table clearly pictures the structure of cash and bank balance.

**Table 4.5**  
**Structure of CBB on TA and CA**

(Rs in Million)

Fiscal Year	CBB	TA	CBB to TA ratio (%)	CBB	CA	CBB to CA ratio %
2001/02	189.26	783.2	24.16	189.26	444.64	42.56
2000/03	198.63	737.02	26.95	198.63	450.76	44.06
2003/04	192.74	768.73	25.07	192.74	463.87	41.55
2004/05	300.47	771.43	38.95	300.47	497.81	60.35
2005/06	273.99	813.2	33.69	273.99	542.88	50.46
Mean	231.02		29.76	231.02		47.8

Source: Annual Reports of DDC.

Note: Cash=Cash+ Bank + Branch Account

With respect to total assets, the mean score of volume of cash and bank balance is found Rs. 231.02 million. As a result the average percentage of cash bank balance on total assets is appeared 29.76%. It indicates that the portion of cash and bank balance on to total assets in DDC is found in satisfactory level. The volume of cash and bank balance of DDC during study period is in fluctuating trend. In the beginning period, FY 2001/2002, the percentage of cash and bank balance to total assets shared 24.16% which is increased to 33.69% in last year 2005/06.

The table 4.5 also shows the volume of cash and bank balance and the portion of cash and bank balance on current assets. The table shows that DDC has hold higher percentage of cash and bank balance on current assets. The table also shows that cash and bank balance represented more than 40% of current assets during study period. Mean score of cash and bank balance to current assets is 47.8%.

**vi Structure of Loan, Advance and Deposit (LAD) in Total Assets (TA) and Current Assets (CA).**

The ratio of LAD to TA indicates the portion of LAD which occupies on TA and similarly LAD to CA ratio indicates the portion of SAD which occupies on total assets. Following table present the LAD ratio on TA and CA.

**Table 4.6  
Structure of LAD on TA and CA**

(Rs in Million)

Fiscal Year	LAD	TA	LAD to TA Ratio (%)	LAD	CA	LAD to CA Ratio (%)
2001/02	85.06	783.2	10.86	85.06	444.64	19.13
2000/03	91.1	737.02	12.36	91.1	450.76	20.21
2003/04	99.05	768.73	12.88	99.05	463.87	21.35
2004/05	70.14	771.43	9.09	70.14	497.81	14.09
2005/06	86.5	813.2	10.64	86.5	542.88	15.93
Mean			11.17			18.14

Source: Annual Reports of DDC.

With respect to TA, the LAD to TA ratio of DDC has increasing trend from FY 2001/2002 to 2003/2004. In FY 20004/2005, LAD to TA ratio is 9.09, the smallest ratio during study period. The average portion is 11.17%

With respect to CA, the average LAD to CA ratio of DDC is 18.14%. The highest and lowest ratios are 21.35% and 14.09%. in FY 2003/2004 and 2004/2005 respectively.

**vii Analysis of Average Structure of Working Component (WC) on Total Assets (TA )and Current Assets (CA).**

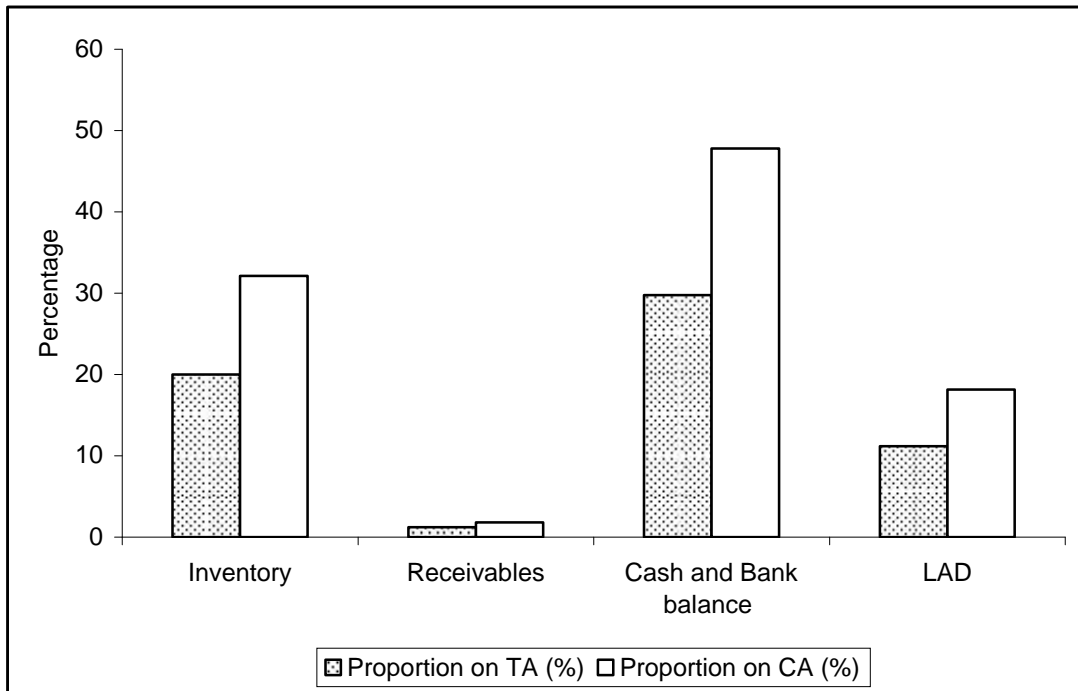
This analysis represents the average form during the study period. The average structure of working capital and its components are presented in the following table.

**Table 4.7**  
**Average proportion of WC components on TA and CA**

Components of WC	Proportion on TA (%)	Proportion on CA (%)
Inventory	20.01	32.13
Receivables	1.22	1.82
Cash and Bank balance	29.76	47.8
LAD	11.17	18.14
Total	62.16	99.89 ≈100

The above table presents the working capital structure as a whole in average during the study period with all the components. The DDC has inventory, receivable, cash and bank balance and LAD and ratios are 20.01%, 1.22%, 29.76%, and 11.17% of total assets respectively, in aggregate 62.16% of total assets. Similarly, the above table shows the structure of working capital and the various proportions of the components on total current assets.

**Figure 4.1**  
**Average Proportion of Components of TA and CA**



The above figure shows a great part has been occupied cash and bank balance followed by inventory, LAD and receivable.

#### **4.2.1.2 Utilization of Working Capital**

Funds are invested in various assets in business to make sales and earn profit. The efficiency with which assets are managed directly affects the volume of sales. High proportion of current assets, corporation maintains high liquidity position, but they may not achieve the desired profitability. This situation is seen in the utilization or efficiency of working capital in DDC. Activity ratios measure the utilization or efficiency or effectiveness with which a firm manages its resources or assets. These ratio are called the turnover ratio, hence turnover ratio are used to measure the efficiency or utilization of working capital in DDC.

## **i Currents Assets Turnover Ratio (CATR)**

This ratio measures the effective utilization of current assets in creating optimum sales level, where the company can sell with maximum profit in minimum cost. The maximum ratio indicates highest efficiency of current assets and vice-versa. CATR is presented in the following table.

**Table 4.8**  
**Current Assets Turnover Ratio (CATR)**

(Rs in Million)

Fiscal Year	Sales	TA	CATR (Times)
2001/02	1559.35	444.64	3.51
2000/03	1609.46	450.76	3.57
2003/04	1547.37	463.87	3.34
2004/05	1643.99	497.81	3.30
2005/06	1651.53	542.88	3.04
Average			2.68

Note: Sales denotes the operating income

Source: Annual Report of DDC.

The above table clearly pictures the relationship between sales and current assets in DDC. The value of sales is found higher than current assets and its proportion to current assets is found continuing declining trend. The average ratio is appeared 2.68. The declining trend of ratio between sales and current assets implies very low utilization of current assets. Thus, it is necessary to take corrective actions by the management of the company.

## ii Net Working Capital Turnover Ratio (NWCTR)

The sales to net working capital indicates the efficiency of working capital management. It indicates the velocity of utilization of working capital. This indicates the number of times the working capital turnover in the course of an accounting year. This ratio also measures the efficiency with which the working capital is being used by DDC. The following table shows the ratio of sales and net working capital of DDC.

**Table 4.9**  
**Net Working Capital Turnover Ratio (NWCTR)**

(Rs in million)

Fiscal Year	Sales	NWC	NWCTR (Times)
2001/02	1559.35	46.2	33.75
2000/03	1609.46	62.99	25.55
2003/04	1547.37	119.04	13
2004/05	1643.99	139.12	11.82
2005/06	1651.33	117.88	14
Mean			19.62

Source: Annual Reports of DDC.

The above table presents the NWCTR of DDC. The NWCTR of DDC has decreasing from 33.75 to 14. The declining trend of ratio between NWC and sales implies that utilization of net working capital is not in satisfactory level. The highest and lowest NWSTR are 33.75 and 11.82 times in FY 2001/2002 and 2004/2005 respectively. The average NWCTR ratio is 19.62 times with decreasing changing rate.

## ii Inventory Turnover Ratio (ITR)

The ITR measures the efficiency and effectiveness of inventory level. It shows how many times inventory is converted into sales. High ITR indicates high efficiency in conversion of inventory to sales.

**Table 4.10**  
**Inventory Turnover Ratio (ITR)**

(Rs in million)

Fiscal Year (FY)	Sales	Inventory	NWCTR (Times)
2001/02	1559.35	165.71	9.14
2000/03	1609.46	156.22	10.30
2003/04	1547.37	169.22	9.14
2004/05	1643.99	104.83	15.68
2005/06	1651.53	169.20	9.76
Average			10.86

Source: Annual Reports of DDC.

The above table clearly pictures the relationship between sales and inventory in DDC. The times of sales to inventory is found in fluctuating trend. The average ratio between sales and inventory of DDC is in satisfactory level.

**iv Receivable Turnover Ratio (RTR)**

Receivable turnover ratio indicates the speed with which receivables are being converted into sales. Low level of the receivables indicates the larger number of transaction on sales is held by cash and vice-versa. It helps to analyze the capacity of DDC management in utilization of fund in current assets. The table below shows the sales to receivables ratio in DDC.

**Table No. 4.11**  
**Receivable Turnover Ratio (RTR)**

(Rs in million)

Fiscal Year (FY)	Sales	Receivables	RTR (Times)
2001/02	1559.35	4.61	338.25
2000/03	1609.46	4.81	334.61
2003/04	1547.37	2.86	541.04
2004/05	1643.99	22.37	73.49
2005/06	16514.53	13.19	125.21
Average			282.52

Source: Annual Reports of DDC.

The table 4.11 shows the receivable turnover ratio of a DDC during 5 years study period. Sales are found in fluctuating trend where as receivables also is in fluctuating trend. The above average RTR is 282.52 times. The time of receivables is decreased from 338.25 times to 125.21 times. The table also shows that the increments level of receivable is found relatively low than net sales.

**v Cash and Bank Balance Turnover Ratio (CBBTR)**

CBBTR measures how rapidly cash can be converted in to sales. It reflects the efficiency of management in utilization of absolute liquid assets. The following table shows the cash and bank balance turnover ratio of DDC during five years study period.

**Table 4.12**  
**Cash Bank Balance Turnover Ratio**

(Rs in million)

Fiscal Year (FY)	Sales	CBB	CBBTR (Times)
2001/02	1559.35	189.26	8.24
2000/03	1609.46	198.63	8.10
2003/04	1547.37	192.74	8.03
2004/05	1643.99	300.47	5.47
2005/06	1651.53	273.99	6.03
Average			7.17

Source: Annual Reports of DDC.

The table 4.12 shows the decreasing trend of sales to cash ratio except fiscal year 2005/2006. The ratio is 8.24 times in 2001/2002 and decreased to 6.03 times over five year. Average turnover during that period is 7.17 times. Here both the sales and cash and bank balance are in increasing trend but sales are increasing slower than cash and bank balance during study period.

#### **4.2.1.3 Growth of Working Capital**

This part of study purpose to analyze the growth of working capital in DDC. Working capital has positive relationship with firms prosperity. Generally, the prosperity of the firm is reflected by its increasing sales volume, expansion of operation and so on. In order to analyze the growth of working capital in DDC, a relationship between working capital and sales and total assets have been attempt to establish. The following table shows the growth indices of working capital of DDC in term of current assets, total assets and sales.

**Table 4.13**  
**Growth trend of Current Assets Total Assets and Sales**

(Rs in million)

Fiscal Year	Current Assets	Indices	Total assets	Indices	Sales	Indices
2001/02	444.64	100	738.2	100	1559.35	100
2002/03	450.76	101.38	737.02	99.84	1609.46	103.21
2003/04	463.87	102.91	768.73	104.30	1547.37	96.14
2004/05	497.81	107.32	771.43	100.35	1643.99	106.24
2005/06	542.88	109.01	813.2	105.41	1651.53	100.46

Source: Annual Reports of DDC.

The table no 4.13 shows that the volume of current assets, total assets and sales and their respective growth indices. The growth indices shows that all the variables are found in increasing trend except total assets in fiscal year 2002/2003 and sales in fiscal year 2003/2004 during the study period. Current assets is found larger growth rate (109.01%) over the 5 years period as comparison to other two variables. On the other hand, total assets and sales are found 105.41% and 100.46% of growth rate respectively.

#### **4.2.1.4 Trend Analysis**

The financial statements may be analyzed computing trends of series of information. This method determines the action upwards or downwards and involves the computation of the percentage relationship that each statement item has been extracted from the same item in base year. The information for a number of years is taken up and one year, generally the first year is taken as a base year. The trend percentage analysis is interprets that either increased or decrease in trend percentage may give misleading results. This sections express the trend of some related items, which have effect in working capital. The following table express some significant trend ratios and regression line.

**Table 4.14**  
**Trend Analysis of Working Capital**

Year	CA	Indices	CL	Indices	CBB	Indices	LAD	Indices	Inventory	Indices	Total Assets	Indices	Sales	Indices	NWC	Indices
2001/02	444.64	100	398.44	100	189.26	100	85.06	100	165.71	100	738.2	100	1559.35	100	46.2	100
2000/03	450.76	101.38	387.77	97.32	198.63	104.95	91.1	106.43	156.22	94.27	737.02	99.84	1609.46	103.21	62.99	136.34
2003/04	463.87	102.91	344.83	88.93	192.74	96.66	99.05	108.73	169.22	108.32	768.73	104.30	1547.37	96.14	119.04	188.98
2004/05	497.81	107.32	358.69	104.01	300.47	155.89	70.14	70.81	104.83	61.95	771.43	100.35	1643.99	106.24	139.12	116.87
2005/06	542.88	109.01	425.00	118.49	273.99	91.18	86.5	123.33	169.20	161.4	813.2	105.41	1651.53	100.46	117.88	84.73

In the above table no 4.14 the trend ratios in fraction have been converted into integer and the trend is plotted on graphs as shown in the figure 4.2, 4.3 and 4.4 and these graphs have been analyzed.

**Figure 4.2**  
**Trend indices of CA and CL**

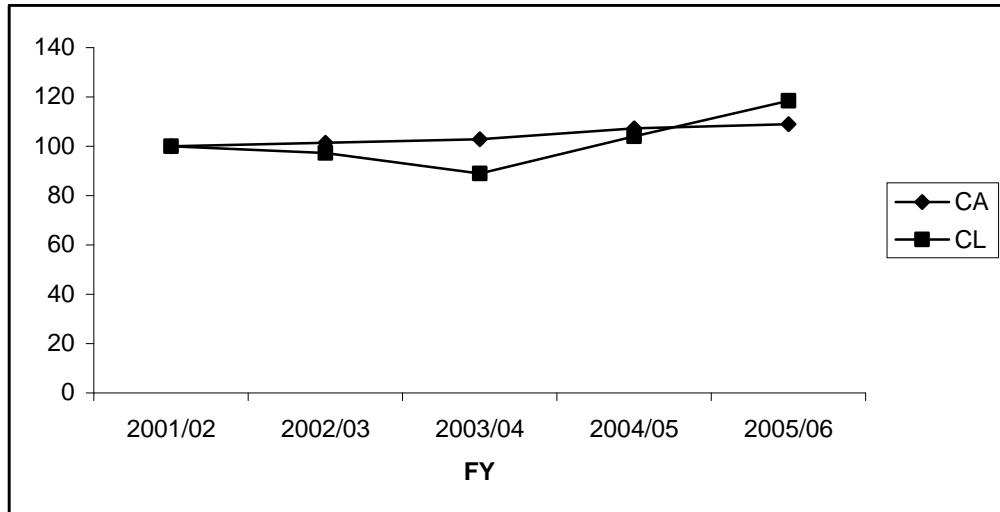
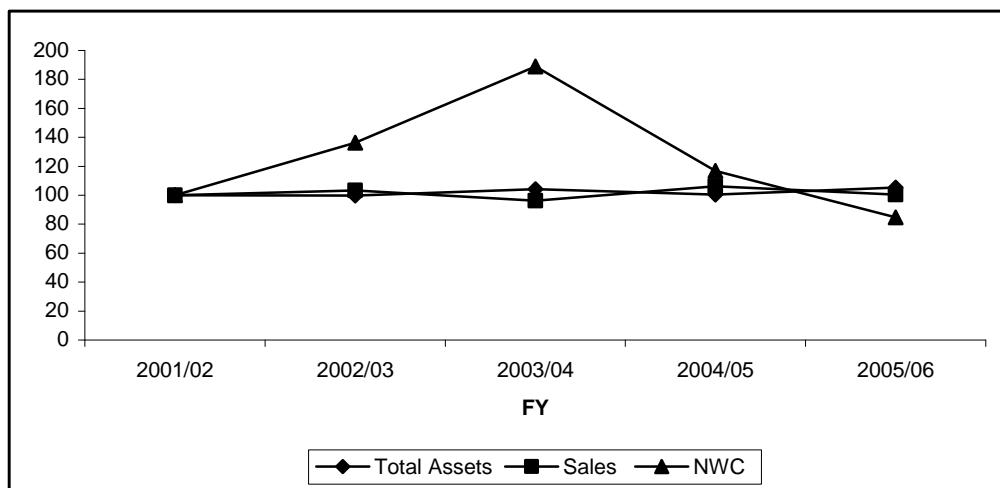


Figure 4.2 shows the trend of current assets and current liabilities over five years study period of DDC. The growth trend of current assets is in increasing trend where as the growth trend of current liabilities is in fluctuating trend. Current assets increased to 101.38% , in 2002/2003, and then 102.91%, 107.32% and 109.0%in fiscal year 2003/2004, 2004/2005 and 2005/2006 respectively.

**Figure 4.3**  
**Trend indices of TA, Sales and NWC**



Growth indices of total assets, sales and net working capital are shown in figure 4.3. Net working capital and total assets are denoted by NWC and TA respectively. NWC curve is increased first three years and then it is decreased in the study period. The indices are 136.34, 188.98, 116.87 and 84.73 in the years 2002/2003, 2003/2004 and 2005/2006 respectively taking 2001/2002 as base year. Similarly, the sales curve and TA curve are fluctuating every year. In the same period the growth indices of sales are 103.21, 96.14, 106.24 and 100.46 and those of total assets are 99.84, 104.30, 100.35 and 105.41. In this way sales and total assets have shown fluctuating between themselves but net working capital is highly increased and declined over that period.

**Figure 4.4**  
**Trend indices of CBB, Inventory and LAD**

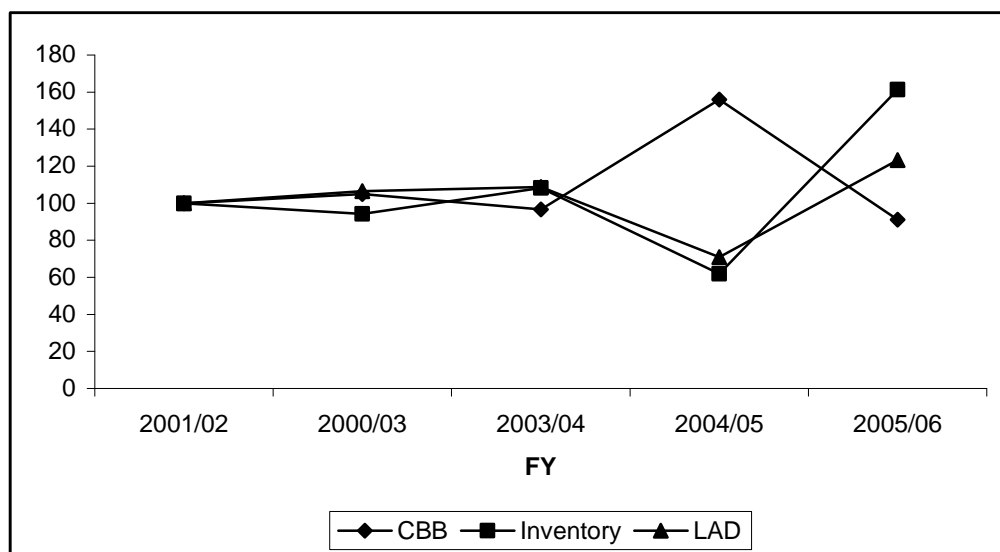


Figure 4.4 shows that the growth indices of cash and bank balance inventory and loan advance and deposit. The growth trend of cash and bank balance and inventory are in fluctuating trend. The indices are 100%, 104.95%, 96.66%, 155.89%, 91.18% and 100%, 94.27%, 108.32%, 61.95% and 161.4% in the fiscal year 2001/2002, 2002/2003, 2002/2004, 2004/2005, and 2005/2006 respectively. In the same period the growth

indices of loan, advance and deposit is in increasing trend except fiscal year 2004/2005. The indices are 100%, 106.43%, 108.73%, 70.81% and 123.33% in the fiscal year 2001/2002, 2002/2003, 20003/2004 and 20005/2006 respectively taking 20001/2002 as base year.

### **4.3. Relationship of Working Capital on Net Profit and Sales**

#### **4.3.1 Relationship of Working Capital and Net Profit**

Effective working capital management directly affects the net profit volume of the organization. It is regarded as the most important profit indicators. It helps to increase the net profit volume of the company where as weak level of working capital management is the signal of lower level of profit. Thus, it is logical to review the relation of working capital and net profit.

For the research purpose, net profit and working capital during study period are averaged to get profit and working capital variables. After getting profit and working capital variable, then data are analyzed using correlation coefficient. The following table presents the net profit Vs Net working capital.

**Table No 4.15**  
**Net Profit Vs Net Working Capital**

Fiscal Year	Net Profit	Net working capital
2001/02	7.61	46.2
2000/03	8.93	62.9
2003/04	14.12	119.04
2004/05	7.37	139.12
2005/06	25.24	117.88

Source: Annual Reports of DDC.

Above table shows that the net profit is regularly increasing except in 2004/2005. The volume of net profit in fiscal year 2001/2002 is Rs7.61 million which is increased to Rs25.54 million in last year (FY 2005/2006). The table also shows that the volume of net working capital is also in increasing trend except fiscal year 2005/2006.

**Table 4.16**

**Correlation between Net Profit and Net Working**

Equation	Correlation (r)	Coefficient of determination (r <sup>2</sup> )	Probable Error (PE)	Result
Net profit	0.375	0.1406	0.2603	Significant
Net working capital	37.5%	14.06%		

Source: Appendix I.

The table 4.16 presents the correlation coefficient between net profit and net working capital during study period. The calculated correlation coefficient is found 0.375 which shows positive correlation. It indicates that net profit and net working capital are found related with each other. Similarly coefficient of determination is found to be 14.06% which indicates that 14.06% of total change in profit has been determined by net working capital. The table also shows that PE is 0.2603 which is less than r. It indicates that the result is significant.

**4.3.2 Relationship of Net Working Capital and Sales**

Sales are regarded as the back bone of the organization. If sales of the company increased, there would be higher profit volume. On contrary, if sales of the organization decreased, there would be low profit volume. That means net profit is largely dependent on effective sales of the organization. Effectiveness of sales may be the important determinant of

profit. Thus, it is also logical to review the relation of net working capital and sales for our research purpose.

Sales volume and net working capital volume during study period are averaged to get a sales variable and net working capital variable. There after, correlation coefficient is used to find out the relationship between networking capital and sales of DDC. The following table presents the sales Vs net working capital

**Table No. 4.17**  
**Sales Vs Networking Capital (NWC)**

(Rs in million)

Fiscal Year	Sales	NWC
2001/2002	1559.35	46.2
2002/2003	1609.46	62.99
2003/2004	1547.37	119.04
2004/2005	1643.9	139.12
2005/2006	1651.33	117.88

Source: Annual Reports of DDC.

Above table shows the volume of sales is in increasing trend except fiscal year 2003/2004. The volume of sales in fiscal year 2001/2002 is Rs 1559.35 million which is increased to Rs1651.33 million in last year (FY 2005/2006). The table also shows the increasing trend of net working capital. The volume of net working capital is found Rs46.2 million in fiscal year 2001/2002 which is increased to Rs117.88 million in fiscal year 2005/2006.

**Table No. 4.18**

**Correlation between Sales and Net Working Capital**

Equation	Correlation (r)	Coefficient of determination ( $r^2$ )	Probable Error (PE)	Result
Sales	0.46	0.2116	0.2378	Significant
Networking Capital	46%	21.16%		

Source: Appendix II.

The table 4.18 clearly shows the relationship between sales and net working capital during the study period. The calculated correlation coefficient is found 0.46, which shows the positive correlation. It indicated that the networking capital and sales are correlated with each other. The sales volume of DDC is determined by the working capital. In the same way the coefficient of determination is found to be 0.2116 means that 21.16% of total variation in sales has been explained by net working capital. The probable error is 0.238. The value of r is greater than probable error. That means the relationship between sales and net working capital is said to be significant.

**4.3.3 Impact of Net Profit on Current Assets and Current Liabilities**

Current asset and current liabilities have high implication for determining net profit. Effective current assets and current liabilities policy directly affects the net profit of the organization. It means that the net profit of the organization is largely depended by the current assets and current liabilities of the organization. Thus, it is more significance to know the impact of current assets and current liabilities on net profit.

To find out the result, the five years data of net profit, current assets and current liabilities are averaged to get a variable of net profit, current assets and current liabilities respectively. There after linear regression analysis is used for computation. The following table presents the regression analysis of the independent variables current assets and current liabilities on dependent variable net profit of DDC.

**Table 4.19**  
**Impact of Net Profit on CA and CL: Regression Analysis**  
**Summary of the result**

Model	R	R square	Adjusted R square
1	0.816 <sup>a</sup>	0.666	0.332

a. Predictors: (constant), CL CA

#### ANOVA

Model	Sum of square	df	Mean square	F	Significant
Regression	156.750	2	78.375	1.993	0.334 <sup>a</sup>
Residual	78.661	2	39.330		
Total	235.411	4			

a. Predictors: (constant), CL CA

b. Dependent variable: NP

#### Coefficients

Model	Unstandardized coefficients		Standardized coefficient Beta	t	Significant
	B	Std: error			
1.Constant	-71.803	44.486		-1.614	0.248
CA	0.128	0.84	0.682	1.520	0.268
CL	0.060	0.108	0.249	0.555	0.635

a. Dependent Variable: NP.

Source: Appendix III.

The table 4.19 shows the dependency on net profit of current asset and current liabilities. The calculated R is found 0.816, which indicates that there is high positive relationship between dependent variable net profit and two independent variables, current assets and current liabilities. After considering the error term, the adjusted R square value is found 0.332. It indicates that 33.2% of total variation in the dependent variable net profit has been explained by the two independent variables current asset and current liabilities. Thus, it can be concluded that the current assets and current liabilities are determinant of net profit. Therefore, management of current asset and current liabilities should seriously be taken to achieve the goal of the organization.

Similarly, ANOVA table shows that the result presented above is significant at 0.05 level. The lower level of 'F' statistic resulted relatively higher level of significance.

#### **4.3.4 Impact of Sales on Current Assets (CA) and Fixed Assets (FA)**

Besides current assets, fixed assets also plays a significant role to operation of the business firm. It also helps to increase the profit of the organization. In this section, therefore, the researcher tries to find out the dependency of sales on current assets and fixed asset which is more relevant. The following table shows the regression analysis of dependent variable sales and independent variables current assets and fixed assets.

**Table 4.20**

#### **Impact of Sales on CA and FA: Regression Analysis**

#### **Summary of Result**

Model	R	R square	Adjusted R square
1	0.976 <sup>a</sup>	0.953	0.905

a. Predictors: (constant), FA, CA

### ANOVA

Model	Sum of square	df	Mean Square	F	Significant
Regression	826.578	2	4313.289	20.123	0.47 <sup>a</sup>
Residual	428.692	2	214.346		
Total	9055.270	4			

a. Predictors: (constant), CA, FA

b. Dependent variables: Sales

### Coefficients

Model	Unstandardized coefficient		Standardized coefficient Beta	t	Significant
	B	Std: Error			
1.Constant	2449.082	344.758		7.104	0.19
FA	-3.091	0.804	-0.925	-3.842	0.62
CA	0.76	0.281	0.65	0.269	0.813

a. Dependent variables: Sales

Source: Appendix IV.

The table 4.20 shows that the R value is found 0.976. It indicates that there is high and positive relation of sales on current assets and fixed assets. After considering error item, adjusted R square is found 0.905. It indicates that 90.5% of total variation in the dependent variables sales has been explained by the two independent variable current assets and fixed assets. Similarly, ANOVA table represent that result observed above is found significant at 0.05 level. The trend of the variables resulted relatively lower level of 'F statistics that resulted relatively higher level of significant.

### 4.3.5 Impact of Net Profit on Working Capital (WC) Regression Analysis

To focus the main objective of the study the researcher tries to find out the impact of net profit on working capital. The difference between the current assets and current liabilities is treated as working capital. Here simple regression analysis is used to find out the impact of net profit on working capital. The following table presents the regression analysis of gross concept.

**Table 4.21**  
**Impact of Net profit on WC: Regression analysis**  
**Summary of the result**

Model	R	R square	Adjusted R square
1	0.375 <sup>a</sup>	0.141	0.146

a. Predictors (Constant), WC

b. dependent variable Net profit

Model	Sum of squares	DF	Mean square	F	Significant
Regression	33.133	1	33.133	0.491	0.534 <sup>a</sup>
Residual	202.278	3	67.426		
Total	235.411	4			

a. Predictors (Constant), WC

b. Dependent variable: Net Profit

### Coefficient

Model	Unstandardized coefficient		Standardized coefficient	t	Significant
	B	Std: Error			
1.(Constant)	5.749	10.592		0.543	0.625
WC	0.072	0.102	0.375	0.701	0.534

a. Dependent variables: Net profit

Source: Appendix V.

The table 4.21 presents the regression analysis of dependent variable profit and independent variable net working capital during study period. The calculated value R is found 0.375 indicating the relationship between the dependent variable and independent variables is positive. After considering error term the value of adjusted R square is found 0.146 which indicates that 14.6% of the total variation in the dependent variable net profit has been explained by the independent variable net working capital. Similarly, the result signified relatively lower level of 'F' statistic that resulted higher level of significance.

#### **4.3.6 Working Capital of Management Policies and Practices in DDC**

Working capital indicates such type of capital, which is required for daily business operation. The management of working capital largely depends upon the policy of the organization. It is found through the interviews that there is no set of policies regarding working capital management formulated and the need of working capital is not estimated with any systematic study. A large liquidity position is maintained in the form of cash where no reasonable logic can be seen behind this.

Working capital is the key to success of every business organization. High working capital indicates the good liquidity position but low profitability where low working capital means high rate of profitability and poor liquidity position. The researcher designed seven question to know the agreement or disagreement of the respondents about the policies and practices of working capital management adopted DDC. Following table present the descriptive statistics of the result

**Table 4.22**  
**Descriptive Result of Working Capital Management Policies and Practices in DDC**

Variable	N.	Mean	Standard deviation
Working capital policies and practices properly adopted by the organization	30	4.6	0.56234
Norms and values of working capital management is seriously considered here	30	4.2333	0.67851
Proper size and structure of working capital is properly maintained here	30	4.1333	0.86057
Effectiveness of working capital management is timely evaluated here	30	3.8667	0.97320
Efficiency of the organization is also evaluated on the basis of working capital management	30	3.4667	0.77608
The large volume of profit is determined by working capital	30	4.6667	0.80250
Effective working capital management increase the profitability situation of the organization	30	5	0.74278
Total	30	4.2809	

The table 4.23 clearly presents the descriptive result of working capital policies and practices adopted by DDC. The mean score of the four variables stood just above average and the remaining three variables scored below average. It means that the respondents expressed agreement with the statement. The organization had not more practice to evaluate working capital management timely and to evaluate efficiency of organization on the basis of working capital management. The average

overall variables appeared have express slightly agreement with working capital policies and practices adopted by DDC. The result also showed that it was not found in satisfactory level. Thus, the organization should make appropriate policies and practices for management of working capital.

Similarly, the standard deviation of all the variables stood below average less than one. It indicates that the respondents are not low side where as other voted negative side. But the fluctuations in responses are not found very high.

#### **4.4 Major Findings of the Study**

The major findings of the present study are presented as under

##### **4.4.1 Structure of Working Capital**

The first part of the analysis deals with the structure of working capital. It has found that CA structure levels of DDC are not stable. The CA portion on TA are ranged between 60.23% to 66.76% with the average portion 62.60% and similarly on FA portion in TA ranged between 157.46% to 200.8%.The average NWC on TA and FA has been are 12.56% and 34.24% respectively. Cash and bank balance is the most important and largest element of current assets which holds 47.8% during the study period. Inventory, receivables, LAD has been found 32.13%, 1.82% and 18.14% respectively. DDC has maintained sufficient level of CA on TA and FA.

##### **4.4.2 Utilization or Efficiency of Working Capital**

The efficiency of management of current assets can be assessed with the help of volume of sales. The volume of sales in any business organization clearly reflects the utilization efficiency. The volume of sales seems to be

increasing every year during the study period except FY 2003/2004. CATR are decreased from 3.51 times to 3.04 times during the five year study period. NWCTR are also just 14 times in the last year of observation which is found 33.75 times in the base year. ITR is found to be in fluctuating trends and RTR from 338.25 times to 125.21 times, CBB from 8.24 times to 6.03 times. Form this analysis it can be said that the utilization of working capital in DDC is not in satisfactory level during study period.

#### **4.4.3 Growth and Trend Analysis of Working Capital**

The growth trend of CA is increasing than the TA and sales. The indices of CA indicates that the speed of current assets is faster as compared to the speed of TA and sales. The growth trend of CA is in increasing trend where as the growth of CL is in fluctuating trend. Similarly, NWC is in increasing trend first three years then it is in decreasing trend. CBB and inventory is in fluctuating trend, where as the increasing trend of LAD is also seems to be fluctuating trend. But the size of CBB has been increased in an inconsistent manner, which is the main cause of rapid increase in CA..

#### **4.4.4 Relationship of Working Capital and Net Profit**

The finding shows that the relationship between working capital and net profit of DDC is found 0.375 which shows the positive correlation. It indicates that the net working capital and net profit are related with each other. The result is also significant.

#### **4.4.5 Relationship of Working Capital and Sales**

Sales are regarded as the spinal cord of the organization. If sales of the organization increased there would be higher profit volume. On contrary

if sales of the organization decreased, there would be low profit volume. That means net profit is largely dependent on effective sales of the organization. Effectiveness of sales may be the important determinant of profit.

The relationship between net working capital and sales during the study period is found 0.46% which shows the positive correlation. It indicates that NWC and sales are linked with other. The coefficient of determination is found 21.16%, which indicates that 21.16% of total variation in sales has been explained by net working capital. The result is also significant.

#### **4.4.6 Impact of Net Profit on Current Assets and Current Liabilities**

Current assets and current liabilities have high implication for determining net profit. Effective current asset and current liabilities policy directly affects the net profit of the organization. It means that the net profit of the organizations is largely depended by the current assets and current liabilities management of organization.

The calculated R value is and 0.816, which indicates that there is high and positive relation of profit on current assets and current liabilities. The adjusted 'R' square is found 0.666 which indicates that 66.6% of total variation in the dependent variable net profit has been explained by the two independent variables current assets and current liabilities. Thus, it can be concluded that the current assets and current profit are strong determinants of net profit. Therefore, management of current assets and current liabilities should seriously be taken to achieve the goal of the organization.

#### **4.3.7 Impact of Sales on Current Assets and Fixed Assets**

Besides current assets, fixed assets also plays a significant role in operation of the business firm. It also helps to increase the profit of the organization. The result shows that R value is 0.976. It indicates that there is high and positive relation of sales on current assets and fixed assets. Similarly, the value of R square is found 0.953 which indicates that 95.3% of total variation in the dependent variable sales has been explained by the two independent variable current assets and fixed assets. Similarly, ANOVA table represents that result observed above is found significant at 0.05 level.

#### **4.3.8 Impact of Net Profit on Working Capital**

The finding shows that the relationship between net profit and working capital is positive. The value of R is found to be 0.375. Similarly, the adjusted R square is found 0.146, which indicates that 14.6% of the total variation in the dependent variable net profit has been explained by the independent net working capital. Similarly, ANOVA table shows that the result is significant at 0.05 level. It also indicates that the significant is higher level of significance.

#### **4.3.9 Finding on Primary Data**

The descriptive result of working capital policies and practices adopted by DDC shows that the organization had no practice to evaluate working capital management timely and to evaluate the efficiency of organization as the basis of working capital management. The average of four variables appeared just above four which indicates that the respondents have expressed slightly agreement with working capital policies and practices. The result also showed that the policies and practices adopted by DDC are not found in satisfactory level.

## **CHAPTER FIVE**

### **SUMMARY, CONCLUSION AND RECOMMENDATION**

#### **5.1 Summary**

Working capital management is concerned with the management of current assets and current liabilities in optimum level for day to day operation which involves deciding upon the amount and composition of current assets and how to finance these assets. Present research is successful to meet the objectives designed of the study.

The first chapter deals about the brief introduction of the study. This chapter basically presented research issues, basic objectives of the study focus of the study, and limitation of the study. Finally, it presented organization structure of the study.

The second chapter deals with literature review. It helps the researchers to provide knowledge about the development and program made by the earlier scholars on the concerned topics or field of study. Second chapter explains the theoretical issues of working capital management. It also explains the survey of previous scholar which is helpful to understand the concept, importance of working capital based on detail review of literature.

The third chapter is related to research methodology that is adopted by the researcher to analyze the information. Simply it deals with the research design, nature and source of data, data collection procedure, data collection techniques and tools and techniques employed.

Presentation and analysis of data are studied in the fourth chapter. In this chapter, the generated data are presented in tabular form and analyzed it systematically as per requirement. To know the working capital

managements of DDC, structure and utilization working capital, the relationship of working capital to sales and profit and the policies and practices adopt by DDC of working capital has analyzed and interpreted. The structure of working capital shows that level of current assets over total assets, fixed assets are found 62.60%, 168.76%. The level of net working capital over total assets and fixed assets are found 12.56% and 35.24% respectively. The structure of working capital indicates that the portion of inventory receivable, cash and balance, loan, advance and deposit on total assets and current assets are found 20.01%, 32.13%, 1.22%, 1.82%, 29.76%, 47.8%, 11.17% and 18.14% respectively. The utilization of working capital shows that the times of current assets, net working capital, inventory receivable and cash and bank balance are found 2.68, 19.62, 10.86, 282.52 and 7.17 times respectively. Similarly the growth trend of current assets, total assets and sales appeared 109.01%, 105.4% and 100.46% respectively.

The researcher also attempted to find out the relationship of net working capital on sales and net profit on five year data trend of DDC during the study period. The data showed that correlation between working capital and net profit is 0.375, which indicated positive correlation. Similarly the correlation between net working capital and sales is found 0.46% which shows the positive correlation.

In the same way, the researcher also attempted to find out the policies and practices of DDC by supplying a structured questionnaire. The result showed that means score of all items appeared as 4.2809 which is slightly positive. That means the working capital management policies and practices adopted by DDC is found positive but not in satisfactory level.

The findings of various results are also presented in chapter IV. The findings of the result showed that DDC has maintained sufficient level of current assets over total assets and fixed assets. It has also maintained satisfactory level of net working capital over total assets and fixed assets. In the structure of working capital cash and bank balance occupied the largest 47.8% of the total current assets. Similarly inventory occupied 32.13%, receivables occupies 1.82%. In the same way the correlation between net profit on current assets and current liabilities is found 0.816, which indicates that there is high and positive relation of profit on current assets and current liabilities. The adjusted R square is found 0.666, which indicates that 66.6% of total variation in the dependent variable has been explained by two independent variable. The result also presents the impact of sales on current and fixed assets. The result shows that r value is 0.976. It indicates that there is high and positive relation of sales on current and fixed assets.

## **5.2 Conclusion**

Present study is successful to explore the findings of the results designed for the study. Various financial as well as statistical tools are used as per requirement of nature of data. Primary as well as secondary source of information are used for analysis of data. Based on the data analysis and finding of the result, the conclusion can be drawn as follows.

It can be said safely that DDC can not neglect the management of current assets. It can be observed that there is no current assets management and specific working capital policy. To run day by day business activities more efficient level of current assets, which is also called gross working capital, should be maintained.

DDC has maintained sufficient level of current assets over total assets and fixed assets. But there is no specific reasons behind them.

Similarly, the correlation between the working capital to net profit is found positive. The result indicates that the working capital and net profit are linked or correlated with each other. The correlation between the working capital to sales is also found positive. Thus it can be concluded that the working capital may be the useful determinant of net profit and sales. Where as sales and net profit also be helpful for determining effective working capital management.

The efficiency of management of current assets can be assessed with the help of volume of sales. The volume of sales clearly reflects the efficiency. The volume of sales seems to be in increasing trend but the rate of growth in working capital is higher than sales. Therefore, the turnover ratios are decreasing every year. Current assets turnover ratios are decreased from 3.51 times to 3.04 during five year study period. Net working turnover ratios, inventory turnover ratio, receivable turn over ratio are in fluctuating trends. Cash and bank balance turnover ratio is also found decreasing trend. From the analysis, it can be concluded that DDC kept excess amount of working capital in comparison to sales which can not be considered as the sign of efficient management of working capital in the corporation.

From the analysis of primary data it can be concluded that the mean score of the four variables stood more than 4 and below than 5. And the remaining three variables scored below average, which means that the respondents expressed agreement with statement. The average of overall indicates that respondents have expressed slightly agreement with working capital policies and practices. But it can be concluded that it is not found in satisfactory level.

### 5.3 Recommendation

At the end of the research the study with out practicable suggestion would be incomplete phenomenon. Therefore, based on the findings of the study following suggestions are forwarded for the improvement of the working capital management of DDC.

1. Proper level of structure and growth of the working capital should be maintained so that it does not affect the liquidity position of the organization and helps to increase the profitability situation of the organization.
2. DDC has high amount cash and bank balance in current assets. It has high liquid assets and does not directly contribute sales and it has also high amount of loan advance and deposit. So it should reduce loan, advance and deposit and increase receivable and cash and bank balance which will increase liquidity power and will increase ability to meet transaction motivates, speculative motive and precautionary motives of the company.
3. The study does not find efficient utilization of working capital. The usage rate is in decreasing trend. So the management must initiate some measure to optimize the utilization for higher efficiency of working capital. It is recommended that the proportion of current assets should be maintained according to its sales value.
4. To run day-to-day business activities and earn maximum profit current assets should be properly maintained but it has been observed that there is no concrete current assets management and specific working capital policy in DDC. So, there should introduce effective inventory control techniques to decrease huge blockage of inventory and credit policy techniques for collecting receivables.
5. The correlation coefficient between the working capital and net profit is found 0.375 indicates positive correlations. Similarly, the

coefficient of determination is appeared as 0.1406 indicated that only 14.06 of the total variation in net profit of the organization has explained by the working capital. Therefore, management is recommended to take corrective action.

6. Considering the net profit as dependent variable and current assets and current liabilities as independent variable, the value of adjusted R square is found 0.666, which indicated that 66.6% of total change in net profit has been explained by current assets and current liabilities. The current assets and current liabilities are the component of working capital and it has high influence on net profit. Thus it is recommended to maintain proper level of current assets and current liabilities to increase the profitability situation of the organization.
8. The result also conveyed that the policies and practices of working capital of the organization are not found satisfactory level. Thus, it is recommended to the organization that the proper policies, practices and strategies on working capital management should be implemented. So that the organization can easily fulfill their targets or goals.
9. Management is back bone of the company and success and failure of the company depends upon the managerial skills. So, company should allocate some money to produce skilled and experienced man power.
10. Special focus is to be given in formulation of appropriate regulatory systems, suitable information dissemination system for the development of working capital in the organization.

## APPENDIX I

### Correlation Between Net Profit and Net Working Capital

FY	NP(X)	NWC(Y)	dx=X- 12.7	dy=Y- 97	dx <sup>2</sup>	dy <sup>2</sup>	dx dy
2001/02	7.61	46.2	-5.09	-50.8	25.91	2580.64	258.57
2002/03	8.93	62.99	-3.77	-35.01	14.21	1156.68	128.22
2003/04	14.12	119.04	1.42	22.04	2.02	485.76	31.3
2004/05	7.37	139.12	-5.33	42.12	28.41	1774.1	-224.5
2005/06	25.54	117.88	12.84	20.88	164.86	435.97	268.1
N =5	63.57	485.23	0.07	0.23	235.41	6433.15	461.69

$$\bar{X} = \frac{\Sigma X}{N} = \frac{63.57}{5} = 12.7$$

$$\bar{Y} = \frac{\Sigma Y}{N} = \frac{485.23}{5} = 97$$

$$r = \frac{N \Sigma dx \cdot dy - \Sigma dx \cdot dy}{\sqrt{N \Sigma dx^2 - (\Sigma dx)^2} \sqrt{N \Sigma dy^2 - (\Sigma dy)^2}}$$

Probable Error (PE) =

$$\frac{0.6145 (1 - r^2)}{\sqrt{N}}$$

$$= \frac{5 \times 461.69 - 0.07 \times 0.23}{\sqrt{5 \times 235.41 - (0.07)^2} \sqrt{5 \times 6433.15 - (0.23)^2}}$$

$$= \frac{0.6745 (1 - 0.37^2)}{\sqrt{5}}$$

$$= \frac{2308.43}{\sqrt{1177} \sqrt{32165.7}}$$

$$= \frac{0.6754 \times 0.8631}{\sqrt{5}}$$

$$= \frac{2308.43}{6152.97} = 0.375$$

$$= 0.2603$$

## Appendix II

### Correlation between Sales and Net Working Capital

FY	Sales (X)	NWC (Y)	dx=X- 1602.3	dy=y- 97.05	dx <sup>2</sup>	dy <sup>2</sup>	dxdy
2001/02	1559.35	46.2	-42.95	-50.85	1844.7	2585.72	2184
2002/03	1609.46	62.99	7.16	-34.06	51.27	1160.80	-243.87
2003/04	1547.37	119.04	-54.93	21.95	3017.30	483.56	-1207.91
2004/05	163.99	139.12	41.69	42.07	1738.06	1769.88	1753.9
2005/06	1651.33	117.88	49.03	20.83	2403.94	433.89	1021.29
	1602.3	97.05	0	-0.02	9055.27	6433.13	3507.41

$$r = \frac{5 \times 3507.41 - 0 \times -0.02}{\sqrt{5 \times 9055.27 - 0^2} \sqrt{5 \times 6433.13 - (-0.02)^2}} = \frac{17537.05}{38162.06} = 0.46$$

$$\text{Probable error (PE)} = \frac{0.6745 \times (1 - r^2)}{\sqrt{N}} = \frac{0.6745 \times (1 - 0.46)^2}{\sqrt{5}} = 0.2378$$

## APPENDIX VI

### Instrument Used for Primary Data Analysis

#### Working Capital Management and Policies

Dear respected participants,

The objective of the following questionnaire is to identify the policies and practices of working capital management and effect of organizational climate on working capital management at your areas. Your each opinion will be very important in his endeavor. Therefore, we are hopeful that you will circle at the appropriate option understanding the real meaning of the statement. Responses collected from you will be anonymous and only the group level findings will be analyzed and reported.

<b>Please read the following statements and circle at the best alternative number that comes closest to your opinion</b>	<b>Strongly Disagree</b>	<b>Disagree</b>	<b>Slightly disagree</b>	<b>Slightly agree</b>	<b>Agree</b>	<b>Strongly agree</b>
1. Working capital policies and practices is properly adopted by the organization.	<b>1</b>	<b>2</b>	<b>2</b>	<b>3</b>	<b>5</b>	<b>6</b>
2. Norms and values of working capital management is seriously considered here.	<b>1</b>	<b>2</b>	<b>2</b>	<b>3</b>	<b>5</b>	<b>6</b>
3. Proper size and structure of working capital is maintained properly here.	<b>1</b>	<b>2</b>	<b>2</b>	<b>3</b>	<b>5</b>	<b>6</b>
4. Effectiveness of working capital management is timely evaluated here.	<b>1</b>	<b>2</b>	<b>2</b>	<b>3</b>	<b>5</b>	<b>6</b>
5. Efficiency of the organization is also evaluated on the basis of working capital management.	<b>1</b>	<b>2</b>	<b>2</b>	<b>3</b>	<b>5</b>	<b>6</b>
6. The large volume of profit is determined by working capital.	<b>1</b>	<b>2</b>	<b>2</b>	<b>3</b>	<b>5</b>	<b>6</b>
7. Effective working capital increases the profitability situation of the organization.	<b>1</b>	<b>2</b>	<b>2</b>	<b>3</b>	<b>5</b>	<b>6</b>

1. Gender : male/female

2. Age group: (years)

3. Educational Status

4. Job level

5. Job tenure (years)

6. Department

## APPENDIX VII

### Descriptive Statistics

Variable	N	Minimum	Maximum	Mean	Std. Deviation
Effectiveness of working capital management is timely evaluated here	30	3.00	6.00	3.8667	0.97320
Working capital policies and practices is properly adopted by the organization	30	3.00	5.00	4.6000	0.56324
Norms and values of working capital management is seriously considered here	30	3.00	5.00	4.2333	0.67891
Proper size and structure of working capital is maintained properly here	30	3.00	6.00	4.1333	0.86037
Efficiency of the organization is also evaluated on the basis of working capital management	30	2.00	5.00	3.4667	0.77608
The large volume of profit is determined by working capital	30	3.00	6.00	4.6667	0.80230
Effective working capital increases the profitability situation of the organization	30	4.00	6.00	5.0000	0.74278

## APPENDIX VIII

### Questionnaire

Dear Sir/Madam,

I am a student of MBS final year of University Campus, Kirtipur, Kathmandu, preparing thesis on “A Study on Working Capital Management of Dairy Development Corporation” to fulfill partial requirement of my study. I therefore, request you to fill this questionnaire and help me to carry out my study. All the answer will be taken very confidential and will not provide for any publications.

1. Which working capital financing policy is the company adopting?
  - a. Aggressive
  - b. Moderate
  - c. Conservative
  - c. Don't Know
  
2. Which are the factors that affect in working capital policy in your company?
  - a. Nature and size of business
  - b. Sales and demand conditions
  - c. Inventory conversion period
  - d. Credit policy
  - e. Suppliers credit policy
  
3. The performance role of working capital in your company is
  - a. Very good
  - b. Good
  - c. Not so good
  
4. Who is responsible to manage the working capital?
  - a. Top level management
  - b. Middle level management
  - c. Lower level management
  - d. If others than specify
  
5. Which working capital financing policy is appropriate to the company?
  - a. Aggressive
  - b. Moderate
  - c. Conservative
  - d. That does not matter
  
6. Which concept of working capital is appropriate for the company's development?
  - a. Cross concept
  - b. Net concept
  - c. Zero concept
  - c. Do not know
  
7. Which working capital investment policy is adopting by your company ?
  - a. Relaxed
  - b. Moderate
  - c. Restricted

8. What types of credit policy are adopting by the company?  
a. Liberal                      b. Tight                      c. Moderate
9. What is the reason for holding large amount of cash in your company?  
a. \_\_\_\_\_                      b. \_\_\_\_\_  
c. \_\_\_\_\_                      d. \_\_\_\_\_
10. What are the constraints of working capital?  
\_\_\_\_\_

APPENDIX IX

दुध विकास संस्था

२०५९ आषाढ ३२ को बासलात

सम्पती तथा जायजेथा

स्थिर सम्पती	अनुसूची	०५८/५९	०५७/५८
क. प्रयोगमा रहेको	८	२८८२४२६३५/९१	३१५४८२७६७/२८
ख. प्रयोग तथा जडान हुन बाँकी	९	५३१७७०५/५३	६३४९६४/०६
अनुदान कोष लगानी र मोज्दात	१०	१८०३१५७/३६	१७०४०७५/३६
चल सम्पती	११	४४४६४१६५/६०	५०१४२५७७१/९०
विलम्बित खर्च		९०७९५३३/६७	८९०५८६५/३३
संकलित नोक्सानी		२२७७५६८१०/७३	१५१६२३८६६/५२
जम्मा		९७६८४१५१९/८३	९८५४९१९९०/४५

कोष तथा दायित्व

संस्थान कोष	१२	४१९६८८३७७/९६	४१९६८८३७७/९६
मित्र राष्ट्रहरुबाट अनुदान कोष	१३	१५७३६४२/५९	९५७३६४/५९
क्यान रिभलिभिड फण्ड		९१४२१०/००	९१४२१०/००
दिर्घकालिन ऋण	१४	१५६२२९९१४/२१	१५७९८००२०/५५
चालु दायित्व तथा व्यवस्था	१५	३९८४३५३७५/०७	४०६१३५७३१/३५
जम्मा		९७६८४१५१९/८३	९८५४९१९९०/४५

अनुसूची १ देखि १६ यस विवरणका अभिन्न अंग हुन ।

अजव लाल यावद

विष्णु वहादुर के.सी

निमित्त महाप्रबन्धक

महालेखा परिक्षक

राम वहादुर थापा

स्वयम्भु कृष्ण कलाकार

का.मु प्रबन्धक

चार्टर्ड एकाउण्टेण्ट

आर्थिक व्यवस्थापन विभाग

संचालक वर्ग

रामचन्द्र प्रसाद अग्रहरी

दिनेश वहादुर विष्ट

**APPENDIX III**

**APPENDIX IV**

**APPENDIX V**

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