

CHAPTER - I

INTRODUCTION

1.1 General Background

After democracy of 2007 B.S., Nepal is being liberal for implementing government policy through general public is the result of increment of different public and private company for production of goods and services and distribution of these products among require people with country and outside country.

There need infrastructural development for the development of manufacturing company. Due to absence of such type of facilities and technology there need to produce and utilize several products to uplift national economy. These services and goods can be produced thorough public enterprises, among these public enterprises; Nepal Telecom (NTC) is one of the leading public enterprises.

1.2 A Brief Overview of Telecommunication

In this globalization and scientific era, telecommunication is getting more important, useful, and an indispensable aspect of our lives. It is one of the fastest, cheapest, comfortable and reliable media of communication.

In the 21st century in which knowledge and information are the foundation for competitiveness, information technology will play a vital role in providing that competitiveness. As we leave the industrial age and enter the information age, it is clear that despite all the technical

advances and globalization, the formula for economic success has remained the same, economic prosperity relies on quick access to the critical network of information and commerce.

In terms of market capitalization, the telecommunication industry ranked third in the world behind health care and banking. Telecommunication as an industry has combined sales of more than US \$ 800 billion world wide, of which three quarters comes from services and one-quarter from equipment sales. In the context of Nepal, Nepal Telecom is the chief tax payer among all other companies.

The world's telecommunication network is the largest man- made machine of all time. With the change and development in science and technology, telecommunication is getting more and more advanced and made the whole big world like a small village. The newer mechanisms are more reliable, comfortable and less time consuming, which helps people to communicate distant places very easily and in less time.

1.3 Introduction to the Organization

From 1970 B.S., telecommunication service was started as magneto telephone service in limited area was the first step for telecommunication service. Then on 1991 B.S., Telephone Head Office was established. Then only after 1992 B.S., telecommunication service was available to those general public, who can afford for it. On 2005 B.S. Mohan Akasbani service was started from Akashbani head office. On 2016, with amalgamating Akashbani Head Office and Telephone Head Office new Telecommunication Department was established under Ministry of transport and communication. This Telecommunication Department was turned into Telecommunication committee on 2026 Kartik 1st.

According as policy of Sasthan Act 2028, to provide base for economic development though providing telecommunication service to general public, Telecommunication Department was turned into Nepal Doorsanchar Sasthan 2032 Asadh 1st (www.ntc.net.np).

"Nepal Doorsanchr Company Limited (Nepal telecom) was registered on 2060-10-22 under company Act 2053 and the notice to this effect was published in Nepal Gazette dated 26th Chaitra 2060, after dissolving the Nepal Telecommunication Corporation (NTC), as the mended provide by communication policy of 2060 B.S., to provide qualitative communication services at least cost with applying open competitive environment. However, the company name was officially effected from 1st Baishak 2061 (13th April 2004) and the general public know it by the name of "NEPAL TELECOM" as its registered trade name.

Mission

Nepal Telecom as the progressive customer spirited and consumer responsive entity is committed to provide nation wide reliable telecommunication services to serve as impetus to the social, political and economic development of the country.

Vision

Vision of Nepal Telecom is to remain a dominant player in telecommunication sector in the country which also extending reliable and cost effective services to all.

Goal

Goal of Nepal Telecom is to provide cost effective telecommunication services to every hook and corner of the country (Annual Report: 2007).

1.3.1 History of Telecommunication in Nepal

The history of telecommunication development in Nepal is not a long one. The first telecommunication service was started during the regime of Chandra Shamsheer in 1970 B.S. (1913 A.D.). With the help of a small magneto telephone exchange, telephone service was introduced and this service was only used by the Rana family and in some important government office. However, this service was not so reliable and was named as 'Shree Chandra Telephone' after the name of Chandra Shamsheer.

After a year in 1971 B.S. (1914 A.D.), Open Wire Trunk line from Kathmandu to Raxaul (India) was established. After that, there was a long interval since any development took place in telecommunication field in Nepal. It was only in 1992 B.S. i.e. in 1935 A.D., automatic telephone exchange of 25 lines was introduced in Royal Palace and subsequently, Open Wire Trunk line from Kathmandu to Dhankuta was established in the following year. Then, other Trunk services from Birgunj to Rajbiraj, Birgunj to Raxaul and Rajbiraj to Biratnagar were established in 1994 B.S., 1995 B.S. and 1998 B.S. respectively.

Similarly, other services like Telegram service and High Frequency Radio System (AM) was introduced after fourteen years in 2007 B.S. Meanwhile, Kathmandu – Nepalgunj 'Mohan Akasbani' was established by higher technology with High Frequency (HF) communication in 2005 B.S. Falgun, this Akasbani linked Kathmandu with Nepalgunj, Bhairahawa, Ilam, Biratnagar, Dhankuta, Pokhara, Bhojpur and Birgunj. Call signs were 'George King' for Kathmandu and serially George 3,4,5,6,7,8,9, and 10.

In 2008 B.S., CB telephone exchange was established in Kathmandu and 100 lines were distributed within the city to private sector and after two years additional 50 lines were distributed. Meanwhile, the trunk system with Palpa was also established in 2009 B.S.

Then in 2012 B.S.(1955 A.D.), a remarkable happening took place. This year is considered a very special year in the history of Nepal telecommunication because it is the year when telephone lines were distributed to general public and were allowed to keep telephone personally. After few years, into 2019 B.S., first public telephone exchange in Kathmandu with 300 lines CB was introduced with the help of Indian Government and more 120 lines exchange was introduced with the help of Sweden's L.M. Ericsson Company in Singh Durbar.

The International Telecommunications Service using HF Radio to India and Pakistan was begun in 2021 B.S. (1964 A.D.) and 1000 lines were distribute in Kathmandu through first Automatic Exchange in subsequent year. At the same time, trunk services from Kathmandu to Calcutta and Delhi were also established and HF communication service was introduced in 58 districts of Nepal.

In 2026 B.S., Telecommunication Department was transferred into Nepal Telecommunication Board and then the autonomy was seen in the telecommunication field. Telex service was commenced from 2028 B.S., from Kathmandu by using manual telex exchange. Till 2028B.S. 300 lines in Biratnagar, 600 lines in Patan were established using separate exchanges and in Kathmandu overall 5000 lines were distributed.

Many other separated telephone exchanges were also established in the following year i.e. in 2029 B.S. They were:

300 lines automatic service in Birgunj

100 lines in Pokhara

200 lines in Hetauda

100 lines in Bhairahawa(CB exchange)

50 lines in magneto telephone in Malangwa

To facilitate the communication more, additional 1000 lines in Birgunj and 200 lines (CB exchange) were established in year 2030 B.S. Similarly, 400 lines in Dharan (CB exchange), 100 lines in Rajbiraj, 100 lines in Bhadrapur and 200 lines in Janakpur were distribute in 2031 B.S. It was the same year in which Microwave transmission links were established for internal trunk. To serve the same objective, 1300 lines were established by automatic exchange in Biratnagar, which reached to 2000 lines till 2034 B.S.

In pursuit of development, Nepal Telecommunication was continuously trying new technology and in this course, in 2039 B.S. (1982A.D.), it established Standard "B" type Satellite Earth station for international circuits in Blaju, Kathmandu. From this station, overall telecommunication service of the world was linked with Nepal with the help of seven circuits joined. Today there are all together 393 circuits in this station which links Nepal with 137 countries by direct dialing.

In the same year i.e. 2039 B.S., SPC telex exchange was also established. In 2040 B.S., Digital telephone exchange was established following by the commencement of Subscriber Trunk Dialing (STD) service in 2041 B.S. In the same year, Reliable Rural Telecom Service, with support from JICA, was also start.

To enhance the communications with foreign country and for the benefit and comfort of the Nepalese people, Nepal telecommunication commenced its International Subscriber Dialing system (ISD) in 2044 B.S. After 8 years, in 2052 B.S., Optical Fiber Network was installed with the objective of obtaining fastest, cheapest and most reliable way of communication. And a year later i.e. in 2053 B.S., all Transmission link were converted to Digital Transmission link. In the same year, the entire Telephone network was automated, independent International Gateway Exchange was established and VSAT services were introduced. In 2054 B.S., digital link with D.G.T. India through Optical Fiber in Birgunj – Raxaul was introduced and in 2055 B.S., direct link with Bangladesh was established.

Nepal Telecom has always tried to provide more and more facilities to its costumers and pursuing its objective, it introduce GSM mobile service in the year 2056 B.S.(1999 A.D.) and implement SDH Microwave Radio and launched Internet service in the subsequent year. Launching of mobile and Internet service brought a great revolution in the way people communicate. They are the easiest and most comfortable way of communicating different places. Similarly, Payphone service was also communicate in 2057 B.S.

The East West Highway Optical Fiber Project was commenced in 2058 B.S., which has helped Nepalese people to communicate within the country and outside the country in much cheaper rate than before. Similarly, GSM prepaid service was launched in 2059B.S. which is quite cheap than the postpaid service launched in the year 2056 B.S.

Recently, a new milestone has been added in the telecommunication history of Nepal. NT has lunched CDMA based basic telephone or "C-Phone" service in the Kathmandu Valley in 8th July 2005. "C-Phone" is a kind of fixed wireless phone. The main objective of the service is to expand its service to rural parts of the country. NT is planning to distribute a total of one million C-phone lines throughout the country by 2008. It has announced that it would distribute around 100,000 lines in Bhairahawa in the 1st phase.

The history of telecommunication service in Nepal reveals that it has incessantly headed above since its commencement in 1970 B.S. with the aim of improving and achieving its height, Nepal Telecommunication Corporation (NTC) was transformed into Nepal Doorsanchar Company Limited (Nepal telecom) a couple of years back i.e. on 1st Baisakh, 2061.

Nepal telecom (then, the Nepal telecommunications corporation) has 30 glorious years to look back upon, within theses along years, it has faced many highs ad lows, and confronted with ever challenge on its progress. It took around 16 years to reach present form as the national

operator of local, long distance and international telecommunications services. Although few other companies are sprouting in this field, they are far behind where Nepal Telecom is today.

Retrospectively, we come to know that; Telecommunication department was established on 2016B.S.. It was changed to Nepal Telecommunication Board on 2026B.S..Subsequently, it was changed to Nepal Telecommunication Corporation on 1st Asadh 2032B.S..Then after 1st Baisakh, 2061B.S. it started its operation as Nepal Doorsanchar Company Limited (Nepal telecom) (NTSmarika 2063 and other unpublished thesis).

Nepal Telecom is a fully governmental owned organization and is started to issue its share to general public is can be seen as the policy of liberalization, playing a key role in the development of the nation. It is staffed by more than 5699 employees and has been distributed more than 509873 telephone line, has more than 909483 mobile subscribers and more than 161155 CDMA subscribers (NTC Annual Report 2007).

1.3.2 Telecom Services

Since 1970 B.S, Nepal Telecom has been going to provide its communication in wide area as globally as required by customers. It has also making different strategy to provide its services to general public according as their desire through innovation and implementation of different technology. The services provided by NTC are:

"Local calls

Domestic Telex

Local Leased Lines

National Trunk Calls

International Trunk Calls

International Telegram

International Telex

Operator-Assisted Int'l Telephone

ISDN (Integrated Services Digital Network)

Pay Phone

Intelligent Network Services

PCC (Easy Call Prepaid Calling Card Service)

AFS (Advanced Freephone Service)

PCL (PSTN Credit limit Service)

HDC (Home Country District Service)

GSM

Post-paid NTC Mobile

Pre-paid Namaste Mobile

Roaming (Incoming and Outgoing)

SMS, CRBT, GPRS, WebSMS

E-mail and Internet

Yearly email Package

Dial-up Internet Access

PSTN Dial-up

Fixed hour Package

Night Surfing package

Fixed hour / month package

Unlimited Single user package

PSTN Bills in the Internet

Post-Paid Mobile Bills

Telephone inquiry

Leased Line Connectivity (n*64 Kbps)

CDMA

Post-paid C-phone

Pre-paid C-phone

Post-paid Sky-phone

Pre-paid Sky-phone

Sky Data Service

Domestic Roaming SMS

PSTN IVR Services

198, 188, 1600, 1601, 1606 "

(Annual report 2007)

1.4 Statement of the Problem

Cash is a blood for every organization which spreads every part of activities within an organization. So, cash management in productive manner is given high priority by every organization. To manage the cash in effective way, there need effective controlling mechanism which provides different information to take decision for the management of cash in NTC. This study is attempt to analyze cash flow of NTC under different headings with linking each other to provide the insight knowledge to manage cash through application of cash flow analysis. For this, the present analysis is tried to find:

-)] What is the situation of NTC in its operation?
-)] What do the cash flow statements of the NTC indicate?
-)] Whether the NTC has managed the cash properly or not?
-)] Whether there are any irregularities in cash flow of the NTC or not?
-)] How far they have been able to keep the sound status in terms of business success?

1.5 Objectives of the Study

The main objective of this study is to analyze the cash flow of NTC to get the in-depth information related with cash management. This objective is associated with following objectives.

-)] To analyze the trend of cash flow of NTC.
-)] To examine, analyze and compare the cash flow of different headings (i.e. operating, investing and financing).

-) To identify the strengths and weaknesses of cash management of NTC.
-) To provide suggestions and recommendations for future improvement on cash flow and cash management.

1.6 Significance of the Study

No organization can exist without cash. But mishandling of cash is also a type of disease for the organization for its failure because it is assumed that cash is blood for every organization. Every activities performed by organization directly or indirectly relates with cash in short run or long run. So, management is highly prioritized to manage cash by dividing the inflow and outflow of cash with segregating into different headings. These headings are: operating activities, investing activities and financing activities. These activities cover all activities of any organization. So, the study of cash flow analysis is considered as the integrated approach to management science.

This study is focused on analysis and explanation of cash, cash flow budget and the cash position which are the key factors of any organization. The component of cash flow budget shows the financial health of organization in a critical way. The statement of cash flow reveal the solvency position of a firm. The information concerning statement of cash flow can be used to evaluate the ability to generate positive cash flow for the future periods, pay dividend and financial growth. On the other hand, the decision makers know the direction in which a strategy is likely to affect cash flow on the short term and over long term. This study is significant for the following purpose.

-) Useful to the concern person like management, policy maker and shareholders.
-) Beneficial to other related organization.
-) Helps to other new researchers.
-) Library asset for common use.

1.7 Limitation of the Study

No research can be done without boundary. In that sense, the present study is also not free from limitations. These main limitations are the cause of time and cost which made following limitation for the study.

-) This study covers the data of only last five years from 2058/059 to 2062/063.
-) This study based on secondary data provided by NTC and other document published on different media. So, the accuracy of the study depends on the accuracy of the data.
-) This study limited only cash flow analysis of NTC as part of profit planning and control.

1.8. Organization of the Study

This research study has been organized as followings chapters:

Chapter -I: Introduction

This chapter is the introductory chapter which covers general back ground, introduction to the organization, focus of study, limitation of study, objectives of study etc.

Chapter -II: Review of Literature

This chapter reviews the existing literature in related area mainly it includes the fundamental concept and brief review of previous research work i.e. book, journal, internet and thesis.

Chapter -III: Research Methodology

This chapter describes the methodology employed for the study. It includes research design, data collection and method of analysis and key term.

Chapter -IV: Presentation and Analysis of Data

This chapter is the main chapter of the study which applies different (financial and statistical) tools and techniques for the data to get analysis and major findings.

Chapter -V: Summary, Conclusion and Recommendations

This is last chapter for the study which organizes summary, conclusions and recommendations.

Besides these chapters, bibliographies, appendix has been also included at the end of the study.

CHAPTER - II

REVIEW OF LITERATURE

The word research is derived from French word i.e. re-searcher which means to seek again about what has in existence or both repetitions of research work in the sense to review as per its relevancy to the subject matter. The main objective of this chapter is to analyze the research work and clarify the study on a rational basis. But only limited numbers of studies have been conducted in the field of cash flow statement.

The chapter has been divided into two sections and is organized as follows.

-) Conceptual Framework
-) Review of Previous studies

2.1 Conceptual Framework

The term cash flow statement is an indicator of the amount of cash receipts and the amount of cash payments or disbursements during a specified period. Cash flow is the net amount of money received by an individual or business in a given period. If cash flows are budgeted correctly, enough funds should be available to meet cash payments as they occur. Cash flow should not be confused with profits and losses; many companies have gone out of business while making profits, simply because they ran out of cash . It is a statement which shows the inflows and outflows of cash and equivalents during the year. It is defined as a statement of company's ability to generate cash from various activities and their need of cash (www.cashflow.com).

Cash flow management is the process of monitoring, analyzing, and adjusting cash flows. For small businesses, the most important aspect of cash flow management is avoiding extended cash shortages, caused by having too great a gap between cash inflows and outflows. Funds can be of two types they are either in the form of working capital or in cash. If the fund is considered as working capital then we have to prepare the funds flow statement whereas if the fund is taken as cash then we have to prepare cash flow statement.

There are different concepts regarding fund. Some concepts insist that only cash should be considered as fund and another concept states that fund is not only the cash but the financial resources which can be converted into cash can also be included in funds.

2.1.1 Funds Flow Analysis

The funds flow statement consists of two terms 'funds and 'flow'. The 'funds' refers to all pecuniary resources that can be measured in terms of money. It may be interpreted as cash or working capital or all financial resources. 'Flow' means change in amounts of funds between two periods. Thus, the statement designed to highlight the change in the financial position of business is known as funds Flow Statement (Dangol, 2006:360).

The balance sheet and income statement of a business shows the financial position at a given point of time and summary of revenue and expenses during the accounting period. But for evaluating the past performances, future potential of a business, a separate statement has to be prepared which is known as funds flow statement. For showing the changes in assets and liabilities from the end of one period of time to the end of another period of time a statement of changes in financial position or a funds flow statement has to be prepared.

The comparatively study of two balance sheets of a company prepared for two different years for knowing the financial activities of a company is known as funds flow statement. Form where the funds have been obtained, which is known as sources and where the funds have been utilized, which is known as uses are shown by a funds flow statement.

Funds flow statement is the statement of sources and uses of fund. Funds flow statement shows the sources from which the funds are received and the areas to which the obtained funds have been utilized. Funds flow statement indicates various mean by which funds were received during a particular period and the ways in which theses funds were applied. Thus, the funds flow statement is an essential tool for financial analysis (Koirala, et. al., 2064:310).

It explains the sources from which additional fund i.e. working has been arrived and the uses to which the fund or working capital has been employed. Funds flow statement is prepared on the basis of two balance sheets of subsequent dates and highlights the changes in the financial position of a concern. The main purpose of funds flow analysis is to get clear information about the financial transactions that bring changes in the companies' resources. The objective of funds flow statement is to disclose the cause of changes in the assets, liabilities and equity capital between two balance sheet dates. It highlights the changes in financial position of a concern and indicates the various means by which funds were obtained during a particular period and the ways to where these funds were utilized. By comparing balance sheets of two different dates funds flow statement is prepared which shows the inflow and outflow of the funds. It is a kind of financial tools which answers the following questions (Lucy, 1998: 125).

-) From which source fund were received?
-) How many funds were received?
-) For what purpose the fund is used?

2.1.2 Cash Flow Analysis

Cash is the lifeblood of a business enterprise. It is the fuel that keeps a business alive. Without cash no activities can take place. So a business must have an adequate amount of cash to operate. As such of the decision makers must pay close attention to the firm's cash position and events and transaction that affect the cash position of the company is termed as cash flow analysis (www.cashflow.com).

Cash flow analysis is the study of the cycle of the business cash inflows and outflows, with the purpose of maintaining an adequate cash flow for the business, and to provide the basis for cash flow management. Cash flow analysis involves examining the components of the business that affect cash flow, such as accounts receivable, inventory, accounts payable, and credit terms. By performing a cash flow analysis on these separate components, the company should be able to more easily identify cash flow problems and find ways to improve the cash flow.

A quick and easy way to perform a cash flow analysis is to compare the total unpaid purchases to the total sales due to the end of each month. If the total unpaid purchases are greater than the total sales due to the company would be need to spend more cash than receive in the next month, indicating a potential cash flow problem.

Cash flow is calculated by making certain adjustments to net income by adding or subtracting differences in revenue, expenses and credit transactions resulting from transactions that occur from one period to the next. These adjustments are made because non-cash items are calculated into net income and total assets and liabilities. So, because not all transactions involve actual cash items, many items have to be re-evaluated when calculating cash flow from operations. The other method of cash flow is calculated by different adjustments of operating activities, investing activities and financing activities within different operations.

2.1.3 Cash Flow and Profitability

Profits are accounting measures that may not reflect the economic reality of the firm. Increasing profits will not always result in higher stock prices. Profits of the firm depend on many factors such as method of depreciation; non operating gains; incomes, expenses and losses.

People often mistakenly believe that a cash flow statement will show the profitability of a business or project. Although closely related, cash flow and profitability are different. A cash flow statement lists cash inflows and cash outflows while the income statement lists income and expenses. A cash flow statement shows liquidity while an income statement shows profitability.

Many income items are also cash inflows. The sales of crops and livestock are usually both income and cash inflows. The timing is also usually the same as long as a check is received and deposited in to account at the time of the sale. Many expense items are also cash outflow items. The purchase of livestock feed (cash method of accounting) is both an expense and a cash outflow item. The timing is also the same if a check is written at the time of purchase.

All the available cash not the profit determines the firms' future investment and growth. Cash flows have earning potential and capture the economic impact of managerial decisions. Cash flow not the profit that determines the wealth.

2.1.4 Cash Flow Statements

A cash flow statement is one of the most important financial statements for a project or business. The statement can be as simple as a one page analysis or may involve several schedules that feed information into a central statement.

A cash flow statement is a listing of the flows of cash into and out of the business or project. A cash flow statement is a listing of cash flows that occurred during the past accounting period. A projection of future flows of cash is called a cash flow budget.

A cash flow statement is not only concerned with the amount of the cash flows but also the timing of the flows. Many cash flows are constructed with multiple time periods. For example, it may list monthly cash inflows and outflows over a year's time. It not only projects the cash balance remaining at the end of the year but also the cash balance for each month.

Working capital is also an important part of a cash flow analysis. It is defined as the amount of money needed to facilitate business operations and transactions, and is calculated as current assets less current liabilities. Computing the amount of working capital gives a quick analysis of the liquidity of the business over the future accounting period. If working capital appears to be sufficient, developing a cash flow budget may be not critical. But if working capital appears to be insufficient, a cash flow budget may highlight liquidity problems that may occur during the coming year.

Cash flows analysis is done through statement of cash flows. A cash flow statement is a statement of company's ability to generate cash from various activities such as operating, investing and financing and their need of cash. It is a statement which shows the inflows and outflows of cash and cash equivalents during the year.

A cash flows statement is defined as a statement of company's ability to generate cash from various activities and their need of cash (Munakarmi, 2063: 13.9).

The cash flow analysis is an essential ingredient which has its own special technique. Moreover we should analyze cash flow ability of the firm to serve fixed charges. When the company issues the securities in greater amount with short maturity period, its fixed charges will be high. Fixed charges of any firm include principal plus interest payment on debt, lease payment and dividend on preferred stock. The firm should try to cover all fixed charges by analyzing expected future cash flows before assuming any fixed charges. The inability to meet the fixed charges may result in financial insolvency. Therefore the more stable future cash flow means the greater debt capacity of the company. Due to this reason, an analysis of the cash flow ability of the firm it's the best way to analyze its financial risk. As such an enterprise should prepare a cash flow statement and should present it as an integral part of its financial statement for each periods for which financial statement are presented.

2.1.5 Importance of Cash Flow Analysis

Cash flow statement is an important complement to the other major financial statements. Cash flow statement summaries the operating, investing and financing activities of a business organization, reports the changes in cash over a period of time and explains the causes of changes. Enterprise needs cash to conduct their operation, to pay their obligation and to provide returns to their investors. Users of an enterprise financial statement are interested in how the enterprise generates and uses cash and cash equivalents.

Cash flow statement is important to provide information about inflows and outflows of cash and cash equivalents. It provides useful information to:

- a. Assess a company's ability to generate positive future cash flows.
- b. Assess a company's ability to meet its obligation, its ability to pay dividends and its need for external financing.
- c. Assess the reason for differences between income and associated cash receipts and payments.

- d. Assess both the cash and non cash aspects of a company's investments and financial transaction.
- e. Assess a company's quality of earning. The quality of earning refers to how closely income is correlated with cash flows. Higher the correlation the higher the earning quality.
- f. Assess a company's solvency, liquidity and financial flexibility. Solvency is the ability of a company to pay its debt as they mature. Liquidity is the ability to generate adequate amount of cash and also refers to assets and liabilities nearness to cash. Financial flexibility refers to adapt during a periods of financial adversity, to obtain financing to liquidate non operating assets for cash.

In other words the cash flow statement may help to answer the following

- a. If a company operates at a profit why is it continually short of cash?
- b. How can a company operate at a loss and still generate huge inflows of cash from operations?
- c. How was the company's growth and expansion financed?
- d. Was financing obtained during the period through issuance of debt or equity securities? If so what were the amount of cash obtained?
- e. Did the company use cash to retire any long term debt or equity securities during the period?
- f. Are the company's incomes producing activities using more cash than they are generating?
- g. Do operating activities consistently generate enough cash to assure prompt payment of operating expenses maturing liabilities interest obligation and dividends?

2.1.6 Aims and Objective of Cash Flow Statement

The cash flow statement of an enterprise is useful in providing information to the users of financial statements about the ability of an enterprise to generate cash and cash equivalents and the needs of the enterprise to utilize those cash flows. Its aim and objective are mentioned below.

- a. Cash flows statement will help the financial manager to explain the situation of sufficient cash balance in hand despite the business incurred loss or short of cash balance even if the business is making huge amount of profit.
- b. Comparison between cash budget and cash flow statement may prove to be useful for the management for preparing cash budget for the periods to come.
- c. With the help of cash flow statement the management can find out the causes of changes in the cash position on two dates.
- d. Evaluation of financial policies can be done with the help cash flow statement.
- e. As the cash flow statement helps the management to know and predict its cash position, it can plan its policy and make decisions regarding the redemption of debentures, purchase of fixed assets and so on.

2.1.7 Difference between Funds Flow Statement and Cash Flow Statement

- a. Concept: Funds flow statement is based on working capital and cash flow is based on cash.
- b. Accounting: Funds flow statement is based on accrual basis of accounting and cash flow statement is based on cash basis of accounting.
- c. Preparation: Funds flow statement reveals the sources and application of funds and any difference represents net increase or decrease of working capital. Cash flow statement reveals the inflow and outflows of cash and difference represents the closing cash balance.

- d. Purpose: Funds flow statement shows the causes of changes in working capital position of a firm between two balance sheets dates. Cash flow statement shows the causes of changes in cash position of a firm between two balance sheet dates.
- e. Usefulness: Funds flow statement is useful in planning intermediate and long term financing. Cash flow statement is more useful for short term analysis and cash planning of the business.
- f. Schedule of changes in working capital: To get information about current assets and liabilities it is necessary to prepare the schedule of changes in working capital before preparing funds flow statement whereas in cash flow statement it is not necessary to prepare the schedule of changes in working capital.

2.1.8 Preparation of Cash Flow Statement

The cash flow statement is distinct from the income statement and balance sheet because it does not include the amount of future incoming and outgoing cash that has been recorded on credit. Therefore, cash is not the same as net income, which, on the income statement and balance sheet, includes cash sales and sales made on credit. The cash flow statement is prepared on the basis of cash basis of accounting. While calculating operating profits for cash flow statement, adjustment for prepaid and outstanding expenses and incomes are made to convert the data from accrual basis to cash basis. The statement is prepared by taking the opening balance of cash, adding to this all the inflows of cash and deducting all the outflows of cash from the total. The statement is more useful for short term analysis and cash planning of the business. Cash flows statement shows the sources and application of cash. Following are the major sources and use of cash.

Sources of Cash

- a. cash from operation
- b. sales of fixed assets

- c. issues of shares
- d. issues of debentures
- e. raising long term loan
- f. decrease in working capital

Uses of Cash

- a. cash loss from operation
- b. purchase of fixed assets
- c. redemption of redeemable preference shares
- d. redemption of debentures
- e. payment of dividend and income tax
- f. increase in working capital

Cash flow is determined by looking at three components by which cash enters and leaves a company: core operations, investing and financing,

Operations

The operations component of cash flow reflects how much cash is generated from a company's products or services. Generally, changes made in cash, accounts receivable, depreciation, inventory and accounts payable are reflected in cash from operations.

Cash flow is calculated by making certain adjustments to net income by adding or subtracting differences in revenue, expenses and credit transactions (appearing on the balance sheet and income statement) resulting from transactions that occur from one period to the next. These adjustments are made because non-cash items are calculated into net income (income statement) and total assets and liabilities (balance sheet). So, because not all transactions involve actual cash items, many items have to be re-evaluated when calculating cash flow from operations.

Investing

Investing activities are related with the purchase and sales of non current assets such as plant and machinery, land and building, furniture and fixture etc. Investing activities also include lending money and the purchase or sale of investments in securities. Changes in equipment, assets or investments relate to cash from investing. Usually cash changes from investing are a "cash out" item, because cash is used to buy new equipment, buildings or short-term assets such as marketable securities. However, when a company divests of an asset, the transaction is considered "cash in" for calculating cash from investing.

Financing

The financing activities section of the cash flow statement shows the sources of fund generated through owner's capital and borrowed capital. Changes in debt, loans or dividends are accounted for in cash from financing. Changes in cash from financing are "cash in" when capital is raised, and they are "cash out" when dividends are paid. Thus, if a company issues a bond to the public, the company receives cash financing; however, when interest is paid to bondholders, the company is reducing its cash.

The cash flows statement should be presented under informative approach in activity format. Under informative approach the cash flow statement may be presented using

1. Direct method
2. Indirect method

2.1.9 Indirect Approach to Cash Flow Statement

Under indirect approach net profit or loss is adjusted for the effects of transaction of a non cash nature, any deferrals or accruals of past or future operating cash receipts or payments and items of income or expense associated with investing or financing cash flows. Operating activities relate to a company's primary revenue generating activities. It is the single major continuing source of cash. Operating activities are always within the management control and they provide base for management estimation of funds needed to rise from available sources. Cash flows from operating activities are generally the cash effects of transaction and economic events included in the determination of income.

Operating Activities

Under indirect method the net cash flow from operating activities is determined by adjusting net profit or loss for the effect of

-) Changes during the period in inventories and operating receivables and payables.
-) Non cash items such as depreciation; provisions, deferred taxes and unrealized gains or losses; and
-) All other for which the cash effects are investing or financing cash flows.

Alternatively the net cash flows from operating activities under indirect method may be present showing operating revenues and expenses, excluding non cash items disclosed in the statement of profit and loss and the changes in inventories and operating receivable and payables during the period.

Investing Activities

It include lending money (investment) and collecting on those loan, buying and selling productive assets that are expected to generate revenues in future periods and buying and selling securities not classified as cash equivalents.

Investment activities are

-) Cash payments to acquire the fixed assets
-) Cash receipts from disposal of fixed assets
-) Cash payments to acquire shares, warrants or debt instrument of other companies
-) Cash advances and loan made to other parties
-) Cash receipts from the repayment of advances and loans made to third parties.

Financing Activities

It include borrowing money from creditors and repaying the amounts to borrower and obtaining resources from owners, repayment of borrowed funds/amount and payment of dividend to owners. The separate disclosures of cash flows arising form financing activities is important, because it is useful in predicting claims on future cash flow by providers of funds.

Financing activities are

-) Cash proceeds from issuing shares or other similar instrument.
-) Cash proceeds from issuing debenture, loan, notes, bonds and other short or long term borrowings and
-) Cash repayments of amount borrowed.

Cash Flow Format under Indirect Approach

Net profit for the period	xxx	
Add: Non cash and non operating expenses and losses (Item wise)	xxx	
Less: Non cash and non operating income and gains (Item wise)	<u>(xxx)</u>	
Funds from operation	xxx	
Add: Decrease in current assets, other than cash (Item wise)	xxx	
Increase in current liabilities (item wise)	xxx	
Less: Increase in current assets, other than cash (Item wise)	<u>(xxx)</u>	
Decrease in current liabilities (item wise)	<u>(xxx)</u>	
Cash from Operating Activities	xxx	
C2: Cash from Investing Activities:		
Cash Inflows:		
Sales of fixed assets	xxx	
Cash from sale of equity or debt of other enterprises	xxx	Cash from the repayment of advances and
loan made to other parties	<u>xxx</u>	

	xxx
Less: Cash payment to acquire property	(xxx)
Cash payment to acquire equity or debt of other companies'	(xxx)
Cash payment for advances and loans made to other parties	<u>(xxx)</u>

C2: Net Cash flows from Investing Activities **xxx**

C3: Cash flows from Financing Activities:

Issue of shares	xxx
Issue of debenture and bonds	xxx
Cash collection from loan and mortgage	<u>xxx</u>
	xxx
Less: Redemptions of shares	(xxx)
Redemptions of debenture and bonds	(xxx)
Repayment of loan and mortgage	(xxx)
Dividend payment	<u>(xxx)</u>

C3: Net Cash flows from Financing Activities **xxx**

<i>Total Cash Flows [C1+C2+C3]</i>	.xxx
Cash or Cash equivalent at the beginning	<u>xxx</u>

2.1.10 Direct Approach to Cash Flow Statement

When the direct method is used the cash flow statement does not begin with net income, rather, it shows cash collected from customer and is deducted cash used for various expenses. That is, major class of gross receipt and gross cash payments are disclosed.

Determination of Cash Flow from Operating Activities

Operating Activity only include transaction that relate to the calculation of net income. It involves the production or purchase and the sales of goods and services to customers. Cash flow from operating activities includes all cash flows form transaction that is not defined as investing or financing activities.

The cash flow from operating activities is primarily derived from the principal revenue producing activity of the enterprise. Examples of cash flows from operating activities are:

-) Cash receipts form the sales of goods and the rendering of services.
-) Cash receipts form royalties, fees, commission, and other revenue.
-) Cash payments to suppliers of goods and services.
-) Cash payments to and on behalf of employees.
-) Cash payments or refunds of income taxes.

The direct method provides information which may be useful in estimating future cash flows and which is not available under the indirect method. Under direct method information about major classes of gross receipts and gross cash payments may be obtained either.

- i. Changes during the period in inventories and operating receivables and payables
- ii. Other non cash items and
- iii. Other items for which the cash effects are investing or financing cash flows

Determination of Cash Flow from Investing Activity

Determination of cash flows from investing activities require to analyze the non operating incomes and expenses in income statement relating to

- i. Productive assets
- ii. Investment in share and debentures
- iii. Intangible assets
- iv. Short term investments other than cash equivalents

Determination of Cash Flow from Financing Activity

A company's transactions with its owners and long term creditors are typically called financing activities. Financing activities also include borrowing cash on short term basis. For determination of cash flow from financing activities items relating to

-) Share capital equity
-) Share premium

-) Debenture
-) Dividend proposed and
-) Comparative balance sheets should be analyzed by preparing necessary accounts.

Cash Flow Format under Direct Approach

Cash inflows

A: Sales	xxx
Add: Decrease in sundry debtors	xxx
Decrease in bills receivable	xxx
Increase in provision for bad debt	xxx
Increase in provision for discount	xxx
Bad debts recovered	<u>xxx</u>
	<u>xxx</u>
	xxx
Less: Increase in sundry debtors	xxx
Increase in bills receivable	xxx
Bad debts	xxx
Discount allowed	xxx
Decrease in provision for bad debts	xxx
Decrease in provision for discount	<u>xxx</u>

(A) Collection from Costumers	<u>XXX</u>
B: Interest Income	XXX
Add: decrease in accrued interest	<u>XXX</u>
	XXX
Less: increase in accrued interest	<u>XXX</u>
(B) Collection from Interest Income	<u>XXX</u>
C: Dividend Income	XXX
Add: Decrease in dividend receivable	<u>XXX</u>
	XXX
Less: Increase in dividend receivable	<u>XXX</u>
(C) Collection from Dividend Income	<u>XXX</u>
Cash Outflows:	
D: Cost of Goods Sold	XXX
Add: Increase in inventory	XXX
Decrease in sundry creditors	XXX
Decrease in bills payable	<u>XXX</u>
	XXX
Less: Decrease in inventory	XXX
Increase in bills payable	XXX

Increase in sundry creditors	xxx	
Discount received	<u>xxx</u>	
(D) Payment to supplier	<u>xxx</u>	
E: Salary and Wage Expenses	xxx	
Add: Decrease in salary or wage payable	xxx	
Increase in prepaid salary or wage	<u>xxx</u>	
xxx		
Less: Increase in salary or wage payable	xxx	Decrease in prepaid salary or wage
<u>xxx</u> (E) Payment to Employees		<u>xxx</u>
F: Income Tax Expenses	xxx	
Add: Decrease in taxes payable	xxx	Increase in advance taxes
<u>xxx</u>		xxx
Less: Increase in taxes payable	xxx	
Decrease in advances taxes	<u>xxx</u>	
(F) Payment of Government for taxes	<u>xxx</u>	
G: Interest Expenses	xxx	
Add: Decrease in interest payable	<u>xxx</u>	
	xxx	
Less: increase in interest payable	<u>xxx</u>	
(G) Payment to Creditors for Interest	<u>xxx</u>	

H: Insurance Expenses	xxx
Add: Decrease in insurance payable	xxx
Increase in advance insurance	<u>xxx</u>
	xxx
Less: increase in insurance payable	xxx
Decrease in advance insurance	<u>xxx</u>
(H) Payment for Warranty Service	<u>xxx</u>
I: Other Expenses	xxx
Add: Decrease in expense payable	xxx
Increase in advance payable	<u>xxx</u>
	xxx
Less: Increase in expense payable	xxx
Decrease in advance payable	<u>xxx</u>
(I) Payment for Expenses	<u>xxx</u>
Cash from Operating Activities before Extra Ordinary Items:	
(A+B+C-D-F-G-H-I)	xxx
Add: Increase in bank overdraft	xxx
Increase in short term loan	<u>xxx</u>
	xxx

Less: Decrease in bank overdraft	xxx	
Decrease in short term loan	<u>xxx</u>	
C1: Net Cash from Operating Activities	<u>xxx</u>	
C2: Cash from Investing Activities:		
Cash Inflows:		
Sales of fixed assets	xxx	
Cash from sale of equity or debt of other enterprises	xxx	Cash from the repayment of advances and
loan made to other parties	<u>xxx</u>	
	xxx	
Less: Cash payment to acquire property	(xxx)	
Cash payment to acquire equity or debt of other companies'	(xxx)	
Cash payment for advances and loans made to other parties	<u>(xxx)</u>	
C2: Net Cash flows from Investing Activities	<u>xxx</u>	
C3: Cash flows from Financing Activities:		
Issue of shares	xxx	
Issue of debenture and bonds	xxx	
Cash collection from loan and mortgage	<u>xxx</u>	
	xxx	
Less: Redemptions of shares	(xxx)	

Redemptions of debenture and bonds	(xxx)
Repayment of loan and mortgage	(xxx)
Dividend payment	<u>(xxx)</u>

C3: Net Cash flows from Financing Activities	<u>xxx</u>
<i>Total Cash Flows [C1+C2+C3]</i>	xxx
Cash or Cash equivalent at the beginning	<u>xxx</u>
Cash or cash equivalent at the end of the period	xxx

2.2 Review of Previous Studies

Bajracharya (1990), entitled “*A Study of Cash Management in Nepalese Public Enterprises*”, has studied the cash management practices in Nepalese public enterprises. He has taken 18 enterprises as a sample. According to his study, he concluded that,

-) Most enterprises have periodic accumulation of surplus cash and corresponding cash shortage from time to time. However, one of the enterprises considered the implication of holding idle cash balance and few took on to account Cash management in public enterprises of is primarily based on the traditional practices. Lacking in a scientific approach, more serous aspects of cash management has been the any formalized system of cash planning and cash budgeting in many of enterprises, although the executive of some enterprises do have the practices of forecasting cash requirements on a formal basis.
-) Modern practices with respect to debt collection, monitoring the payment behavior of customers and relevant banking arrangement in connection with collection of receivables has been virtually ignored in many enterprises.

- J Majority of the enterprises didn't face any serious liquidity problem. However, this was not because of the effectiveness of cash planning and budgeting. The problem of liquidity actually didn't arise due to the coincidence of delay in payment creditors.
- J By and large the potential benefit of investing surplus in marketable securities. These which failed to consider the cost of administering such investments.
- J There had been wide variations over-time in the state of financial health of enterprises in terms of the composition of current assets to current liabilities as revealed by the relevant financial ratios.
- J Neither interest rate nor the rate of inflation had any effect on the cash balance. Further there was very little evidence of effect on the cash balance holding in most case.

Further he recommended for developing appropriate strategies for cash management. He stressed on cash planning and budgeting to cash project cash surplus and cash deficit. Firm can accelerate the inflows as far as possible to decelerate outflows. He also stressed to maintain optimal level of cash and at last it can be better to invest idle fund in marketable securities.

Sainju (2003), entitled “*Cash Management in Public Manufacturing Enterprises of Nepal: A Case Study of Royal Drug*”, he has made conclusion indicating the poor cash management practices of Royal Drugs Limited (RDL). He concluded that

- J Overall cash management practices have been found disappointing.
- J Overall liquidity position of the firm has been found moderately dissatisfactory.
- J Overall, yearly cash inflows and out flow in RDL is not properly managed. Surplus cash hasn't been properly employed to earn return by investing in short-term investment opportunities.

-) Profitable has been found in very weak position.
-) Overall cash budgeting practice of RDL is very poor.

On this study payable deferral period, inventory conversion periods and receivable collection period and their aggregate effect as cash management has not been identified i.e. cash conversion cycle of the company has not been identified which helps to analysis overall status of collection of not cash in organization.

Neupane (2004), has conducted a research entitled in "*A study of cash management of Nepalese Public Enterprise*" (*A case study of Salt Trading Corporation Limited*). He has collected the data from secondary source that are published by the Salt Trading Corporation Limited and related information through the direct interview and questionnaire. The period covered is F.Y. 2055/56 to 2059/60. He has set the following objective.

-) To study the existing cash management in STCL.
-) To critically review the cash management technique procedure by STCL.
-) To suggest appropriate cash management policy for future.

He has pointed the major findings of his research work are as follows:

- i. Cash management in the STCL is primarily based on the traditional practice lacking in scientific approach. A more serious aspect of cash management has been the absence of any formalized system of cash planning and cash budgeting is STCL.

- ii. Modern practices with respect of debt collection, monitoring the payment behavior of customers and relevant banking arrangement in collection of receivables have been virtually ignored in STCL.
- iii. The STCL could not make the best use of available cash balance prudently.
- iv. The average cash turnover time in a year is found 40 times which is in fluctuating trend over the study period.
- v. The average inventory conversion period into cash is found a little more than two month i.e. 62 days which is very slow.
- vi. The average payable conversion period is faster than average receivable period which is not a good single for the purpose of managing cash.
- vii. Average cash conversion cycle taken 64 days i.e. little more than two month which is not a good single for the cash management or cash collection efficiency of corporation is very low.
- viii. Management has taken liberal credit policy to sales of goods. Hence the cash and bank balance of the study period is in minimum.
- ix. No optimum cash balance is maintained. The cash and bank balance with respect to current assets has been fluctuating. Similarly is the cash with respect to the total assets.

Adhikari (2004), has submitted as dissertation in the topic "*A comparative and Analytical Study on Cash Flow of selected Finance Companies*" to the faculty of management T.U. in the course of partial fulfillment of M.B.S.

The data are collected from both primary and secondary source. The period covered was from F.Y. 2054/55 to 2057/58. the basis objective of this research paper is to analysis the trend of cash flows of selected institute, to examine and compare the cash flow statement of those financial institution, to identify the strength and weakness of working capital management especially cash management of those financial institution.

Major Finding

i. National finance company

-) In case of NFS the total cash flow from operating activities is in increasing trend in the first two year but in the final year it is decreasing.
-) Deposit mobilization/collection is in decreasing trend.
-) The amount of current liabilities and current assets are increasing trend.
-) The cash flow from investing activities is not regular.
-) Borrowing is in decreasing trend which in the final fiscal year has decreased to zero.

ii. Lumbini Finance and Leasing Company

-) The amount of total cash flow from operating activities is in increasing trend in the first two year but in the final year it is decreasing.
-) Deposit mobilization/collection is in increasing trend.
-) The amount of current assets is decreasing in the first two years of the study period but it is increasing in the final year.
-) The amount of loan is decreasing in the first two years of the study period but it is increasing in the final year.
-) Cash flow from investing activities is in decreasing trend.
-) Borrowing is in decreasing trend.

Dahal (2005), has conducted a research entitled "*Cash flow budget analysis of service industry as component of profit planning and control*" (A case study of Sagarmatha Insurance Company PVT Ltd). He has set the following objectives:

-) To analyze sales and expense budget with cash budget of Sagarmatha Insurance Co.

-) To draw the true picture of profit planning and control of Sagarmatha Insurance Co.
-) To evaluate various budget with actual result.
-) To find the trend of premium collection and investment and its impact of cash budget.

To accomplish the above objectives, Mr Rohit has made research covering the F.Y. 2055/56 to 2059/60. Research methodology is followed through secondary source of data and other essential information from primary source.

His major findings are as follows:

- i. The company follows traditional method for planning the cash.
- ii. The company possesses large amount of fund but it is not profitably invested. The company couldn't invest its available fund for national interest. The company is having narrow look for its investment. Even its return on investment is decreasing (10.4%) toward the end of study period.
- iii. The company does not follow the optimum cash balance process. There is high idle cash (15-20%) of total cash available with it which invested prudently would have heavy returns.
- iv. Though the total premium of company is increasing, its net profit is continuously decreasing.
- v. The company is under capitalized. It does not possess borrowed capital.
- vi. The company does not seem applying the effective managerial tool "Profit planning and control" for controlling its activities.

Bhandari (2006), conducted a research entitled in "*A Study of Cash Flow Analysis in Nepalese Public Enterprises (A Case Study of Salt Trading Corporation Limited)*". He has collected the data from secondary sources that are published by salt trading corporation limited for the period from 2056/57 to 2061/62. He has set the following objectives

-) To analyze cash flow statement of Salt trading corporation.
-) To analyze functional budget associated with cash flows.
-) To reflect ability to generate cash flow in future periods.
-) To find out the ability to meet its obligation.
-) To provide suggestion and recommendation for effective cash management.

He has pointed the following major findings:

- i. The company is not adopting the definite inventory policy because the levels of inventory were fluctuated.
- ii. The company has ability to pay short-term ability to pay short term obligation which shows the financial strength of company.
- iii. The debt serving capacity is satisfactory as indicated by average interest coverage ratio is 1.43 times.
- iv. The long term solvency position of company is not satisfactory as it has used more debt as compare to equity.
- v. The average collection period is 26 days which shows the shows slow collection from debtors.
- vi. The cash flow from operating activities was not adequate to meet the short-term and long-term obligations. The trend of cash flow from operating activities was fluctuated.
- vii. The company has raised funds through loan and overdraft. It has not issued share except in the fiscal year of the study period which was also of very small portion. Due to such loan, the company paid more interest.

- viii. No optimum cash and bank balance were maintained. The bank and cash balance were fluctuated than indicated no definite policy was maintained regarding the amount of cash hold at the end of each year.
- ix. The cash flow per share was found highly fluctuated which shows the poor ability to pay dividend and current liabilities.
- x. The company has not adequate cash and bank balance to meet it's short-term and long-term debts.

Khadka (2008), conducted a research entitled on "A Comparative Study on Cash Flow of Bottlers Nepal Limited and Unilever Nepal Limited". The general objective of the study is to analyze the cash flow statements of the selected manufacturing companies comparatively.

The specific objectives of the study are:

-) To analyze the trend of cash flow of selected manufacturing companies
-) To examine, analyze and compare the cash flow statements of these companies.
-) To identify the strengths and weaknesses of cash management of the companies.
-) To provide recommendations to the concerned companies for future improvement on the basis of this study.

Major Findings

In the case of Unilever Nepal Ltd. the amount of the total cash from operating activities is in fluctuating trend. It is decreased in FY 2059/060, FY 2061/062 and FY 2062/063, but it is increased in FY 2060/061.

The amount of cash flow prior to change in working capital is in increasing trend. The amount has increased from FY 2059/060 to FY 2062/063.

The current assets amount is in fluctuating trend. The amount is decreased in FY 2058/059 and FY 2059/060, but the amount is increased in FY 2060/061 to FY 2062/063.

The current liabilities amount is in fluctuating trend. The amount is decreased in FY 2058/059 and FY 2062/063, but it is increased in FY 2059/060 to FY 2061/062.

In the case of Unilever Nepal Ltd. the amount of investing activities is in fluctuating trend. But there is no any investment amount in FY 2059/060. The amount is decreased in FY 2060/061, but the amount is increased in FY 2061/062 and FY 2062/063.

The amount of financing activities is in increasing trend, but it is decreased only in second year. The amount is decreased in FY 2059/060; but it reveal increasing trend from FY 2060/061.

In the case of Bottlers Nepal Ltd. the amount of the total cash from operating activities is in fluctuating trend. It is decreased in FY 2059/060 and FY 2061/062, but it is increased in FY 2060/061 and FY 2062/063.

The amount of cash flow prior to change in working capital is in fluctuating trend. The amount is increased In FY 2059/060 and FY 2062/063, but it is decreased in FY 2060/061 and FY 2061/062. So the amount is fluctuating for Bottlers Nepal Ltd

The current assets amount is in fluctuating trend. The amount is increased in FY 2058/059, FY 2059/060 and FY 2061/062, but the amount is decreased in FY 2060/061.

The current liabilities amount is in fluctuating trend. The amount is increased in FY 2058/059, FY 2061/062 and FY 2062/063. But the amount is decreased in FY 2059/060 and FY 2060/061.

In the case of Bottlers Nepal Ltd. the amount of investing activities is in fluctuating trend. The amount is increased in second year but the amount is decreased in third year. But it is increasing trend from FY 2061/062 to FY 2062/063.

The amount of financial activities is in fluctuating trend. The amount is constant in first and second year. The amount of financial activities is same in both years. But the amount is decreased in FY 2060/061. There are no any financial activities in FY 2061/062 and the amount is positive in FY 2062/063.

2.3 Research Gap

There is gap between the present research and the previous research in terms of some objectives, tools for analysis, period of data and the organization. The main issue of this study is to analyze the cash flow statement of NTC. This study has used financial and statistical tool for cash flow analysis. It is mainly concern with NTC and data is taken in between 2057/058 to 2062/063. This study has been done to analyze the trend of cash flow of selected organization, to examine, analyze and compare the cash flow, to identify the strengths and weaknesses of cash management of NTC and to provide recommendations to the concerned organization for future improvement on the basis of this study.

CHAPTER - III

RESEARCH METHODOLOGY

The knowledge of human being is rising through the getting answer of different questions like why, how, when, where, what etc. To answer these questions, they should gather information and analyze them to achieve their goals or satisfaction. "The research for gaining the knowledge about method of goal achievement, which we desire, is known as research methodology" (Joshi, 2001:12-13). Research is to find out to gain knowledge about a phenomenon. Here re means repeatedly or again and again, and 'search' says to investigate or to find. Thus, Combine researching repeatedly is called research, which includes searching new facts, knowledge, principles and theories in scientific way Likewise; research needs various methodologies, tools, techniques etc. A systematic research studies needs to follow a proper methodology to achieve the pre mentioned objectives. "Research methodology is a sequential procedure and methods to be adopted in systematic study". The proper analysis of the study can be meaningful only on the right choice of research tools that help for meaningful conclusion. This chapter is mainly associated with research design, sample design, period of study, sources of data & data collection procedures, data processing & terms, methods, tools techniques, theories employed in the analysis & interpretation.

3.1 Research Design

"Research design is the plan, structure and strategy of investigation conceived so as to obtain answer to research questions and to control variance" (Wolfff and Pant, 1999:50). The main objective of the study is to analyze to cash flow statements of the public enterprise and provide suggestions on the basis of findings. In order to fulfill objectives of the study as much as possible, an adequate attention has been paid in the process of Research Design. The research is carried out on the basis of secondary sources data. In the study, the researcher has

followed the descriptive cum analytical research design to analyze the financial performance of the selected public enterprise. Various financial parameters and an effective research technique are employed to especially identify the weaknesses of these institutions. On the ground of observed infirmities and inefficiencies, an attempt will be made to suggest the reasonable and useful recommendations to the concerned.

3.2 Population and Sample

There are 138 listed companies in Nepal. They are related with different sectors like banking, manufacturing and processing, hotels, trading, insurance, finance and others. It is not possible to study all of them regarding the research topic. Therefore among these, one reputed public company NTC is taken as a sample company from population for this research study.

3.3 Sources of Data

This study is mainly based on the secondary data collected from the different published sources. The audited Balance Sheet, profit & loss account and related schedules of the concerned public enterprise was collected. Besides these, other essential data and information were collected from some published and unpublished documents. So far as the data collection procedure is concerned, annual reports of selected organizations were collected. In addition, answers on certain queries made to the staffs of concerned organization also assists in data collection procedure. The researcher has also consulted the library to gather necessary data and information during the course of study.

3.4 Data Processing and Tabulation

The necessary data from 2057/058 to 2062/063 for the study collected from various sources are recorded systematically for analysis. All the information is then identified, grouped and tabulated as per the need of study in order to meet the research objectives.

Tabulated data are presented through the easy understanding graphs.

3.5 Tools and Techniques used to Analyze the Data

The data analysis is made on the basis of various financial and statistical tools to achieve the research objectives. The researcher has used the following tool and techniques.

3.5.1 Statistical Tools

Statistical tool is very useful tool to analyze the available data to find the relation between these data and to predict about the trend and hidden fact in the relation. So, different related tools from the statistical tool are utilized in terms research objectives. They are:

- a) Mean
- b) Correlation
- c) Standard deviation
- d) Trend analysis

3.6 Research Variables

Balance sheet, Profit and loss account, Cash flow statement including cash from operating activities, cash from investing activities and cash from financing activities are the research variables.

CHAPTER - IV

DATA PRESENTATION AND ANALYSIS

4.1 Cash from Operating Activities

This includes all those activities which are main activities of any company. If the cash inflow from this activity is greater than the outflow then it is considered satisfactory, because it shows the companies have liberal cash to operate and to bear all the expenses and overheads occurred during the operation.

The cash from operating activities can be determined by applying any one method from 1) direct method or 2) indirect method. This selected company is applying indirect method to determine cash from operating activities. The difference between direct method and indirect method is: on direct method starting is sales and on indirect method starting is net profit. Net profit is calculated by deducting all cash and non cash expenses that can be deducted while calculating net profit. So, on this indirect method, there should be making some adjustment of different non cash expenses and income to determine actual cash flow. Following table shows the cash flow from operating activities of NTC.

Table 4.1
Cash Flow from Operating Activities of NTC

(in Rs '0000)

Particular	Fiscal Year				
	2058/59	2059/60	2060/61	2061/62	2062/63
Net profit before tax	332006	409312	455067	492153	684373
Adjustment					
Depreciation	87387	94022	102792	105049	119614
Differed expenses	2338	3444	3277	4082	4003
Foreign exchange gain/loss	-15799	16200	2844	25112	-28001
Provision for staff bonus and incentive	30621	30164	30921	28171	32204
Provision for pension and gratuity	4514	6253	23499	31261	24139
Interest on loan			329	70	111
Fixed assets written off	5043	297	3393	123	
income from investment and bank deposit	-37938	-41955	-49027	-46383	-59684
expense on loss of goods	26991	4209	16349		853
Royalty		40527	12657	49130	59181
Provision for earned leave			3760	2424	6598
Bad debts	18	66			
Provision for doubtful debts	-3216	2107	22598		
Special charge	10542	12437	700		
Last year adjustment	2056	5600			
Operating profit before working capital change	444563	582683	629159	691192	843391
Adjustment for working capital changes					
Increase/Decrease in account receivable	-70749	-56220	13535	-15700	-27355
Increase/Decrease in stock	2468	8245	5062	-5461	-3426
Increase/Decrease in interest accrued	5234	-713	-1807	546	246
Increase in advance-tax			-131570	-160205	-168460

Increase/Decrease in advance	-120963	-73261	-24706	22148	38251
Branch account (Adjust)	326	-1244	1218	-404	280
Increase/Decrease in payable	60290	68485	33254	22645	61850
Payment of interest/adjustment			-1385	47	-234
Payment of royalty				-45000	-37064
Payment of earned leave			-2136	-2102	-2201
Payment of pension			-2145	-2361	-3005
Gratuity received					1
Payment of bonus, taxes and incentives	-104950	-137215	-36190	-38404	-30164
Last year adjustment			-4834	15809	127
Increase/Decrease in provision	24473	21933			
Working capital Change			-76698		
Net cash flow from operating activities(A)	240692	412693	400757	482750	672237

Sources: Annual report from 2058/50 to 2062/63

The table shows that the total cash flow form operating activities for NTC are Rs. 240692 on FY 2058/59, Rs. 412693 on FY 2059/60, Rs. 400757 on FY 2060/61 (on this year the adjustment for two period has been done), Rs 482750 on FY 2061/62 and Rs. 672237 on 2062/63 respectively. This table shows the operating cash inflow of NTC is in increasing rate except in the year of 2060/61. That may be the cause of combination of incomplete financial statement. There is also irregular cash flow on non operating income and expenses and working capital which is also the reason for fluctuation on operating cash flow. These cash flows from operating activities are show on the figure 4.1.

Table 4.1 shows, on F.Y. 2058/59 net profit before tax is Rs 332006. On this profit adjustment on the head of depreciation Rs 87387, Differed expenses Rs 2338, Foreign exchange gain/loss Rs -15799, Provision for staff bonus and incentive Rs 30621, Provision for pension and gratuity

Rs 4514, Fixed assets written off Rs 5043, income from investment and bank deposit Rs -37938, expense on loss of goods Rs 26991, Bad debts Rs 18, Provision for doubtful debts Rs -3216, Special charge Rs 10542 and Last year adjustment Rs 2056 has been made.

On F.Y. 2059/60 net profit before tax is Rs 409312. On this profit adjustment on the head of depreciation Rs 94022, Differed expenses Rs 3444, Foreign exchange gain/loss Rs 16200, Provision for staff bonus and incentive Rs 30164, Provision for pension and gratuity Rs 6253, Fixed assets written off Rs 297, income from investment and bank deposit Rs -41955, expense on loss of goods Rs 4209, Royalty Rs 40527, Bad debts Rs 66, Provision for doubtful debts Rs 2107, Special charge Rs 12437 and Last year adjustment Rs 5600 has been made.

On F.Y. 2060/61 net profit before tax is Rs 455067. On this profit adjustment on the head of depreciation Rs 102792, Differed expenses Rs 3277, Foreign exchange gain/loss Rs 2844, Provision for staff bonus and incentive Rs 30921, Provision for pension and gratuity Rs 23499, Interest on loan Rs 329, Fixed assets written off Rs 3393, income from investment and bank deposit Rs -49027, expense on loss of goods Rs 16349, Royalty Rs 12657, Provision for earned leave Rs 3760, Provision for doubtful debts Rs 22598 and Special charge Rs 700 are made.

On F.Y. 2061/62 net profit before tax is Rs 492153. On this profit adjustment on the head of depreciation Rs 105049, Differed expenses Rs 4082, Foreign exchange gain/loss Rs 25112, Provision for staff bonus and incentive Rs 28171, Provision for pension and gratuity Rs 31261, Interest on loan Rs 70, Fixed assets written off Rs 123, income from investment and bank deposit Rs --46383, Royalty Rs 49130, Provision for earned leave Rs 2424.

On F.Y. 2062/63 net profit before tax is Rs 684373. On this profit adjustment on the head of depreciation Rs 119614, Differed expenses Rs 4003, Foreign exchange gain/loss Rs -28001, Provision for staff bonus and incentive Rs 32204, Provision for pension and gratuity Rs 24139,

Interest on loan Rs 111, income from investment and bank deposit Rs -59684, expense on loss of goods Rs 853, Royalty Rs 59181 and Provision for earned leave Rs 6598 are made.

Before the adjustment of working capital, cash from operating activities of NTC for the F.Y. 2058/59, 2059/60, 2060/61, 2061/62 and 2062/63 are 444563, 582683, 629159, 691192 and 843391 respectively which are shown on figure 4.1.

Table 4.2
Cash from Operating Activities before and After Change in WC

(in Rs '0000)

Particular	Fiscal Year				
	2058/59	2059/60	2060/61	2061/62	2062/63
Net profit before tax	332006	409312	455067	492153	684373
Operating profit before working capital change	444563	582683	629159	691192	843391
Net cash flow from operating activities(A)	240692	412693	400757	482750	672237

Sources: Annual report from 2058/50 to 2062/63

On table 4.2, Second row shows Net profit before tax including none operating and non cash income and expenses. Third row shows operating profit before working capital but after adjustment of non operating income and expense. Last row shows Net Cash from operating activities which are shown on following figure 4.1 as follows:

Figure 4.1

Cash from operating activities before and after change in WC

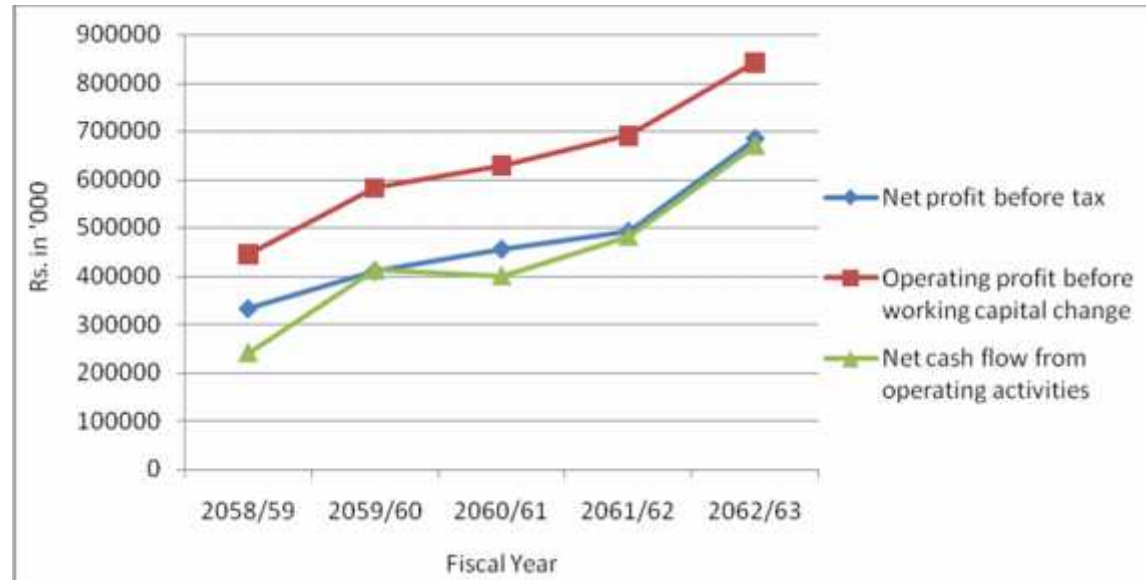


Figure 4.1 shows the operating profit before working capital change is more in all years with increasing rate. Net profit before tax is in slow increment rate till F.Y. 206162, after then increment rate is higher. The trend line of Net profit before working capital change and Net cash flow from operating activities are not in same trend.

4.1.1 Trend Analysis of Operating Cash Flow

To analyze the trend of operating cash flow, straight line trend by least square method is going to be fitted. For this, let us assume that the fiscal year be X and the cash from operating activities be Y . If we keep the fiscal year ranking from 1 to 5 then no. of observation would be five. Similarly, operating cash inflow Y would be kept in four figure i.e. in Rs (0000) to make calculation easier.

So, that straight line trend $Y_c = a + bx$

Where,

$$b = \frac{\sum xy - \frac{\sum x \sum y}{n}}{\sum x^2 - \frac{(\sum x)^2}{n}}$$

$$a = \frac{\sum y}{n} - b \frac{\sum x}{n}$$

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

Here, $a = \frac{\sum Y}{N} - b \bar{X}$ ($\because \sum x = 0$)

$$b = \frac{\sum xY}{\sum x^2}$$

$$\bar{x} = \frac{\sum X}{N}$$

Table 4.3

Least square spreadsheet cash from Operating Activities

Fiscal Year	Cash from operating activities Y in (0000)	$x = (X - \bar{X})$	x^2	xy
2058/59 (1)	240692	-2	4	-481384
2059/60 (2)	412693	-1	1	-412693
2060/61 (3)	400757	0	0	0
2061/62 (4)	482750	1	1	482750
2062/63 (5)	672237	2	4	1344474
$\bar{X} = \frac{\sum X}{N}$	$Y = 2209129$	$\sum x = 0$	$\sum x^2 = 10$	$\sum xy = 933147$

Sources: Annual report from 2058/50 to 2062/63

$$\bar{X} = \frac{\sum X}{N} = \frac{15}{3} = 3$$

$$a = \frac{\sum Y}{N} = \frac{2209129}{5} = 441825.8$$

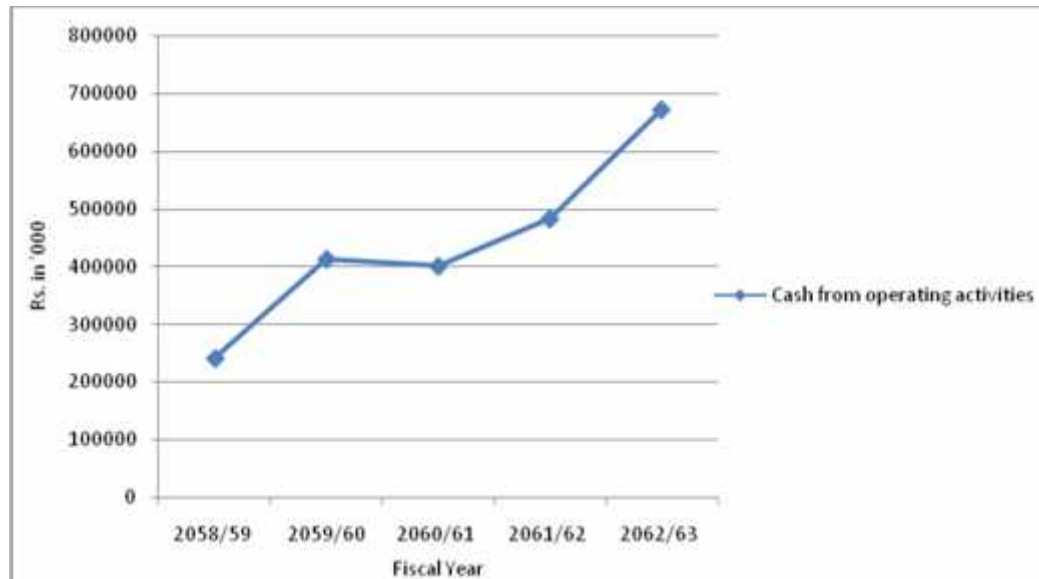
$$b = \frac{\sum xy}{\sum x^2} = \frac{933147}{10} = 93314.7$$

$$Y_c = 441825.8 + 93314.7x$$

This trend line shows the highly positive operating cash inflow for the future. The annual rate of increment is $93314.7 \times 10000 = 933147000$. The trend line of Net cash from operating activities is shown below.

Figure 4.2

Trend line of Net Cash Flow from Operating Activities



On this figure the net cash flow from operating activities is in increasing trend. During the period, its rate of growth is high in the beginning then the mid period and last period which are shown by the above trend line.

4.2 Cash from Investing Activities

Cash flows from investing activities represent inflows and outflows that occurred within an accounting period and concern all the investments that the company has made. Primarily, these cash flows refer to cash received or paid for the acquisition or disposal of long term (fixed assets). Cash flows from investing activities should be reported separately from the cash flow from operating activities and in a unified form that does not allow the selection between a direct or indirect method. This includes all those investment made or sold inside or the outside the company. If the cash inflow is less than the cash outflow then it is considered satisfactory for the company because more the company is able to invest more it is considered to be able to expand.

The separate disclosure of cash flows arising from investing activities is important because the cash flows represent the extent to which expenditure has been made for resources intended to generate future income and cash flows. Examples of cash flows arising from investing activities are:

- a. Cash payments to acquire property plant and equipment intangible and others long term assets. These payments include those relating to capitalized development costs and self constructed property plant and equipment.
- b. Cash receipts from sales of property plant and equipment intangible and other long term assets.
- c. Cash payments to acquire equity or debt instrument of other enterprise and interest in joint venture.
- d. Cash receipts from sales of equity or debt instrument of other enterprises and interest in joint venture.
- e. Cash advances and loans made to other parties.
- f. Cash payments from the repayment of advances and loans made to other parties.

Investing activities are related with the purchase and sales of non current assets such as plant and machinery, land and building, furniture and fixture etc. Investing activities also include lending money and the purchase or sale of investments in securities. Changes in equipment, assets or investments relate to cash from investing. Usually cash changes from investing are a "cash out" item, because cash is used to buy new equipment, buildings or short-term assets such as marketable securities. However, when a company divests of an asset, the transaction is considered "cash in" for calculating cash from investing.

Table 4.4
Cash flow from Investing Activities

Sources: Annual report
2062/63

(in Rs '0000) *from 2058/50 to*

Cash flow from investing activities	Fiscal Year				
	2058/59	2059/60	2060/61	2061/62	2062/63
Purchase of fixed assets	-109315	-176864	-154912	-199775	-224365
Decrease in cwip			-4150	-107534	1579
Increase in Differed expenses			-532	-4210	-3429
Increase in investment	-14354	-97653	-38382	5582	-81822
Income from investment and bank deposit	37938	41955	49027	46383	59684
Sale of investment	12410	28250			
Net Cash flow from investing activities(B)	-73321	-204312	-148949	-259554	-248353

Above table 4.4 shows investing activities for 2062/63. As mentioned purchase of fixed period. This activities The maximum cash period is Rs -224365

the Cash flow from F.Y. 2058/59 to above, NTC has made assets during the result on cash outflow. outflow during the on F.Y 2062/63. The

minimum cash outflow from purchase of fixed assets is Rs -109315 on F.Y. 2058/59. This means the company has increasing rate of purchase of fixed assets. The cash outflow from purchase of assets on 2058/59, 2059/60, 2060/61, 2061/62 and 2062/63 are -109315, -176864, -154912, -199775 and -224365 respectively. During the study period Change in cwip has been arise only for last three fiscal years as Rs 1579 on F.Y. 2062/63, Rs -107534 on 2061/62 and Rs -4150 on 2060/61. Among these three years, last year's cwip is in positive which shows during the year cash inflow has been arise. Again for previous two periods the cash has been out flowed. On the beginning two years there is not any cwip. On the above table the cash outflow for differed expenses -3429, -4210 and -532 for F.Y. 2062/63, 2061/62 and 2060/61 respectively.

Increase in investment is a cause for cash outflow and it increase future cash inflow through its return the cash outflow for the period 2058/59, 2059/60, 2060/61, 2061/62 and 2062/63 are -14354, -97653, -38382, 5582 and -81821 respectively. Cash inflows from investing activities are income from investment and bank deposit and sale of investment. The sales of investment are made during the F.Y. 2059/60 and 2058/59 are 28250 and 12410 respectively. On the other hand, the income from investment and bank deposit is also a source for cash inflows. The income from investment and bank deposit are Rs 59684 on 2062/63, R s 46383 on 2061/662, Rs 49027 on 2060/61, Rs 41955 on 2059/60 and Rs 37938 on 2058/59.

The net cash from operating activities are obtained through the addition and subtraction of all above statement of cash inflow and out flow. Cash out flow is presented with (-) sign at the beginning of the amount. The trend of cash flow of investing activities is not in fixed trend, it is fluctuating randomly. The net cash from operating activities are shown on figure 4.2.

4.2.1 Trend Analysis of Investing Cash Flow

To analyze the trend of investing cash flow, straight line trend by least square method is going to be fitted. For this, let us assume that the fiscal year be X and the cash from investing activities be Y. If we keep the fiscal year ranking from 1 to 5 then no. of observation would be five. Similarly, investing cash flow would be kept in figure 4.3 i.e. in Rs (0000) to make calculation easier.

So, that straight line trend $Y_c = a + bx$

Where,

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

$$a X \frac{Y}{N}$$

$$b X \frac{xY}{x^2}$$

$$\mathbf{x} = (X \ Z \ \overline{X})$$

Table 4.5

Least Square Spreadsheet Cash from Investing Activities

Fiscal Year	Cash from investing activities Y in (0000)	x= (X - \bar{X})	X ²	xY
2058/59 (1)	-73321	-2	4	146642
2059/60 (2)	-204312	-1	1	204312
2060/61 (3)	-148949	0	0	0
2061/62 (4)	-259554	1	1	-259554
2062/63 (5)	-248352	2	4	-496704
$\bar{X} = \frac{\sum X}{N}$	Y = -934488	$\bar{x} = 0$	$\sum x^2 = 10$	$\sum xY = -405304$

Sources: Annual Report from 2058/50 to 2062/63

$$\bar{X} = \frac{\sum X}{N} = \frac{15}{5} = 3$$

$$a = \frac{\sum Y}{N} = \frac{-934488}{5} = -186897.6$$

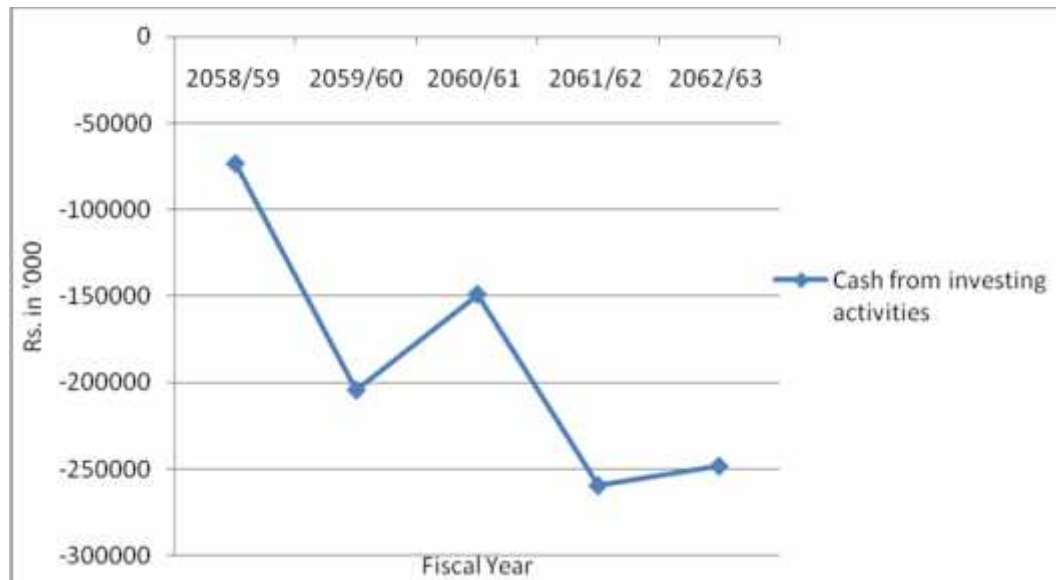
$$b = \frac{\sum xY}{\sum x^2} = \frac{-405304}{10} = -40530.4$$

$$Y_c = -186897.6 - 40530.4x$$

This trend line shows the highly fluctuating cash flow for the period. The annual rate of increment is $-40530.4 \times 10000 = -405304000$. The trend line of Net cash from investing activities is shown below.

Figure 4.3

Trend line of Net Cash Flow from Investing Activities



On the above figure 4.3, the trend of cash from investing activities is fluctuating during the study period and its rate of outflow is increasing that shows the NTC is expanding its business.

4.3. Cash from Financing Activities

This section shows the sources of fund generated through owner's capital and borrowed capital. Financing activities also include the repayment of debt and payment of cash dividend to shareholders. If the cash inflow is greater than the cash outflow whether it is satisfactory or not, depends on the situation. But it shows the company's ability to take risk but excess cash inflow through this activity is considered as not much healthier for the financial condition of the company. According to international accounting standard financing activities are:

- a. Cash proceeds from issuing shares or other equity instruments.
- b. Cash payments to owners to acquire or redeem the enterprise shares.
- c. Cash proceeds from issuing debentures, loans, notes, bonds mortgage and other short or long term borrowings.
- d. Cash repayments by a lessee for the reduction of the outstanding liability relating to a finance lease.

Table 4.6
Cash flow from Financing Activities

(in Rs '0000)

Cash flow from financing activities	Fiscal Year				
	2058/59	2059/60	2060/61	2061/62	2062/63
Receipt in long term debt	7734	23391	1125	2424	
Payment of long term debt	-72970	-30012	-23378	-1125	-2424
Payment of dividend			-49681	-30000	-43351
payment of last year dividend			-9240		
Repayment of retained earning to Nepal government			-100000	-290000	-161165
Receipt of share capital			500		
Capital reverse adjustment to					-232

retained earning					
Net cash flow from financing activities	-65236	-6621	-180674	-318701	-207172

Sources: Annual Report from 2058/50 to 2062/63

Table 4.6 presents the source and use of cash in the head of financing activities. On this table the financing activities of NTC are : Receipt in long term debt, payment of long term debt, payment of dividend, payment of last year dividend, repayment of retained earning to Nepal government, receipt from share and Capital reverse adjustment to retained earning during the period. Due to the reason of government owned organization, it makes repayment of retained earning to Nepal government. So, its cash flow is in negative. Cash inflows from financing activities are: receipt of share capital, receipt on long term debt. The share receipt is only on F.Y. 2060/61 amount of Rs 500. Cash receipt on long term debt on 2058/59, 2059/60, 2060/61 and 2061/62 are: 7734, 23391, 1125 and 2424 respectively.

Cash out flow headings are: Payment of long term debt, Payment of dividend payment of last year dividend, Repayment of retained earning to Nepal government and capital reverse adjustment to retained earning. Capital reverse adjustment to retained earning was on only 2062/63 of Rs -232. Dividend payment of F.Y. 2058/59 and F.Y. 2059/60 was not paid on the date but it was paid on F.Y. 2060/61 of the head of last year dividend amount of Rs -9240. Dividend payment for F.Y. 2060/61, 2061/62 and 2062/63 are: -49681, -30000 and -43351. Payment of long term debt are -72970, -30012, -23378, -1125 and -2424 of F.Y. 2058/59, 2059/60, 2060/61, 2061/62 and 2062/63 respectively. Repayment of retained earning to Nepal government of F.Y. 2060/61, 2061/62 and 2062/63 are: -100000, -290000 and -161165 respectively. All the cash from financing activities are in negative but in range of -6621 to -318701. The minimum cash amount is Rs -6621 on F.Y. 2059/60 and the maximum

amount is -318701 on F.Y. 2062/63. The cash flow from financing activities for remaining fiscal year 2058/59, 2060/61 and 2061/62 are -65236, -180674 and -318701 respectively. The trend of cash flow from financing activities is show below on bar diagram (figure: 4.4).

4.3.1 Trend Analysis of Financing Cash Flow

To analyze the trend of financing cash flow, straight line trend by least square method is going to be fitted. For this, let us assume that the fiscal year be X and the cash from financing activities be Y. If we keep the fiscal year ranking from 1 to 5 then no. of observation would be five. Similarly, financing cash flow would be kept in four figure i.e. in Rs (0000) to make calculation easier.

So, that straight line trend $Y_c = a + bx$

Where,

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

$$a = \frac{\sum Y}{N}$$

$$b = \frac{\sum xY}{\sum x^2}$$

$$x = (X - \bar{X})$$

Table 4.7

Least Square Spreadsheet Cash from Financing Activities

Fiscal Year	Cash from financing activities Y in (0000)	x= (X - \bar{X})	X ²	xY
2058/59 (1)	-65236	-2	4	130472
2059/60 (2)	-6621	-1	1	6621
2060/61 (3)	-180674	0	0	0
2061/62 (4)	-318701	1	1	-318701
2062/63 (5)	-207172	2	4	-414344
$\bar{X} = \frac{\sum X}{N}$	$\bar{Y} = -778404$	$\sum x = 0$	$\sum x^2 = 10$	$\sum xY = -595952$

Sources: Annual report from 2058/50 to 2062/63

$$\bar{X} = \frac{\sum X}{N} = \frac{15}{3} = 3$$

$$a = \frac{\sum Y}{N} = \frac{-778404}{5} = -155680.8$$

$$b = \frac{\sum xY}{\sum x^2} = \frac{-595952}{10} = -59595.2$$

$$Y_c = -155680.8 - 59595.2x$$

This trend line shows the highly fluctuating cash flow for the period. The annual rate of increment is $-59595.2 \times 10000 = -595952000$. The trend line of Net cash from financing activities is shown below.

Figure 4.4
Trend Line of Net Cash Flow from Financing Activities

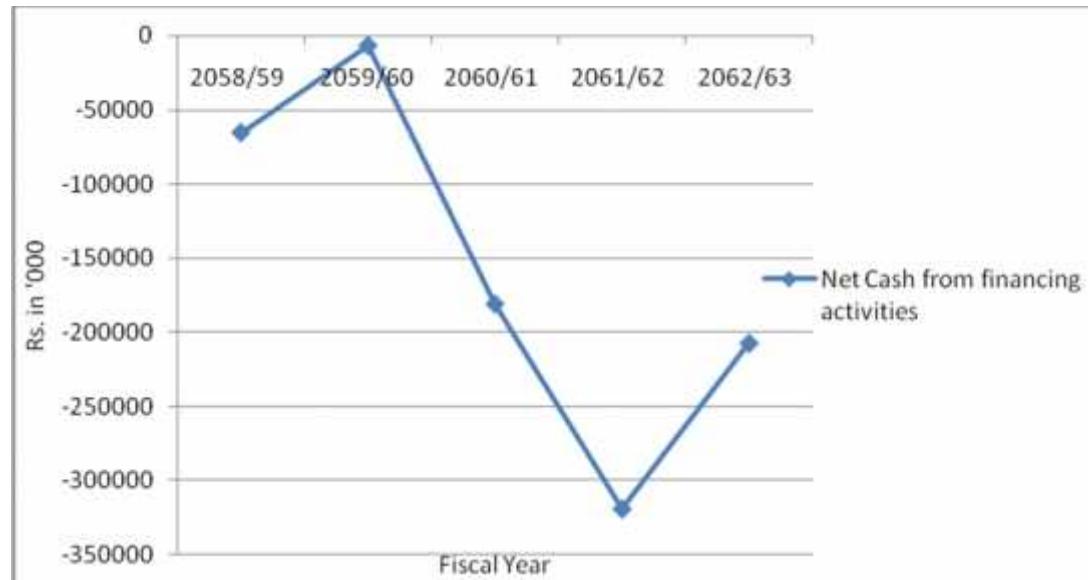


Figure 4.4 shows the trend line graph of cash flow from financing activities. On this graph the trend of cash flow is in negative with fluctuation. This trend line shows the cash outflow is in increasing trend at the beginning two fiscal year. The cash outflow second to fourth year is highly negative trend and at the last year its flow is negative but in increasing rate.

4.4 Net Cash Flow Analysis

Cash flow is a result of different business activities. These activities are categorized in different group in terms of their nature and support provided by them. The group of activities are operating, investing and financing. Operating activities are those activities which are the cause for the organizational existence. Operational effectiveness is measured through the analysis of trend of cash from operation. There should be

positive cash flows on total from these activities. That means the operating cash inflows are the source for the payment of business expenses and trading liabilities. On the other hand, investing and financing activities are mainly concern with bulk amount of cash that are related with business expansion and long term source of cash. Generally, if the cash outflows on investing activities are increasing, organization is in continuous expansion. Again, if the cash inflow on financing activities through issue of share and long term loan, organization can get long term source of cash that can be used on long term investment or business expansion. Investing and financing activities are the activities through which long term sustainability can be measured. To be the efficient and effective on operation of business and expansion of business there should be balance between these activities to produce adequate cash for the requirement.

Net cash flow is the aggregate cash flow from these three heading of activities. The amount of net cash flows of a organization depend upon the type, size, condition and contingencies of the organization. So, there may be fluctuation on the net cash flow and the organization should apply required strategies to keep adequate balance of cash. The net cash flow of NCT for the period 2058/59, 2059/60, 2060/61, 2061/62 and 2062/63 are shown below including different source of cash flow.

Table 4.8

Net Cash Flow of

(In Rs '0000)

NTC

Fiscal Year	Net cash flow from operating activities(A)	Net Cash flow from investing activities(B)	Net cash flow from financing activities ©	Net increase/decrease in cash (A+B+C)
2058/59	240692	-73321	-65236	102135
2059/60	412693	-204312	-6621	201760
2060/61	400757	-148949	-180674	71134

*Sources: Annual
to 2062/63*

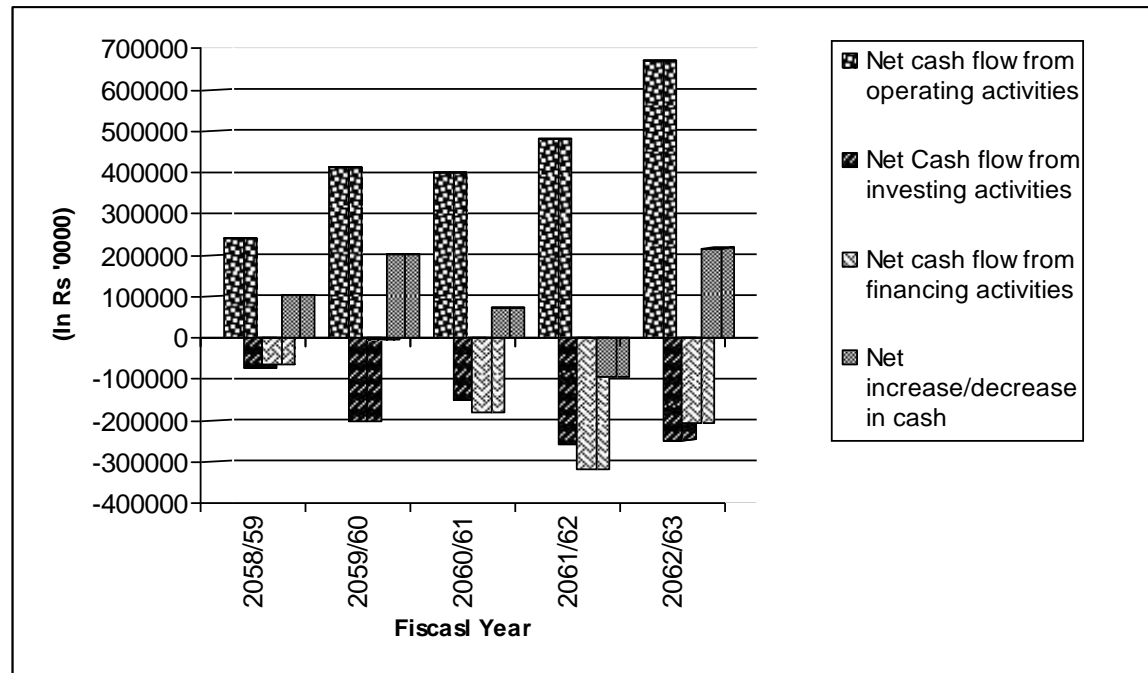
2061/62	482750	-259554	-318701	-95505
2062/63	672237	-248353	-207172	216712

Report from 2058/50

On the table 4.8, first column represents Fiscal year, mid three column shows the amount of cash flow in Rs '0000. Some of these amounts are in negative sign which represents cash outflow and the positive amounts represent cash inflow. Last column is the net amount of cash flow which is the result of sum of mid three columns' amount.

The cash from operation during the period are all positive with increasing situation. This concludes the NTC is in good situation on its operation. On the other hand the cash flow on investing activities elucidate the company is in expansion through increasing its investment. The investment cash flow shows the NCT is in expansion continuously. The cash flow of financing activities is in also negative. It arises mainly due to its repayment of long term debt, dividend payment and payment of retained earning to government. The combined cash flow of NTC is shown below through bar graph clearly.

Figure 4.5
Cash Flow Bar Diagram



The above bar diagram presents the total cash flow during different fiscal year from different cash flow heading. From the diagram, cash flow from operating activities is increasing every year excluding the Fiscal year 2059/60. Cash flow from investing and financing activities are in negative which has been being main sector for the use of cash.

4.5 Cash Position Analysis

Cash is the blood for every organization that should be use in productive manner. Actually the every activities of an organization are measured in term of cash. It means cash is the main input source of every business. Fair and regular inflow and out flow of cash represents strengths and opportunities for business succession through minimizing weakness and threats. There need adequate cash balance for every organization to run its activities smoothly. The amount of required cash balance will be change according as the size, condition, organizational age and other environmental variables. Organization should be effective in cash management. Cash should be kept in organization as the requirement of cash for daily and coming plan of the organization and the excess amount of cash should be use in business expansion or other business growth related activities which create maximum value of cash. There need not to be excess cash in hand without its plan for use. So, Cash management is a one of strategic management tools. Cash flow is ongoing or day to day activities of every organization. Here is going to be analyzed yearly cash flow with the help of annual report. The beginning cash balance, net cash flow during the fiscal year and the ending balance of cash are show below in Table: 4.9.

Table 4.9
Net Cash Position of NTC

(In Rs "0000)

Fiscal year	Cash at beginning	Net cash flow (A+B+C)	Foreign exchange gain/loss	Cash at the end
2058/59	706279	102135	15799	824213
2059/60	824214	201760	-16200	1009774
2060/61	1009774	71134	-2844	1078064
2061/62	1078067	-95505	-25112	957450
2062/63	957450	216712	28001	1202163

Sources: Annual report from 2058/50 to 2062/63

Table 4.9 is prepared to show the yearly beginning cash balance of cash, Net cash flow from different (operating, investing and financing) activities and Foreign exchange gain/loss and their result on cash balance at end. On the above tale, beginning cash balance for every fiscal year is positive, net cash flow for the respective year all positive excluding on F.Y2061/62. Foreign exchange is being loss and gain both for different period. Cash at end for the period is positive for all Fiscal year. But the amount is on fluctuating. Cash balance at end trend line is shown below on figure: 4.6. Following descriptive statistics table is also prepared to analyze the cash position of NTC.

Figure 4.6
Cash balance at End Trend Line

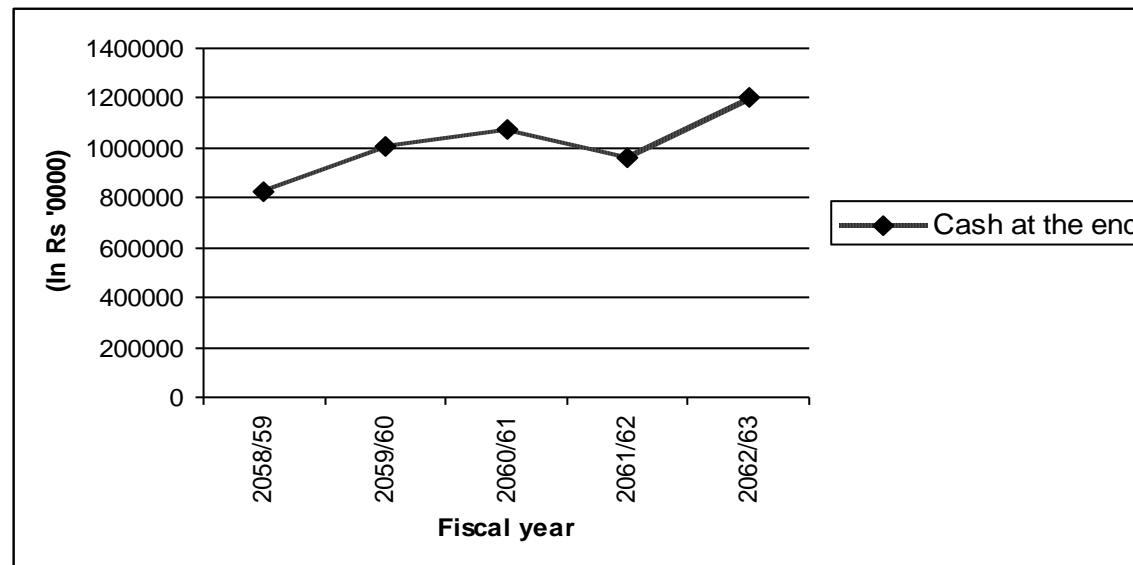


Figure 4.7
Cash at beginning Trend Line

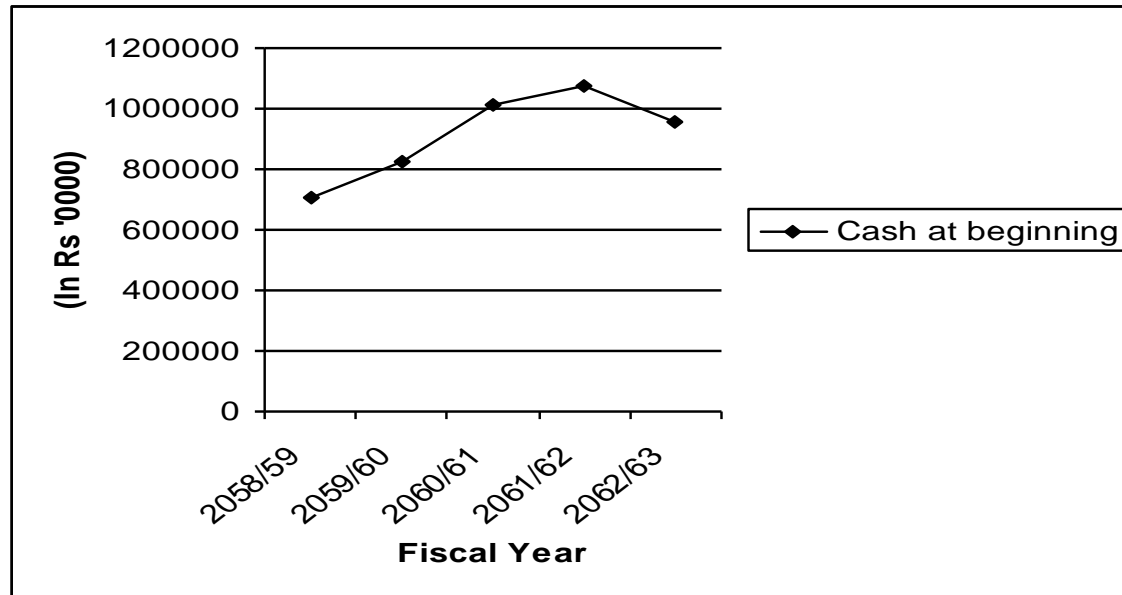


Table 4.10

Descriptive statistics of Net Cash Position of NTC for F.Y. 2058/58 to 2062/63

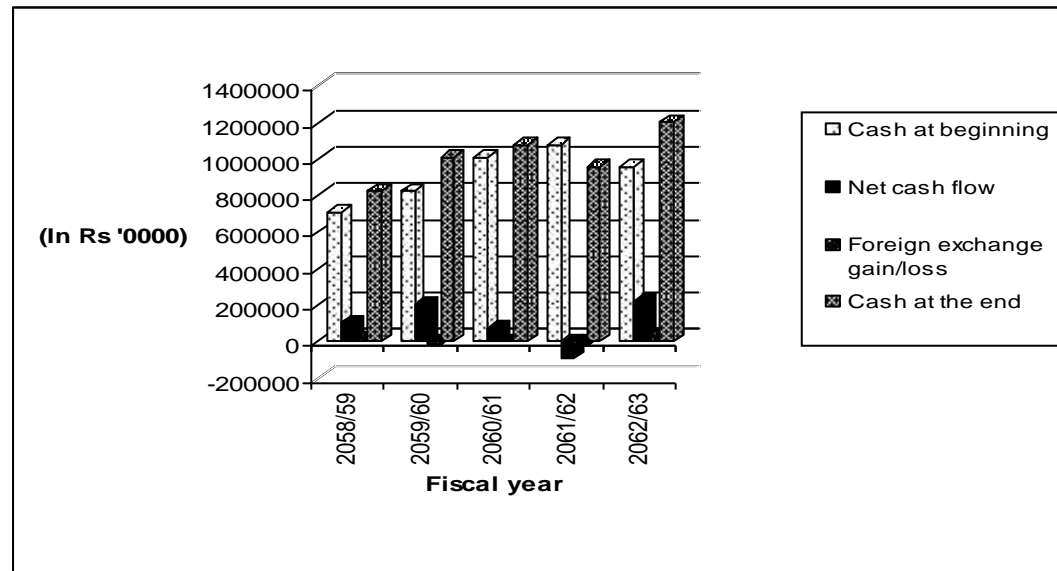
	Cash at Beginning	Net Cash Flow (A+B+C)	Foreign Exchange Gain/Loss	Cash at the end
Maximum	1078067	216712	28001	1202163
Minimum	706279	-95505	-25112	824213
Average	915156.8	99247.2	-71.2	1014332.8
Standard Deviation	149316.2673	125532.8286	21993.06672	140306.6497

Sources: ANNUAL report from 2058/50 to 2062/63 and appendix.

From table 4.10, the maximum beginning cash balance for the study period is 1078067 on F.Y 2061/62, maximum net cash flow is 216712 on F.Y. 2062/63, the maximum foreign exchange gain is 28001 on 2062/63 and the maximum cash balance at the end is 1202163 on F.Y. 2062/63. The minimum value of beginning cash balance is 706279 on F.Y. 2058/59, minimum net cash flow is -95505 on F.Y. 2061/62, maximum foreign exchange loss is -25112 on F.Y. 2061/62 and the minimum cash balance at the end is 824213 on F.Y. 2058/59. Average value of cash at beginning, Net cash flow, foreign exchange gain or loss and Cash balance at the end is 915156.8, 99247.2, -71.2 and 1014332.8 respectively. These average shows the foreign exchange is in negative. Standard deviation for the study period of Cash at beginning, Net cash flow, Foreign exchange gain/loss and Cash at the end are 149316.2673, 125532.8286, 21993.06672 and 140306.6497

respectively. Maximum standard deviation is aroused on beginning cash balance. The bar diagram on figure: 8 show the picture of cash at beginning, net cash flow and cash balance at the end of fiscal year.

Figure 4.8
Cash Position of NCT



4.6. Statistical Description of NPBT, CFOA, CIA and CFFA

The cash flow is determined with the aggregated impact of cash from operating activities (CFOA), cash from investing activities (CFIA) and Cash from financing activities (CFFA). CFOA is obtained after the adjustment of non operating income and expenses and working capital over Net profit before tax (NPBT). The individual analysis of all these heading have already done above. To reach in conclusion of the actual trend

and situation there need to be analyzed the available data through use of statistical tools. Available data related with NPBT, CFOA, CFIA and CFFA are tabulated below on table: 4.11 and the statistical analysis result of these data are tabulated on table: 4.12.

(In Rs '0000)

Table 4.11
NPBT, CFOA,
for the period

Sources: Annual
2058/50 to 2062/63

Fiscal Year	Net profit before tax (NPBT)	Net cash flow from operating activities (CFOA)	Net Cash flow from investing activities (CFIA)	Net cash flow from financing activities (CFFA)
2058/59	332006	240692	-73321	-65236
2059/60	409312	412693	-204312	-6621
2060/61	455067	400757	-148949	-180674
2061/62	492153	482750	-259554	-318701
2062/63	684373	672237	-248353	-207172

CFIA and CFFA
2058/59 to 2062/63
Report from

Above table: 4.11

present the amount

of cash flow at the end of fiscal year from different headings during the study period from fiscal year 2058/59 to 2062/63. Positive amount represents cash inflow and the negative amount represents cash outflow. Descriptions about all headings are completed already above. So, statistical analyses on above data have been prepared below on table: 4.12.

Table 4.12

Descriptive statistics of NPBT, CFOA, CFIA and CFFA for the period

2058/59 to 2062/63

	Net Profit before Tax (NPBT)	Net Cash Flow from Operating Activities (CFOA)	Net Cash flow from Investing Activities (CFIA)	Net Cash Flow from Financing Activities (CFFA)
Maximum	684373	672237	-73321	-6621
Minimum	332006	240692	-259554	-318701

Average	474582.2	441825.8	-186897.8	-155680.8
Standard Deviation	131614.9	156328.4068	76971.94341	122730.0647

Sources: Annual Report from 2058/50 to 2062/63 and Statistical Tools

From table: 4.12 the maximum net profit before tax during the study period is obtained Rs 684373 on F.Y. 2062/63, maximum CFOA is Rs 672237 on F.Y. 2062/63, maximum CFIA is Rs -73321 on F.Y. 2058/59 and the CFFA is Rs -6621 on F.Y. 2059/60. CFIA and CFFA both are in negative means cash is out flowing from these headings.

The minimum net profit before tax during the study period is obtained Rs 332006 on F.Y. 2058/59, minimum CFOA is Rs 240692 on F.Y. 2058/59, minimum CFIA is Rs -259554 on F.Y. 2061/62 and the CFFA is Rs -318701 on F.Y. 2061/62. CFIA and CFFA both are in highly negative means cash is out flowing from these headings.

The average of NPBT, CFOA, CFIA and CFFA are: 474582.2, 441825.8, -186897.8, and 155680.8 respectively. The standard deviation for the period of NPBT, CFOA, CFIA and CFFA are: 131614.9, 156328.4068, 76971.94341, and 122730.0647 respectively.

4.7 Correlation Analysis

Correlation analysis is the statistical tool that we use to describe the degree to which one variable is linearly related to other variables. Two or more variables are said to be correlated if change in the value of one variable appears to be related or linked with the change in the other

variables. It refers the closeness of the relationship between two or more variables. Correlation says just degree of relationship between two or more variables. Here is going use simple correlation to determine the relationship between NPBT, CFOA, CFIA and CFFA. During the study period by using the available data related with these variables, determined simple correlations are presented below on Table: 4.13.

Table 4.13
Karl Pearson Correlations Coefficient between any two of NPBT,
CFOA, CFIA and CFFA

	NPBT	CFOA	CFIA	CFFA
NPBT	1	0.977	-0.740	-0.554
CFOA	0.977	1	-0.852	-0.522
CFIA	-0.740	-0.852	1	0.575
CFFA	-0.554	-0.522	0.575	1

Sources: Annual Report from 2058/50 to 2062/63 and Appendix

Table 4.13 presents the Pearson's correlation coefficient between NPBT, CFOA, CFIA and CFFA. This table is prepared through use of Pearson's statistical tools for calculating correlation coefficient and available data. The results obtained after calculation are presented in above. Form above table correlation coefficient between NPBT and CFOA is 0.977. This show NPBT and CFOA are highly correlated. The correlation coefficient between NPBT and CFIT is -0.740 (highly negative). This result makes conclusion that if NPBT is increasing or inflowing then CFFA is decreasing or outflow. The correlation coefficient between NPBT and CFFA is -0.554, also in negative represents there are also negative correlation between those variables. The correlation coefficient between CFOA and CFIA is -0.852 (highly negative) represents negative correlation between those variables. The Correlation coefficient between CFOA and CFFA is -0.522 also negative. Correlation coefficient between CFFA and CFIA is positive correlated.

4.8 Major Findings

-) Rate of operating cash flow of NTC is in increasing except in the F.Y. 2060/61 and its annual increment is Rs 93314.7(in ten thousand).
-) NTC is expanding its investment at the rate of Rs. 40530 (in ten thousand) per year is a major cause of cash outflow for each year during the study period.
-) There is not any sales of investment on F.Y. 2060/61 and 2062/63.
-) NTC has made huge repayment of retained earning to Nepal government on the F.Y. 2061/62 and payment of long term debt on F.Y. 2058/59 are the major cause of cash outflow for these fiscal year.
-) There is not any receipt from long term debt on F.Y. 2062/63.
-) Regular financing activities of NTC are long term debt receipt/payment, dividend payment, and repayment of retained earning to Nepal government.
-) Annual cash outflow rate from financing activities is Rs 59595.2 (in ten thousand).
-) There is cash increase in every year except on F.Y. 2061/62.
-) Minimum cash balance was kept on F.Y. 2062/63.
-) Average cash inflow during the study period is Rs 99247.2 (in ten thousand).
-) There is loss on foreign exchange in the average of Rs 71.2 (in ten thousand).
-) Net cash flow is also in fluctuation.
-) Standard deviation of CFOA is 156328.41 (in ten thousand).

- J The average NPBT, CFOA, CFIA and CFFA are Rs 441825.8 (in ten thousand), Rs-186897.8 (in ten thousand) and Rs -155680.8 (in ten thousand) respectively.
- J There is negative correlation between NPBT and CFFA, NPBT and CFIA.
- J There is positive correlation between CFOA and NPBT.
- J There is not scarcity of cash during the period to operate its general activities.

CHAPTER - V

SUMMARY, COCLUSION AND RECOMMENDATIONS

5.1 Summary

The trend of cash flow from CFOA, CFIA and CFFA are increasing with fluctuating trend. The reason for fluctuation is emergence of different activities during the period. The financial data of NTC shows there are greatest possibilities of business growth. It is providing a large amount of revenue to Nepal government.

The net cash generation for the period of different fiscal year is also satisfactory except for the F.Y. 2061/62. Cash balance is adequate to perform its needed activities. Since its cash inflow from operating activities is increasing, the investment is also increasing due to highly positive correlation between CFOA and CFIA. That may not be the best capital structure for NTC because there should be done leverage analysis to decide capital structure. It is paying dividend to its shareholder in satisfactory manner. It is earning its profit satisfactorily through providing its services to general public are the cause for increasing goodwill. That means the NTC is in well management including cash management. It has not facing any difficulties during the study period.

But in the F.Y. 2060/61 much working capital adjustment is arisen. All the source and use of cash is satisfactory but the fluctuation is risky for the NTC because there may be excess and scarcity of cash to meet the fluctuation. Both are disadvantageous. All the trend of Cash from operating activities, cash from investing activities and cash from financing activities are in growing trend and good correlation between them seems well management of cash. But the growth may be in danger due to high standard deviations. Working capital adjustment is not proper

because of fluctuation. Increase in investment, loan repayment and repayment of retained earning to Nepal government are regular for every year. That shows the NTC has adequate resources to meet its financial and investing requirements. There is not any plan to hold the cash balance at the end. Dividend payment is made every year since F.Y. 2060/61 which creates good perception on shareholder. As a whole, the performance of NTC is well in terms of analysis of cash flow during the study period.

5.2 Conclusion

The analysis of cash flows statement of NTC concludes that the operation of NTC is in satisfactory because result obtained through analysis is satisfactory. The operating profit is growing every year is the result of increment of cash from operating activities. The operating cash flow is the major source for business activities and it is also a costless source of cash for other financial and investing activities. Therefore, the operation of NTC is in growing situation and it is performing effectively. Its financial and investing transaction are also increasing with good correlation between different variables. In aggregate the overall performance in light of cash flow analysis of NTC is being better on the study period.

5.3 Recommendations

Cash flow is the tool for cash management. Although the result obtained from the analysis is good in aggregate, there will be better to take some corrective actions to attain more efficient and effective result. The some suggestions to improve cash flow for the future are as below:

1. It will be better to determine required cash balance to operate regular activities.
2. It will be better to assess working capital requirement according to the business expansion strategies.
3. Capital structure analysis should be developed in such a way by which cost of capital will be minimized.
4. Future contingencies and selective cash need should be estimated properly.
5. Excess cash should be invested in short term liquid assets that can be converted into cash as per the requirements.

6. Least cost source of cash should be fined when there exist the needs of cash.
7. Past trend in different headings of cash flow should be analyzed to make future plans to handle cash in effective way.
8. Time value of cash should also consider for effective cash management.
9. Priority should be given to soft credit or cheap sources of cash if there is cash need.
10. There should make strategic plan to manage working capital because the cause for fluctuation of CFOA is fluctuation on working capital.
11. Investing activities should be planed because the need of cash can be managed at least cost, if so happens.

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www.google.com

www.ntc.net.np

Appendix – 1
Calculation of Arithmetic Mean and Standard Deviation

(In Rs '0000)

F.Y.	BPBT	CFOA	CFIA	CFFA	Net cash flow (A+B+C)	Cash at beginning	Foreign exchange gain/loss	Cash at end
2058/59	332006	240692	-73321	-65236	102135	706279	15799	824213
2059/60	409312	412693	-204312	-6621	201760	824214	-16200	1009774
2060/61	455067	400757	-148949	-180674	71134	1009774	-2844	1078064
2061/62	492153	482750	-259554	-318701	-95505	1078067	-25112	957450
2062/63	684373	672237	-248353	-207172	216712	957450	28001	1202163
Total X	2372911	2209129	-934489	-778404	496236	4575784	-356	5071664
Arithmetic average $\bar{X} = \frac{\sum X}{N}$	474582.2	441825.8	-186897.8	-155680.8	99247.2	915156.8	-71.2	1014332.8
Standard deviation $S.D. = \sqrt{\frac{\sum f_x Z_x^2 \bar{A}}{N}}$	131614.9	156328.4068	76971.94341	122730.0647	125532.8286	149316.2673	21993.06672	140306.6497

Here, the calculation is completed through use of SPSS-13.0 software

Where,

X is individual variable

\bar{X} is arithmetic mean

N is No of F.Y.

S.D. is standard deviation

Appendix – 2

Correlation Coefficient between NPBT and CFOA

(In Rs '0000)

F.Y.	NPBT (x)	CFOA (y)	xy	x ²	y ²
2058/59	332006	240692	79911188152	1.102E+11	5.793E+10
2059/60	409312	412693	1.6892E+11	1.675E+11	1.703E+11
2060/61	455067	400757	1.82371E+11	2.071E+11	1.606E+11
2061/62	492153	482750	2.37587E+11	2.422E+11	2.33E+11
2062/63	684373	672237	4.60061E+11	4.684E+11	4.519E+11
	x=2372911	y=2209129	xy =1.12885E+12	x ² =1.19543E+12	y ² =1.0738E+12

$$\text{Now, correlation coefficient (r)} = \frac{n \sum xy - \sum x \sum y}{\sqrt{n \sum x^2 - (\sum x)^2} \sqrt{n \sum y^2 - (\sum y)^2}}$$

$$= \frac{5 \times 1.12885 \text{E} + 12 - 2372911 \times 2209129}{\sqrt{5 \times 1.19543 \text{E} + 12 - (2372911)^2} \sqrt{5 \times 1.0738 \text{E} + 12 - (2209129)^2}}$$

$$= 0.977357305$$

Appendix – 3
Correlation Coefficient between NPBT and CFIA

(In Rs '0000)

F.Y.	NPBT (x)	CFIA (y)	xy	x ²	y ²
2058/59	332006	-73321	-24343011926	1.102E+11	5.376E+09
2059/60	409312	-204312	-83627353344	1.675E+11	4.174E+10
2060/61	455067	-148949	-67781774583	2.071E+11	2.219E+10
2061/62	492153	-259554	-1.2774E+11	2.422E+11	6.737E+10
2062/63	684373	-248353	-1.69966E+11	4.684E+11	6.168E+10
	x=2372911	y = -934489	xy =-4.73459E+11	x ² =1.19543E+12	y ² =1.98353E+11

$$\begin{aligned}
 \text{Now, correlation coefficient (r)} &= \frac{n \sum xy - \sum x \sum y}{\sqrt{n \sum x^2 - (\sum x)^2} \sqrt{n \sum y^2 - (\sum y)^2}} \\
 &= \frac{5(-4.73459 \times 10^{11}) - 2372911(-934489)}{\sqrt{5(1.19543 \times 10^{12}) - (2372911)^2} \sqrt{5(1.98353 \times 10^{11}) - (-934489)^2}} \\
 &= -0.739504575
 \end{aligned}$$

Appendix – 4
Correlation Coefficient between NPBT and CFFA

(In Rs '0000)

F.Y.	NPBT (x)	CFFA (y)	xy	x ²	y ²
2058/59	332006	-65236	-21658743416	1.102E+11	4.256E+09
2059/60	409312	-6621	-2710054752	1.675E+11	43837641
2060/61	455067	-180674	-82218775158	2.071E+11	3.264E+10
2061/62	492153	-318701	-1.5685E+11	2.422E+11	1.016E+11
2062/63	684373	-207172	-1.41783E+11	4.684E+11	4.292E+10
	x=2372911	y=-778404	xy=-4.0522E+11	x ² =1.19543E+12	y ² =1.81433E+11

Now, correlation coefficient (r) =
$$\frac{n \sum xy - \sum x \sum y}{\sqrt{n \sum x^2 - (\sum x)^2} \sqrt{n \sum y^2 - (\sum y)^2}}$$

$$= \frac{5(-4.0522 \times 10^{11}) - 2372911(-778404)}{\sqrt{5(1.19543 \times 10^{12}) - (2372911)^2} \sqrt{5(1.81433 \times 10^{11}) - (-778404)^2}}$$

$$= -0.554126691$$

Appendix – 5
Correlation Coefficient between CFIA and CFOA

(In Rs '0000)

F.Y.	CFIA (x)	CFOA (y)	xy	x ²	y ²
2058/59	-73321	240692	-17647778132	5.376E+09	5.793E+10
2059/60	-204312	412693	-84318132216	4.174E+10	1.703E+11
2060/61	-148949	400757	-59692354393	2.219E+10	1.606E+11
2061/62	-259554	482750	-1.253E+11	6.737E+10	2.33E+11
2062/63	-248353	672237	-1.66952E+11	6.168E+10	4.519E+11
	x = -934489	y = 2209129	xy = -4.5391E+11	x ² = 1.98353E+11	y ² = 1.0738E+12

-0.852427086

-0.852427086

$$\begin{aligned}
 \text{Now, correlation coefficient (r)} &= \frac{n \sum xy - \sum x \sum y}{\sqrt{n \sum x^2 - (\sum x)^2} \sqrt{n \sum y^2 - (\sum y)^2}} \\
 &= \frac{5(-4.5391 \times 10^{11}) - (-934489) \times 2209129}{\sqrt{5 \times 1.98353 \times 10^{11} - (-934489)^2} \sqrt{5 \times 1.0738 \times 10^{12} - (2209129)^2}} \\
 &= -0.852427086
 \end{aligned}$$

Appendix – 6
Correlation Coefficient between CFFA and CFOA

(In Rs '0000)

F.Y.	CFFA (x)	CFOA (y)	xy	x ²	y ²
2058/59	-65236	240692	-15701783312	4.256E+09	5.793E+10
2059/60	-6621	412693	-2732440353	43837641	1.703E+11
2060/61	-180674	400757	-72406370218	3.264E+10	1.606E+11
2061/62	-318701	482750	-1.53853E+11	1.016E+11	2.33E+11
2062/63	-207172	672237	-1.39269E+11	4.292E+10	4.519E+11
	x = -778404	y = 2209129	xy = -3.83962E+11	x ² = 1.81433E+11	y ² = 1.0738E+12

$$\begin{aligned}
 \text{Now, correlation coefficient (r)} &= \frac{n \sum xy - \sum x \sum y}{\sqrt{n \sum x^2 - (\sum x)^2} \sqrt{n \sum y^2 - (\sum y)^2}} \\
 &= \frac{5(-3.83962E+11) - (-778404)(2209129)}{\sqrt{5(1.81433E+11) - (-778404)^2} \sqrt{5(1.0738E+12) - (2209129)^2}} \\
 &= -0.521771179
 \end{aligned}$$

Appendix – 7
Correlation Coefficient between CFFA and CFIA

(In Rs '0000)

F.Y.	CFFA (x)	CFIA (y)	Xy	x ²	y ²
2058/59	-65236	-73321	4783168756	4.256E+09	5.376E+09
2059/60	-6621	-204312	1352749752	43837641	4.174E+10
2060/61	-180674	-148949	26911211626	3.264E+10	2.219E+10
2061/62	-318701	-259554	82720119354	1.016E+11	6.737E+10
2062/63	-207172	-248353	51451787716	4.292E+10	6.168E+10
	x = -778404	y = -934489	xy = 1.67219E+11	x ² = 1.81433E+11	y ² = 1.98353E+11

$$\text{Now, correlation coefficient (r)} = \frac{n \sum xy - \sum x \sum y}{\sqrt{n \sum x^2 - (\sum x)^2} \sqrt{n \sum y^2 - (\sum y)^2}}$$

$$= \frac{5 \times 1.67219 \text{E} 11 - (-778404) \times (-934489)}{\sqrt{5 \times 1.81433 \text{E} 11 - (-778404)^2} \sqrt{5 \times 1.98353 \text{E} 11 - (-934489)^2}}$$

$$= 0.575250546$$

(In Rs '0000)

	2058/59	2059/60	2060/61	2061/62	2062/63
Particular	July 16, 2002	July 16, 2003	July 16, 2004	July 15, 2005	July 16, 2006
Net profit before tax	332006	409312	455067	492153	684373
Adjustment					
Depreciation	87387	94022	102792	105049	119614
Deffered expenses	2338	3444	3277	4082	4003
Foreign exchange gain/loss	-15799	16200	2844	25112	-28001
Provision for staff bonus and incentive	30621	30164	30921	28171	32204
Provision for pension and gratuity	4514	6253	23499	31261	24139
Interest on loan			329	70	111
Fixed assets written off	5043	297	3393	123	
income from investment and bank deposit	-37938	-41955	-49027	-46383	-59684
expense on loss of goods	26991	4209	16349		853
Royalty		40527	12657	49130	59181
Provision for earned leave			3760	2424	6598
Bad debts	18	66			
Provision for doubtful debts	-3216	2107	22598		
Special charge	10542	12437	700		
Last year adjustment	2056	5600			
Operating profit before working capital change	444563	582683	629159	691192	843391
Adjustment for working capital changes					
Increase/Decrease in account receivable	-70749	-56220	13535	-15700	-27355
Increase/Decrease in stock	2468	8245	5062	-5461	-3426
Increase/Decrease in interest accrued	5234	-713	-1807	546	246
Increase in advance-tax			-131570	-160205	-168460
Increase/Decrease in advance	-120963	-73261	-24706	22148	38251
Branch account (Adjust)	326	-1244	1218	-404	280
Increase/Decrease in payable	60290	68485	33254	22645	61850
Payment of interest/adjustment			-1385	47	-234
Payment of royalty				-45000	-37064
Payment of earned leave			-2136	-2102	-2201
Payment of pension			-2145	-2361	-3005
Gratuity received					1
Payment of bonus, taxes and incentives	-104950	-137215	-36190	-38404	-30164
Last year adjustment			-4834	15809	127
Increase/Decrease in provision	24473	21933			
Working capital Change			-76698		
Net cash flow from operating activities(A)	240692	412693	400757	482750	672237
Cash flow from investing activities					
Purchase of fixed assets	-109315	-176864	-154912	-199775	-224365
Decrease in cwip			-4150	-107534	1579
Increase in Deffered expenses			-532	-4210	-3429
Increase in investment	-14354	-97653	-38382	5582	-81822
Income from investment and bank deposit	37938	41955	49027	46383	59684
Sale of investment	12410	28250			

Net Cash flow from investing activities(B)	-73321	-204312	-148949	-259554	-248353
Cash flow from financing activities					
Receipt in long term debt	7734	23391	1125	2424	
Payment of long term debt	-72970	-30012	-23378	-1125	-2424
Payment of dividend			-49681	-30000	-43351
payment of last year dividend			-9240		
Repayment of retained earning to Nepal gvt.			-100000	-290000	-161165
Receipt of share capital			500		
Capital reverse adjustment to retained earning					-232
Net cash flow from financing activities ©	-65236	-6621	-180674	-318701	-207172
Net increase in cash (A+B+C)	102135	201760	71134	-95505	216712
Cash at beginning	706279	824214	1009774	1078067	957450
Foreign exchange gain/loss	15799	-16200	-2844	-25112	28001
Cash at the end	824213	1009774	1078064	957450	1202163