

**A STUDY ON WORKING CAPITAL MANAGEMENT OF BUTWAL
POWER COMPANY LIMITED & CHILIME HYDROPOWER
COMPANY LIMITED**

A THESIS

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RECOMMENDATION

This is to certify that the thesis:

Submitted by:

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POWER COMPANY LIMITED and CHILIME HYDROPOWER COMPANY
LIMITED**

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DECLARATION

I hereby declare that the thesis research report entitled “**A Study on Working Capital Management of Butwal Power Company Limited and Chilime Hydropower Company Limited**” submitted Nepal commerce campus, Faculty of Management, Tribhuvan University, is my original work done in the form of partial fulfillment of the requirement for the Master’s Degree in Business studies (MBS) under the supervision of respected teacher Mr. Rajeshwor Neupane and Mr. Tirtha Raj Ghimire, Lecturer, Nepal Commerce Campus Minbhawan, Kathmandu.

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Arjun gautam
Researcher

LIST OF CONTENTS

RECOMENDATION	
VIVA-VOCE SHEET	
DECLARATION	
ACKNOWLEDGEMENTS	
TABLE OF CONTENTS	
LIST OF TABLES	
ABBREVIATION	
CHAPTER – I	1
INTRODUCTION	1
1.1 General Background	1
1.2 Private sector in Hydroelectric power in Nepal	2
1.3 General Introduction of selected hydro power company	4
1.3.1 Butwal Power Company	4
1.3.2 Chilime hydro power company ltd (CHPCL)	6
1.4 Statement of problem	9
1.5 Objectives of the study	10
1.6 Significance of the study	10
1.7 Limitation of the study	11
1.8 Organization of the study	11
CHAPTER TWO	13
REVIEW OF LITERATURE	13
2.1 Introduction	13
2.2 General background of working capital management	13
2.3 Basic concept of working capital	15
2.4 Need of working capital	16
2.5 Working capital policy	16
2.6 Types of Working Capital	21
2.7 Factor Affecting the Working Capital	22
2.8 Literature Review	24
2.8.1 Review of Articles/Journals	24
2.9 Review Some Related Thesis	27
2.10 Research Gap	33
CHAPTER - THREE	34

RESEARCH METHODOLOGY	34
3.1. Introduction	34
3.2 Research Design	34
3.3. Population and Sample	35
3.4 Nature And Sources Of Data :-	36
3.5 Data Gathering Or Processing Procedure	36
3.6 Tools of Data Analysis	36
CHAPTER - FOUR	46
PRESENTATION AND ANALYSIS OF DATA	46
4.1 Introduction	
4.2 Financial Tools	46
4.2.1 Working capital structure	46
4.2.2 Liquidity Position of Selected Company	48
4.2.3 Composition of Working Capital	52
4.2.4 Profitability Position	67
4.2.5 Efficiency of Working Capital	74
4.3 Statistical Tools	80
4.3.1 Liquidity Position	81
4.3.2 Composition of Working Capital	83
4.3.3 Profitability Position	89
4.3.4 Efficiency of Working Capital	92
4.4 Major Findings	96
CHAPTER - FIVE	105
SUMMARY, CONCLUSION and RECOMMENDATIONS	105
5.1 Summary	105
5.2 Conclusion	106
5.3 Recommendations	110
BIBILOGRAPHY	
APPENDIX	

LIST OF TABLES

	Page No.
Table No. 1 : Working Capital Structure of BPC	47
Table No. 2 : Working Capital Structure of CHPCL	48
Table No.3 : Current Ratio of BPC	49
Table No.4 : Current Ratio of CHPCL	50
Table No. 5 : _ Quick Ratio of BPC	51
Table No. 6 : _ Quick Ratio of CHPCL	52
Table No.7 : Current Assets to Total Assets Ratio of BPC	53
Table N. 8 : Current Assets to Total Assets Ratio of CHPCL	54
Table No. 9 : Current Assets to fixed Assets Ratio of BPC	55
Table No. 10 : Current Assets to Fixed Assets Ratio of CHPCL	56
Table No. 11 : Receivable to total Assets Ratio of BPC	57
Table No. 12 : Receivable to Total Assets Ratio of CHPCL	57
Table No. 13 : Receivable to Current Assets Ratio of BPC	58
Table No. 14 : Receivable to Current Assets Ratio of CHPCL	59
Table No. 15 : Inventory to Current Assets Ratio of BPC	60
Table No. 16 : Inventory to Current Assets Ratio of CHPCL	61
Table No. 17 : Inventory to Total Assets Ratio of BPC	62
Table No.18 : Inventory to Total Assets Ratio of CHPCL	63
Table No.19 : Cash and Bank Balance To Total Assets Ratio of BPC	64
Table No. 20 : Cash and Bank Balance to Total Assets Ratio of CHPCL	65
Table No. 21 : Cash and Bank Balance To Current Assets Ratio of BPC	66
Table No. 22 : Cash and Bank Balance to Current Assets Ratio of HPCL	67
Table No. 23 : Return on working capital Ratio of BPC	68
Table No. 24 : Return on working capital Ratio of CHPCL	69
Table No. 25 : Return on Total Assets Ratio of BPC	70
Table No. 26 : Return on Total Assets Ratio of CHPCL	70
Table No. 27 : Net Profit Margin Ratio of BPC	71
Table No. 28 : Net Profit Margin Ratio of CHPCL	72
Table No. 29 : Gross Profit Margin Ratio of BPC	73

Table No. 30 : Gross Profit Margin Ratio of CHPCL	73
Table No. 31 : Inventory Turn Over Ratio of BPC	75
Table No. 32 : Inventory Turnover Ratio of CHPCL	75
Table No. 33 : Debtors Turn Over Ratio of BPC	76
Table No. 34 : Debtors Turnover Ratio of CHPCL	77
Table No. 35 : Cash Turn Over Ratio of BPC	78
Table No. 36 : Cash Turnover Ratio of CHPCL	78
Table No. 37 : Total Current Assets Turn Over Ratio of BPC	79
Table No. 38 : Total Current Assets Turnover Ratio of CHPCL	80

ABBREVIATION

BPC	Butwal power company
CHPCL	Chilime hydropower company
NPAT	Net profit after tax
CA	Current assets
CL	Current liability
WCM	Working capital management
BS	Bikram sambat
FY	Fiscal year
HP	Hydro power
MW	Megawatt
QR	Quick ratio
DF	Degree of freedom
NEA	Nepal Electricity Authority
DSO	Days sales outstanding
DTR	Debtors Turnover Ratio
PPA	Power Purchase Agreement
ASAP	AS Soon As Possible
SCBNL	Standard Chartered Bank Nepal Limited
HBL	Himalayan Bank Limited

CHAPTER – I

INTRODUCTION

1.1 General Background

Nepal is rich in natural resources but the infrastructure facility to cash them is in very poor situation. Nepal is diverse in topography as the highest peak of the world, Mt. Everest, and its lowest plain Musaharniya are situated in here. Nepal's economic status is not good. There are about 6000 rivers of which there are seven major rivers in the Koshi basin, seven major rivers in the Gandaki basin and seven major rivers in the Karnali basin. The hydro electric power potential is estimated to be about 83,000 M.W. of which some 43,000 M.W. can be technically and economically harnessed. Nepal is the second richest country in water resources in the world. Nepal is known for its hydropower potentiality.

Nepal passed one century on electricity sector. The first hydro of Nepal is Pharping Jalbiddhut center, it was established in 1968 and installed capacity was 500kw. But now it is not operation. During one century Nepal cannot progress properly. Now Nepal generates only 705mw., out of this power 692mw generates by water resources and about 53mw generate by diesel thermal plant and 100kw generates by solar. Government generates about 477mw and private sector generates about 174mw only. Government and private sector both cannot catch its potential. Nepal can generate so many hydro power but cannot do it, because most important things is financial problems as well as policy of government. Nepal government can not issue a good or liberal policy for hydro power. Political inestabish also is a problem, one party issue any hydropower then other party stay in opposition. Nepal electricity authority is a main body on hydropower in Nepal. It also cannot generate smoothly, because it can not complete any project on time and certain budget. All project run by NEA, they take long time and exceed budget. Private

sector also not generates properly, they have also some problem like management of finance, government policy, security, local people demand/obstacle and PPA problem etc. The most important thing for industries is electricity because without electricity no any industries can run. So, development of nation electricity is most important and basic requirement. If available sufficient electricity industries will be established which helps to creates job opportunity and minimize the unemployment of nation. So, every country and every government must be sincere about it. Government must be give main important in every budget for electric power. Now so few people only are used electric power.

This study basically focused the management of working capital . The main works of hydro power company is to generate the power and connect or transfer the power in to national grid line . main focused how the manage working capital by the selected company .working capital management works is very sensitive works because it's lower level and high level both are not good for company . So it must be balance which works is very risky works .working capital means that capital which operates day to day transaction or operate the official expenses . without managing working capital many enterprises failed work their growth restricted either due to shortage or miss management of working capital. The study of working capital management assumed a greater significance.

Working capital is most important parts of every company. working capital is life blood of every company. It includes to manage current assets and current liabilities. management of working capital must be analysis available current assets is covered it's current liabilities or not, but always current assets must be covered it's current liabilities. If not so, the company cannot run smoothly.

1.2 Private sector in Hydroelectric power in Nepal

Nepal passed one century in hydroelectric power. The first hydroelectric power of Nepal was Pharping hydroelectric power. After this some power are installed

by government as well as private sector. Before 2049 Bs, private sector can not generate hydropower properly .But after 2049 private sector start generate hydropower by electricity Act 2049. The government issue a act in order to attract private investment. The government also issue a "hydropower development policy 2058" in 2058bs. which attract private investment in hydropower. But only policy is not sufficient to maintain the crisis position on electricity, so, the involvement of private sector is most essential for the development of this area. Although it is very difficult to introduced new hydro project by ignoring of sufficient fund, but it is not impossible. According to NEA record private sector generates about 174mw. Some private hydro power are as follows :

Name of the Company	Name of the Project	Capacity(MW)
1, Himal power company	Khimtikhola	-60
2, Bhotekoshi power co.ltd	Bhotekoshi khola	-36
3, Ridi Hydropower deve.co.ltd	Ridikhola	-2.4
4, Arun valley hydro power co.ltd	Piluwa khola	- 3
5, Sanima hydro power co.ltd	Sunkoshi khola	- 2.5
6, Khudi hydro power ltd	Khudikhola	-3.45
7, Gandaki hydro power co.pvt.ltd	Mardi khola	-4.8
8, Butwal Power company	Jhimruk khola	-12
9, Chilime hydro power co.ltd	Chilime	-20
10, Butwal Power company	Andhi Khola	-5.1
11, Sanima hydropower company	Sunkoshi khola	-2.5
12, National hydropower com.ltd.	Indrawati third	-7.5
13. Alliance power Nepal pvt.ltd	Chaku khola	- 1.5
14. Himal dolkha hydropower co.ltd	Mai khola	-4.5
15. United modi hydropower pvt.ltd.	Lower modi	-9.9
16. Nepal hydro development pvt.ltd	Charnawati khola	- 3.52

(Source : Annual report 2070 of NEA)

Among these project the researcher selects two hydro power companies which are Butwal power company(BPC) and Chilime hydro power company (CHPCL).

1.3 General Introduction of selected hydro power company

1.3.1 Butwal Power Company

Butwal power company was established in 1965-12-29 (i.e.2022-09-14bs.) by a Norwegian engineer Mr. Odd Hoftun. This company conversion in to public ltd in 1993-02-17(i.e.2049-11-06bs.) and this company was privatization in 2003-01-29 (i.e.2059-10-15bs.). It's corporate office is in Ganga Devi marg-313 Buddha Nagar, Kathmandu Nepal, it is registered in Katmandu district regd.no.pa.li.no.3-049/50 . It's pan no. is 500047963 it operate it's financial transaction with Himalayan Banks, Nepal Investment bank, sunrise bank, and bank of Asia. it is listed in Nepal stock exchange and is traded under stock code "BPCL". It's market price of stock is high or very good.

BPC is one of the leading companies in Nepal's power sector with generation and distribution as it's core business areas. It starting with electrification of a small city in the south central Nepal, BPC is the only enterprise which can look back to a four decade history of success, sustained growth and capacity building in the country. BPC is engaged in operation and maintenance of power plants, consulting engineering of hydropower and infrastructure projects, manufacturing and repair of hydro-mechanical and electro mechanical equipment for power plants through its subsidiary companies. BPC owns and operates Andhikhola 5.1mw but now this is upgrade from 5.1 to 9.4mw and Jhimruk 12mw plants located in piuthan district. It owns majourity stake in khudi hydropower plant 4mw it also developing three hydropower projects, Nyadi, Kabeli and lower manang marsyangdi with combined capacity of 205mw. BPC also has ownership in hydro lab which specializes in hydraulic model study of hydropower projects, sediment analysis and efficiency

measurements. BPC is committed to operational excellence and believes in good governance, corporate citizenship and creating value for stakeholders.

BPC takes these vision, mission and values:-

Vision

"To be a leading enterprise in power sector with excellence in providing innovative and quality products and services to meet the growing demand for efficient and clean energy."

mission

- To be a competitive hydropower developer and an electric utility.
- To secure sustainable performance of our investments.
- To be committed to protect the environment.
- To practice corporate social responsibility by serving the communities where we do business.
- To provide a safe, healthy and fulfilling work environment for our employees.

- To maximize value for all stakeholders.

- **Values**

- **Customer focus** - we seek to understand the customer's needs and strive to deliver the best as professionals.

- **Transparent** - we are transparent in our business and financial transactions.

- **Proactive** - we explore and look for solutions, opportunities, partnerships to improve our business.

- **Team work** - we work together with mutual respect and trust to achieve result.

- Share Capital Structure:-

Authorized Capital	- 8,000,000,000
Issued Capital	- 1,690,000,000
Paid up Capital	- 92,293,400

(Source: Annual report 2012 of BPC)

BPC has some subsidiaries and associates companies. which are as follows:

(i) Himal power limited	-60mw
(ii) Hydro- consult engineering ltd.	
(iii) Nepal hydro and electric lyd.	
(iv) Khudi hydropower ltd.	-4mw
(v) Hydro lab pvt.ltd.	
(vi) BPC services ltd.	

BPC has some joint venture companies. which are as follows:

i. Andhikhola upgrading project	-9.4mw
ii. Kabeli energy limited	-37.6mw
iii. Naydi hydropower limited	-30mw
iv. Lower manang marsyangdi hydropower	-140mw

1.3.2 Chilime hydro power company ltd (CHPCL)

Chilime hydro power company ltd was established in 1995 with an objective of hydro electricity generation through optimal utilization of resources within the country. Nepal electricity authority holds majority ownership with 51% share holding. Remaining 49% share holding from general public including 10% equiti ownership of local people. Chilime owns and operate 22.1 MW power plant commissioned on august 25,2003 and located in rasuwa district.133 km north of capital city kathmandu .It sales bulk electricity to Nepal electricity authority at the long term PPA price . The annual energy generation from the plant is about 150 Gwh. It is traded on nepal stock exchange by this code 'CHCL'.

CHPCL committed to develop and generate electricity from hydropower projects satisfying our stakeholders through continual improvement in its technology, process, human resource management and complying the statutory and regulatory requirement.

CHPCL takes some vision, mission and values. which are as follows:

Vision

"To be the largest public hydropower company in Nepal."

Mission

- To harness hydropower potential of the country for the benefit of the people at large by optimally utilizing the untapped resources and creating synergy with the private sector.
- To ensure attractive and sustainable long term return to our shareholders through prudent and sound investment.
- To create a competitive working environment with long term career prospects to our employees whereby they will nurture a culture to learn, grow and put their best effort to the growth of the company.
- To maximize the public participation and empower them to have better living.
- To make the communities in which we live, work and serve, better places to be.

Values

Public focus : we serve to maximize the involvement of public as shareholders ensuring them attractive and sustainable return.

Management excellence : we are committed to ensure management excellence through innovation and adoption of the best practices both in execution and operation of the projects to maximize the efficiency and quality of the service.

Human resource : we are committed to provide our employees opportunities to learn and grow to achieve their full potential.

Corporate social responsibility : we are committed to take social initiatives for the development of local areas in particular and the nation in general.

CHPCL gets some award which are as follows:

- Hydropower excellence award, 2012
- National best presented accounts award, 2012
- ISO certification on quality management system (ISO 9001:2008)
- ISO certification on environment management system(ISO 1400:2004)
- Chilime has established following three subsidiaries :

1. Rasuwagadhi Hydro power company ltd . 111mw in Rasuwa district
2. Madhya Bhotekoshi Jalvidhyut company ltd .102mw in Sindhupalchowk district
3. Sanjen Jalvidhyut company ltd . 57.3mw in Rasuwa district.

Chilime through its three subsidiaries, is developing projects with aggregate capacity of 270.3 MW.

Share Capital Structure of CHPCL

Authorized Capital	- 1,500,000,000
Issued Capital	- 1,400,000,000
Paid up Capital	- 1,344,000,000

(Source: Annual report 2012 of CHPCL)

1.4 Statement of problem

Working capital is a crucial capital which is compared as life blood of the human beings for any organization . The management of working capital is synonymous to the management to short term liquidity . It is very difficult to point out as to how much working capital is needed by a particular organization or company .many company are failure to manage balance of working capital because the manage low or high working capital .The researcher research how to manage working capital by BPC and CHPCL .

Working capital is the life blood of every company. working capital management refers to the proper management of the firm's current assets and current liabilities. It is concerned with all decision and acts that influence the determination of appropriate level of current assets and their efficient use as well as choice of the method of financing them, keeping in view of liquidity. It has been the most challenging area of modern corporate finance where the management always faces a tradeoff between liquidity and profitability of the firm.

The management of working capital is in itself is a decision area within the framework of the overall financial management. working capital must be manage in appropriate level. To determine the level is very difficult job. working capital should not be higher or should not be lower. Higher level of working capital affects to the profit of the company and affects over liquidity position. Lower level of working capital affects to the daily transaction of the company. which affects liquidity problem. It will be loss to business opportunity. Lower level of working capital company can not meet it's obligations, so, the company will be goes to solvency. So, level of working capital should be manage at appropriate level, which is very challenging job. This is most important for financial manager to determine how much cash, account receivable, inventory and total current assets should be maintain.

"The working capital management is concerned with the problems that arise in attempting to manage the current assets, current liabilities and interrelation between them(smith 1994:5)."

The efficient management of working capital plays vital role to the overall successes of most firms over investment. During the management of working capital to be serious about the current liabilities. If failed to known good determine the current liabilities it's affects negative to the cost of capital and risk of return. So, to determine the working capital must be analyze and find out the problem and solution to use of funds which minimize the risk of loss and gain the profit.

This research basically to find out the following major problems that have been identified for the purpose of the study:

- i. What is the structure of working capital of both company?
- ii. What is the liquidity position of both company?
- iii. What is the composition of working capital of both company?
- iv. What is the profitability position of both company?
- vi. What is the efficient of working capital in both company?

1.5 Objectives of the study

The basic objective of the study is to identify the existing situation and to analyze the relationship between different various of working capital for the past five years period (i.e.2064/65 to2068/69) of BPC and CHPCL . Other objectives of the study are as follows :

1. To determine the structure of working capital in BPC and CHPCL .
2. To identify liquidity position of BPC and CHPCL .
3. To assess the composition of working capital in BPC and CHPCL .
4. To calculate the profitability position of BPC and CHPCL .
5. To assess the efficiency off working capital in BPC and CHPCL .

1.6 Significance of the study

The main significance of the study is done for the partial fulfillment of master degree in management. Secondly this study helps to the researcher to get the knowledge on managing of working capital. Then this study gives some suggestion for the stakeholders of these companies. This study will be helpful the reviewing the coming thesis writer or researcher .This study will be significance to the shareholders. They can take some information about how to manage the working capital by the company. If any weakness shareholders can raise question about the working capital to the management of company. Shareholders also suggest to the company in general meeting. They can take knowledge about liquidity position, profitability position of company. They can analysis about own investment is correct place or not. This study also significant for management of company. They can analyze own position with other company. It also significant for policy makers. If any company do not meet the standard they can make policy with controlling rules. In overall this study significant all of it's stakeholders.

1.7 Limitation of the study

No any study can be free from constraints such as economic, resources, time etc. Every research has its own limitation . This research also has some limitation which are as follows:

1. This study select only two hydro power company among all of them
2. This study covered only working capital not covered the hole company .
3. This study covered only five years data (i.e.2064/65 to2068/69 BS) .
4. Lack of information also it's have limitation .
5. Limited tools and techniques are used for the study .
6. For this study most of the data take from secondary data .

Among above limitation I tries to give best performance on related subject.

1.8 Organization of the study

This study has been divided in to five chapters they are as follows :

1. Chapter one: - Introduction

The first chapter deals with general back ground of the study private sector in hydropower general introduction of selected companies back ground of the study, statement of the problem, objectives of the study, significance of the study, limitation of the study, organization of the study .

2.Chapter two: - Review of Literature

This chapter deals with theoretical aspect of working capital management and review of selected companies journals, articles and past research on working capital management .

3.Chapter Three :- Research Methodology

This chapter deals with research methodology. This deals with research design, nature and source of data, data collection and tools used to analysis of secondary data.

4. Chapter Four :- presentation and analysis of data

This chapter deals with the presentation and major finding of the study on working capital .

5. Chapter Five:- Summary, Conclusion and recommendation .

This chapter deals with summary, conclusion and recommendation drawn by researcher.

Besides these, Bibliography and Appendices are also included .

CHAPTER TWO

REVIEW OF LITERATURE

2.1 Introduction

This is the second steps of research works . In this chapter it introduce to meaning of working capital management . In this chapter review some related journal, articles and research paper on the related area of this topic . It provides the foundation for developing comprehensive theoretical framework to conduct research writing . Thus this chapter aimed at reviewing on available literature on working capital management .

2.2 General background of working capital management

Working capital means that capital which needed day to day transaction of every companies . Any company has two types of capital ,one is fixed capital and other is current or working capital . Fixed capital invest to fixed assets and working capital use day to day transaction . Fixed capital develop the assets and company but working capital operates the company . Without working capital no any company can run smoothly . working capital plays the vital role for every company . The importance of working capital of any company is like blood of a human body. Every company invest short terms and long terms financing.

Simply the terms of working capital management refers to the administration of all aspects of current assets and current liabilities which greatly influence the overall day to day functional areas of the company . The current assets are those assets including cash which can converted in cash within an accounting year . The current assets also called short terms assets which are cash, inventories, marketable securities, and account receivable etc. so, the amount of fund that is needed to finance the current assets of the firm is called working capital . The current liabilities are those obligation which are to be paid within

an accounting year, which are trade creditors, account payable, short term bank loan, bank overdraft and outstanding expenses .

The goal of working capital is to manage the current assets and current liabilities of the company to keep at satisfactory level .It helps the company to operate day to day transaction without any disturbance . If the firm cannot maintain the satisfactory level of working capital it is likely to become insolvent and may even be forced to bankruptcy . working capital management involves deciding upon the accounts and composition of current assets and to finance the assets, the decisions involves tradeoff between risk and profitability. The current assets should be large enough to cover its current liabilities , in order to ensure a reasonable margin of safety . Every company depends success and failure on its working capital policy and practice . All the corporate whether public or private manufacturing or non manufacturing needs to have adequate working capital to serve in competitive market . The consideration level of investment in current assets should avoid two danger points excessive and inadequate investment in current assets . Excessive investment in current assets should avoid as it impairs firms profitability as idle investment cannot get nothing and inadequate investment in working capital can threaten solvency of the firm, if it fails to meet its current obligations . It should be realized that the working capital needs of the firm might be fluctuating with changing business activity . So, must be the effective management of working capital for the success of any organization . working capital management is the process of the planning and controlling the level and mix of the current assets of the company as well as financing their assets . If any company mistake to manage of working capital it effects in all company's activities, liquidity and profit . Good management of working capital is that, which reduce the total cost and increase the profit . A good management of working capital always must be meet it's current obligations as well as all of obligations . So, working capital management is very risky, difficult and sensitive job for any companies .

2.3 Basic concept of working capital

Basically two types of concept for working capital which are as follows :

- Gross concept of working capital .
- Net concept of working capital .

Gross concept of working capital

This concept deals all of current assets is working capital . This concept simply refers to firm's investment on current assets . Current assets means these assets which can converted into cash within an accounting year . In other words, gross concept of working capital are the total amount of available for financing of current assets . If all the expenses needed to run the day to day operation of business such as amount to be invest in form of cash, finished goods, receivable etc are put together it is called working capital(R.S.Pradhan and K.D. Koirala) . According to gross concept of working capital is the total amount of available for financing of current assets, however this concept does not mention how they are finance. It also does not indicate the firms liquidity correctly because it does not compare current assets with current liabilities of the company . According to gross concept of working capital :

Gross working capital = Total current assets

All current assets are working capital

Net concept of working capital

Net concept of working capital refers to the different between current assets and current liabilities . Current liabilities means that obligation which are must be paid within an accounting year . Current liabilities includes account payable, creditors, bills payable, outstanding expenses, bank overdraft, short term loan, provision for tax and dividend etc . Net working capital may be positive or negative . Positive working capital shows that there is high level of current assets than current liabilities and vice-versa . Now a days net concept of

working capital is more used in every company because gross concept does not concern with current liabilities, so it does not show fact liquidity position . But the net concept shows the actual liquidity position . The gross concept is important for newly established companies where liabilities have not been acquired immediately, but the net concept is important for both newly and operating company .

According to net concept of working capital

working capital = Current Assets - Current Liability

2.4 Need of working capital

Mainly working capital needs to run day to day transaction of company . The working capital helps to achieve the goal of the company . It can increase sales, it helps to get opportunities, it helps to purchase off season goods and can increase sales .working capital need for these motives :

- i. The transaction motive :- The transaction motive refers to the holding of cash meet day to day requirement of the business to run smoothly .
- ii. Precautionary motive :- The precautionary motive refers to the holding of cash to meet the random and unforeseen fluctuations in cash flow i.e. unpredictable change in demand and supply, strikes, unexpected slow down in collection of account receivable .
- iii. Speculating motive :- The speculation motive refers to the desire of a company to take advantage of opportunities which present themselves as unexpected moment . They can make purchase at favorable price or reduce price on payment of immediate cash, speculative interest rate etc.

2.5 Working capital policy

Basically two types of policy are used in working capital management, which are current assets investment policy and current assets financing policy . Deciding on how much current assets to be maintain and how to finance them

are crucial issues of working capital management because the level of current assets and financing them have direct impact on the firm's profitability, liquidity and risk .

Two types of policies are as follows :

- i. Current Assets Investment Policy .
- ii. Current Assets Financing Policy .

Current Assets Investment Policy

Current assets investment policy refers to the policy regarding the total amount of current assets to be carried out to support the given level of sales . This policy decide that at how much amount invest in current assets . How much amount invest in current assets will depends upon it's operating cycle . If more amount invest in current assets than needed, its result will more liquidity and decrease in profit . If low level of amount invest in current assets it effect to liquidity position which effects to profit . According to this policy three alternative investment policy are used, which are as follows :-

- i. Relaxed current assets investment policy .
- ii. Restricted current assets investment policy .
- iii. Moderate current assets investment policy .

Relaxed current assets investment policy

Relaxed current assets investment policy also called conservative policy . which policy holds large amount in current assets that policy called relaxed policy . According to this policy, the company holds relatively large amount of current assets, like cash, marketable security, inventory and receivable etc. In this chapter the company is motivated to sale by liberal credit policy . This policy takes longer receivable collection period, longer inventory conversion period as well as cash conversion cycle . so, it do not take risk and profit also relatively will be low . According to this policy the company motive more

credit sale than cash sales. At last relatively more amount invest in current assets called relaxed current assets investment policy.

Restricted current assets investment policy

Restricted current assets investment policy also called tight policy. In this policy the company holds relatively low(minimum) level of current assets . The company has high control in current assets . This policy holds only minimum required current assets . which is can run day to day transaction but not other excess . This policy also increase cash sales than credit sales so it reduce the it's receivable collection period, inventory conversion period , cash conversion cycle . some company take this tight policy and maximize the profit with high risk . According to this policy, sometimes will be scarcity of working capital and will be stopped it's day to day transaction . This risk also may be in the company . At last under this policy the company holds current assets than its sales . This policy wants maximum increase in sales with increase in low level of current assets .

Moderate current assets investment policy

Moderate current assets investment policy refers that the company holds the amount of current assets in between the relaxed and restricted policy. In this policy current assets holds less than relaxed policy and higher than restricted policy. Risk and profit also will be moderate. In this policy the company hold current assets neither high nor low.

Current Assets Financing Policy

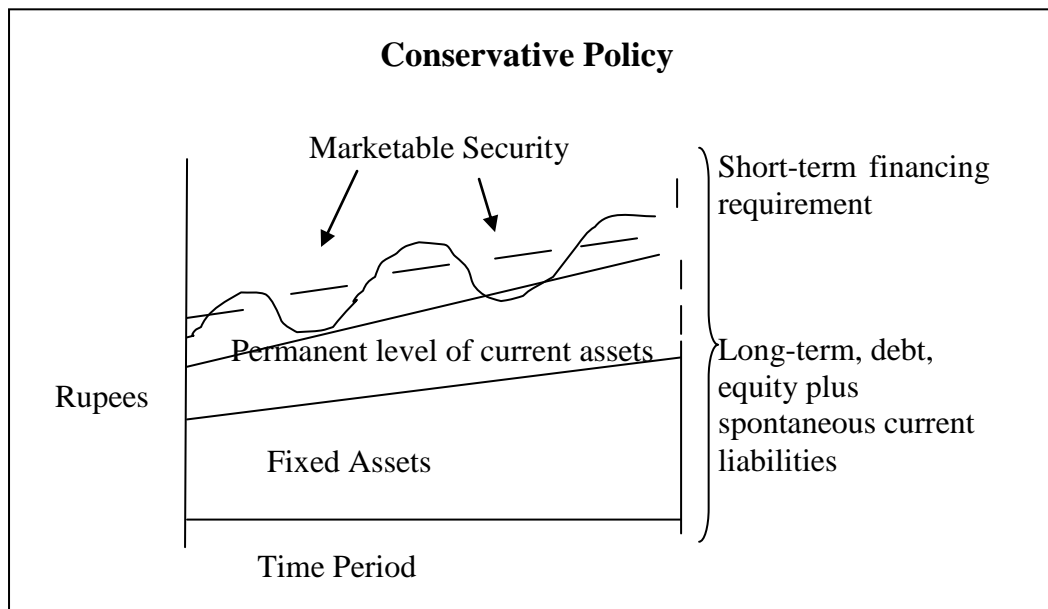
Working capital management involves deciding upon the amount and composition of current assets and how to finance these assets. Current assets financing policy means, to take the decision at what kind of sources are used for current assets by short term or long term sources. The financing of current assets through short term and long term sources is different regarding the cost and flexibility. If use only long term sources the cost of finance will increase

because the financial cost of long term sources is greater than short term sources. If use only short term sources the cost of financial will relatively decrease but current liability will increase than current assets. It negative effect the liquidity position of company. To take the decision, these three alternatives will used :-

- i Conservative Financing Policy .
- ii Aggressive Financing Policy .
- iii Moderate Financing Policy .

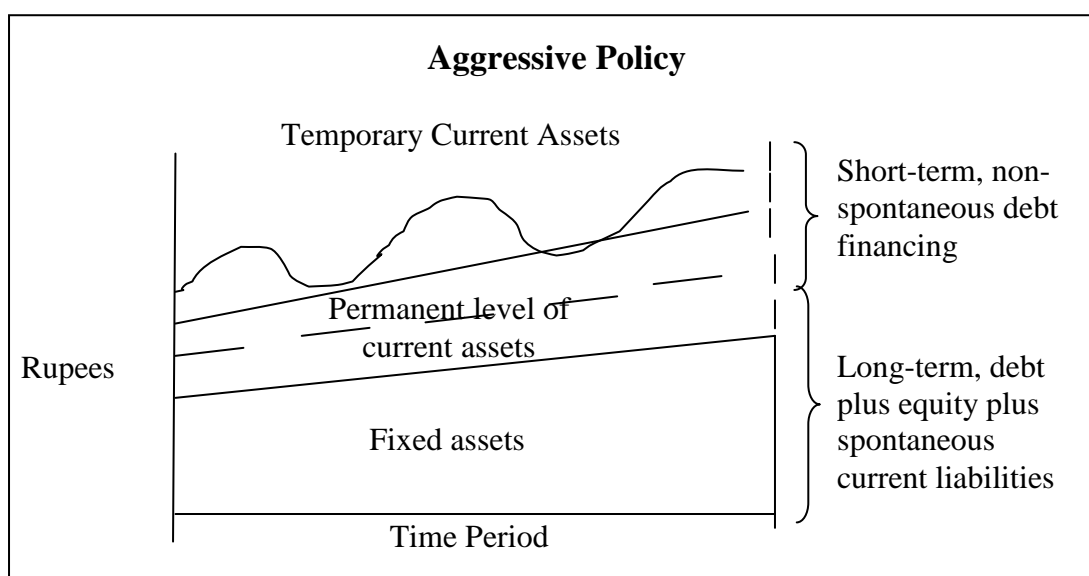
Conservative Financing Policy

The financing policy of the company is said to be conservative when it depend more in long term funds for financing need. under this policy, the company finance it's permanent current assets and part of temporary current assets through long term funds. while short term funds are use in the event of an emergency. According to this policy has kept a large amount of current assets with long conversion period, low level of current liabilities and higher interest rate. Under this policy risk and return both will be relatively low. Under this policy the company reserves short term borrowing power for meting unexpected demand for fund. This policy is relatively safe financing policy than other. This policy has been described in the following picture.



Aggressive Financing Policy

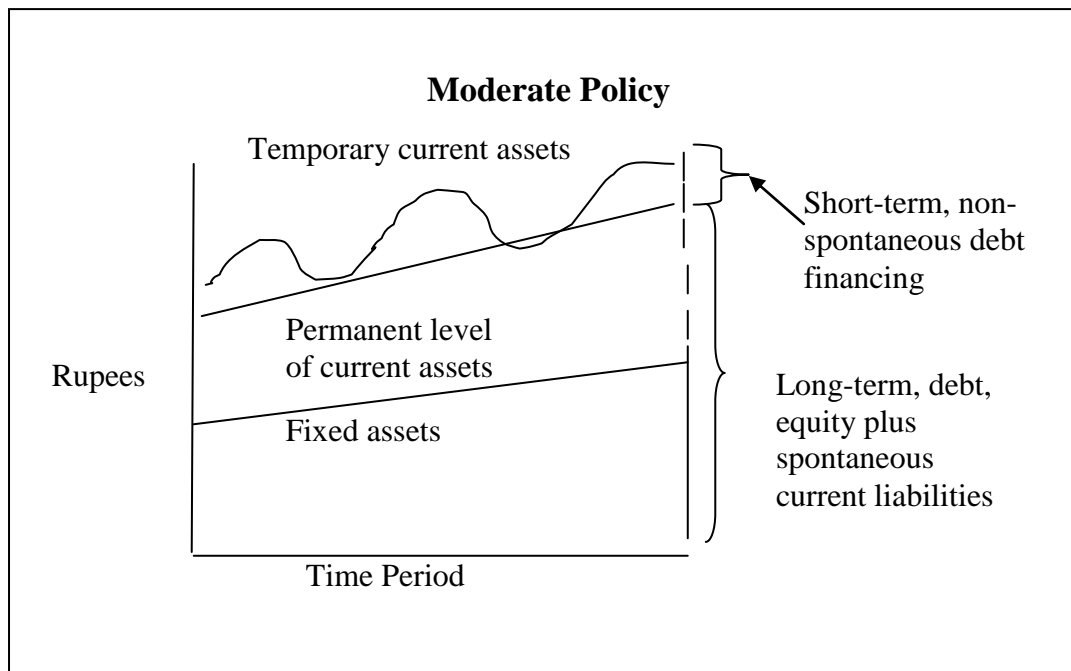
The financing policy of the firm is said to be aggressive when it depends more in short term financing sources for needed fund. This policy also called tight policy. This policy is relatively high risk as well as return also will be high but liquidity position is low. Under this policy the company finance all current assets by short term sources, all of temporary current assets as well as some part of permanent current assets also finance from short term sources. This policy is more risky than conservative policy because it use more short term sources. Short term borrowing must be paid within one year so, liquidity position will be tight within current year. This policy reduce the financial cost because the financial cost of short term is less than long term sources. This policy describe also in bellow picture.



Moderate Policy

According to this policy all of temporary or variable current assets finance with short term sources and all of permanent current assets finance with long term sources. This policy finance that sources to assets when that assets convert into cash. If the assets convert into cash in short period the company finance short term sources and vice-versa. Under this policy finance in between of conservative policy and aggressive policy. This policy finance neither only

short term sources nor only long term sources. This policy also called maturity matching or self-liquidating approach policy because this policy tries to match assets and liabilities maturity. This policy describe also in bellow picture:



2.6 Types of Working Capital

Generally every company has two types of capital, one is fixed capital and other is working capital . Fixed capital means that capital which is used more than one year or use for purchase of fixed assets . working capital means that capital which is used within one year or day to day transaction . working capital also divided into two types . which are as follows :

- i Permanent working capital .
- ii Temporary/ Variable working capital .

Permanent working capital

Permanent working capital means that working capital which is not change, if change the production or sales . Some current assets which are not kept below in some limitation, like cash, bank balance, inventory, safety stock of goods and receivable etc. permanent working capital refers to that level of current

assets which is required on continuous basis over the year . without permanent working capital the company cannot regularly operation . permanent working capital is the minimum amount of gross working capital which is always maintain in spite of the increase or decrease in the sales during the years . knowledge of permanent working capital is important for the financial manager to decided sources for financing permanent current assets .

Temporary/ variable working capital

Temporary/variable working capital also known as fluctuating working capital. variable working capital means that capital which is spontaneous change with change of production and sales. If sales increase then variable working capital also increase and vice-versa. variable working capital is always greater than permanent working capital. The variable working capital is the result of the periodic fluctuation of the gross working capital, some expenses will be variable like wages, repaired and maintenance, royalty etc. These expenses meet by variable working capital because these are fluctuation over the year.

2.7 Factor Affecting the Working Capital

Basically, there are no set rules to determine the working capital requirement of company. The company set itself, the working capital by considering the own need as well as there are some factor that affect working capital requirement for a company. Generally following factors affect the determine the working capital of a company:-

i Nature of business : working capital requirement of a firm are basically related to the nature of business. Financial and manufacturing companies needs large sum of money to be invested in working capital because these types of company needs raw materials work in progress goods and finished goods in large volume. only trading firm need relatively low level of working capital because it only purchase finish goods and sales them. In this way nature of firm affect the determination of working capital.

ii Size of business: Generally, firms are divided in three types like, small, medium and large. If firms size is large then the working capital also need large amount. If the firm's size is medium then the working capital also need medium. If the firm's size is small the amount of working capital also need small. So, firm's size also affect the determination of working capital.

iii Production Policy : Production policy refers that the production is single or double, it also affect the working capital. For example if firm produce single production then it kept low level of working capital and raw material but the firm produce double or multi product then it must kept high level of raw material and working capital. If firm produce large volume of same product the firm's cost of production and working capital also relatively lower. If the firm produce different types product then the firm must be maintain different raw material and relatively large amount of working capital. If the firm produce seasonal product, then the firm will be sold in certain month of the year and inventory will be kept at minimum level, it increase working capital. So, production policy also affect the determination of working capital.

iv Credit policy : Credit policy refers that the policy of sales, the goods sales cash or credit it also important thing for a manufacturing company. If credit policy is liberal then increase the account receivable which affects to increase the working capital. If credit policy is tight then decrease the account receivable which affect to decrease the working capital. If account receivable is higher, then increase the investment for working capital and vice-versa.

v Manufacturing Process : Every firms use raw materials for production finished goods. The conversion period of raw material to finished goods it affect the need of working capital. If production period is short the investment in raw material will be low and vice- versa. In this way if production period is short then the investment of working capital also will be relatively low and vice-versa.

vi Change in technology : Science and technology is rapidly change in every year. Today's technology will not be used after some year. So, change the new technology or machine. For purchase the new machine increase the fixed cost but working capital and production cost per unit will be low because new machine produce High volume of product with low cost. It's repair and maintenance cost also will be low. So, change of machine or technology also affects to determination of working capital.

vii Growth rate : If firm is just established or extension of firm then the sales also will be increase, according to sales inventory also increase, account receivable also increase. So, if the firm is expansion period the need of working capital also increase. Growth of firm and working capital has direct positively relation.

Viii Cash conversion cycle or cash flow cycle: Every firm purchase raw material and convert it's to semi-finished goods then convert it's finished goods. Every manufacturing company sales the own finished goods and collect the cash. In between of purchase the raw material and collection of sales which period called cash conversion or cash flow cycle. If cash conversion cycle period is shorter, then the working capital also need in low level. If the cash conversion cycle period is longer, then the working capital also need high level. So, the period of cash conversion cycle also affects to the determination of working capital.

This above mention factor affects the determination of working capital.

2.8 Literature Review

2.8.1 Review of Articles/Journals

Different analysis has approached working capital management in different ways. A review of these approaches is order to develop an approach that can be employed in the context of selected companies. Articles, journals, bulletins are of great significance for thesis writing. It adds extra input in study. So, various

published articles, journals relating to working capital management published by different management expert are reviewed. This part is mainly focused on the review of articles and journals which was written by different management experts on working capital management. Some related articles/journals are review under as follows:

Working capital management in public enterprises published by Manohar Krishna Shrestha (1983). The researcher studied working capital management of ten selected public enterprises. Specially, he has focused on the liquidity, turnover and profitability position of those enterprises. In this analysis, he found that four public enterprises have maintain adequate liquidity position, two public enterprises have excessive and remaining other public enterprises had failed to maintain desirable liquidity position. On the turnover side, two public enterprises had negative working capital turnover, four had adequate turnover, and one had higher turnover on net working capital. He had also found out that of ten public enterprises six were operating in loss while only four were setting some percentage of profit. with the reference of his findings, he has brought certain policy issues. This is as lack of suitable financial planning, negligence of working capital management, deviation between liquidity and turnover of assets inability to show the positive relationship between turnover and return on net working capital. At the end he has made some suggestive measures to overcome from the above policy issues. These are identification of management information system, positive attitude towards risk and profit and determination of right combinations of short term and long term sources of funds to finance working capital needs.

Pradhan and Koiral (1983) had jointly published an article on " Some reflection on working capital management in Nepalese corporation." The article basically aims at finding out the difficulty, importance and problem of current assets management and also aims to find out the motive for holding cash and inventory. The study uses only primary data to find out the basic constraints and distributed 200 questionnaires and non manufacturing public corporations

as sample companies. After analyzing the collected data, the major finding of the study were as follows:

- i) In Manufacturing Corporation, working capital as well as fixed capital both is difficult to manage. However, in non manufacturing corporations working capital is more difficult to manage as compared to fixed capital.
- ii) The management of current assets had more problems as compared to the management of account receivables and inventories. However, inventory management is problematic to Manufacturing Corporation and the management of cash and receivable is more problematic to non Manufacturing Corporation.
- iii) The major reason for holding inventories is to facilitate smooth operations of production and sales.
- iv) To provide a reserve for routine net outflows of cash is the major motive for holding cash in Nepalese corporation.
- v) The major factor affecting the larger investment in receivable is found to be the liberal credit policy followed by Nepalese corporations. The late paying practice of customers is also responsible for larger investment in receivables. However, corporations are reluctant in take inefficient collection of trade credits as one of the major affecting receivables.

Acharya (1985), write the article about "problem and impediment in the management of working capital in Nepalese enterprises." He described the major problems i.e. operational problem and organizational problems regarding the working capital management in Nepalese public enterprises. From the analysis, he has listed in first part about the operational problem findings, which are: i) Increase of current liabilities than current assets, not allowing the current ratio 2:1 and slow turnover of inventory. ii) Change in working capital in relation to fixed capital had very low impacts over the profit abilities. iii) Absence of apathetic management information system. iv) Break even analysis,

funds flow analysis and ratio analysis were either undone or ineffective for performance evaluation.

In the second part, he has listed the organizational problems in the public enterprises which are: i) Lack of regular internal and external audit system as well as evolution of financial result. ii) Unable to present their capital requirement. iii) Functioning of finance department is not satisfactory and some public enterprises are facing the under utilization of capacity.

At last. Acharya has made some suggestions to correct the above deviation: i) The public enterprises should avoid the system of crisis decision which prevailed frequently in their operation. ii) Avoid fictitious holding of assets. iii) The finance staff should be acquainted with the modern scientific tools used for the presentation and analysis of data. iv) To make optimum working capital policy.

2.9 Review Some Related Thesis

This part of the study covers a review of past studies conducted by other researchers. Some thesis are review hereunder:

Aryal (2008) has carried out study on " A Study on Working Capital Management of Nepal Tele Communication 2008". His major objective of this study is to know how far NTC is able to utilize it's current assets. He has used various financial tools for his calculation to fulfill his objective. For the study he has covered five years period.

He has found that the size of working capital affect the tradeoff between risk and profitability of NTC. His analysis showed that there is a high liquidity in corporation. Main current assets of the corporation are cash and bank balance, account receivable, inventory and miscellaneous current assets. Cash and bank balance holds large amount of current asset. He has found that the company has used long term fund to finance in working capital and it has followed

conservation financial policies. In addition, he has found that the company has reduced external financing by using its internal funds.

The current assets with respect to total assets and net sales are in increasing trend. According to him, this increment is due to the high investment in current assets. He was not satisfied with the turnover ratio of the company's sales and we have been increasing year after year but increment in sales is lower than increment of working capital. Therefore, he has notified that the company has the lack of efficient management. He has observed that the profitability position of NTC is not satisfactory because of low return in comparison to the investment in current assets. The liquidity condition of the company is favorable. According to him, large proportion of the fund has been used in current assets.

He has suggested that company should optimize its liquidity position, concentrated in the collection period. Again, he has given advice to apply in cash management for the optimal cash balance and excess cash can be invested in marketable securities.

Regmi (2009) had studied the comparative study between Bottlers Company and Nepal Lever Company as "A comparative study on working capital management" with five year's published data (2060/61 to 2064/65) during her fulfillment of master degree on management in 2009. She also used of mean, average, correlation, regression and trend line as statistical tools to find out relationship between two variables and financial ratio for performance evaluation. She found various things, Some major findings:

- i) Both companies were neglecting the policy of working capital management.
- ii) They have absence of sources of financing, financial position without long run of current assets and they have not predetermine of their working capital needs which indicates that there is a high variability of working capital and have lower liquidity position.

iii) During the study period the profitability, liquidity and turnover ratio of both the companies are not satisfactory.

Some major recommendation:

- i) They should give more attention to manage their inventory level.
- ii) ii) The firm should try to maintain the considerable liquidity position as per working capital policy.
- iii) Both companies should try to manage it's credit policy effectively.

Chaulagai(2010), has carried out a study on " A study on working capital management of Himal hydropower and general construction pvt.ltd." The main objectives of his study is to study and evaluate the financial position in relation to working capital management, to examine the impact of working capital in liquidity and profitability position. Identify the adopt working capital policy. He has used financial and statistical tools for analysis. Ratio analysis use for financial tools and trend analysis, correlation regression for statistical tools. He has covered five year period for study. He study on current assets is cash, account receivable and inventory.

He found some major findings, He found current assets is excess than standard level which is not beneficial for the company. He found current ratio is 2.84 which is higher than standard i.e.2:1, quick ratio also higher than standard. So, both ratio shows that the company able to immediately payment its obligation. He also found that the return on total assets also not satisfactory level. Its return is very lower. He also found net profit ratio also is very low. So, the company's planed and efficiency is not satisfactory level. Inventory turnover ratio is very fluctuating trend it indicates that the company has not adopted appropriate policy. For inventory management all of turnover ratio is not

satisfactory. He found also the company has no fixed policy of cash management in relation to sales.

For these findings, he gives some recommendation

At first he recommend for current assets and fixed assets. Current assets should maintain according current liabilities. He recommended that the policy for fixed assets. He found the inventory level is very high so, it increase the cost of the company which indicates the idle cash he recommend the management should adopt effective inventory control technique and should be controlled and categorized on the basis of its value and investment.

He found very low level of turnover ratio. Lower turnover ratio indicates inefficient utilization of assets. So, the company increase turnover position. He also recommend to keep fixed level of working capital to achieve high volume of sales.

He found maximum fluctuation in working capital holding of the company. The management should determine certain proportion for the component of current assets in order to manage working capital in future. Therefore the company should formulate compulsory working capital plan and policy to maintain working capital in certain level.

The return on total assets, current assets is not much productive and very low. Management should develop effective policy to generate maximum return on total assets employed. The net profit margin ratio is very low and not satisfactory. This indicates that the company has poor financial planning and less effective.

Belbase(2010), has carried out a study on " A comparative study on working capital management of SCBN and HBL. The main objective of his study is to study on composition of working capital, liquidity position and to assess the profitability position. To obtain his objectives

he used financial tools and statistical tools. For financial tools he used ratio analysis and for statistical tools he used correlation and hypothesis. He covered five year study period. He used for current assets, cash and bank balance, loan and advance, government securities and miscellaneous current assets.

After analysis the data he found some major findings.

He found that the liquidity position or short term solvency of SCBNL is in adequate position than HBL in the study period. The trend of liquidity ratio or current ratio, quick ratio and cash and bank balance to deposit ratio of SCBNL and HBL are increasing. Although higher liquidity means lower risk as well as lower profit in general, it does not necessary mean lower profit in case of commercial banks.

Fixed deposit to total deposit ratios of HBL are higher than that of SCBNL during the study period. HBL has more long term and costly sources of funds than SCBNL and the risk is higher in SCBNL than in HBL.

Savings deposit to total deposit ratio of SCBNL are higher than that of HBL for the study period. SCBNL has more short term and less costly sources of funds than HBL. The risk of SCBNL is higher compared to HBL.

From the analysis of turnover ratio of these two banks, it is found that HBL has slightly better turn over than SCBNL and risk is higher in SCBNL than HBL.

The profitability position of SCBNL and HBL are analyzed from different ways. Interest earned to total assets ratio of the HBL is higher than SCBNL. Therefore HBL is more efficiently using its working funds of assets to earn higher rate of profit than HBL during the study period.

He found these major findings and he recommends the company. His major recommends are as follows:

SCBNL should adjust its policy of investment on loan and advance with collected funds and increase the proportion of loan and advance in total current assets.

One year (i.e. 2062/63) SCBNL has negative working capital but HBL has positive in every year. So, SCBNL should be formulated and implemented suitable working capital. There should be keeping optimum size of investment in current assets and current liabilities.

Liquidity position of both banks is below than normal standard. Therefore both banks should increase the current assets.

Total deposit turnover position of both banks is less than unity. Fixed deposit and saving deposit turnover position are also not satisfactory on both banks. Due to the poor turnover position, the chances of bad debts and non-earning idle funds are high. Therefore both banks should give proper attention on collection of over dated loan and advance and utilization of idle funds as loan and advance.

Interest earned to total assets ratio and lost of service are higher on HBL than SCBNL. Therefore HBL should try to reduce its cost by reducing high cost deposits and operating in proper and efficient way so that it can have least operating cost which further maximizes its profitability and shareholder return.

Investment policy of HBL seems better than of SCBNL during the study period. It is therefore necessary for SCBNL to utilize its deposits in income generating activities by better investment efficiency on loan and advances.

SCBNL and HBL are recommended to give emphasis to proper working capital policy to uplift the financial performance of the banks in the competitive age of today

2.10 Research Gap

Many research studies have been conducted by the different students, exports and researcher about working capital management. Working capital is a controlling nerve center for any type of organization. It is more important for the manufacturing trading company. I found other thesis about working capital of other company. But no any one study in this topic in these companies till now. I do not found about this topic of these companies. So I study about it. Most of the researcher used on his thesis two types of tools, one is financial and other is statistics. In financial tools ratio analysis is most popular and correlation and hypothesis test is used in statistics tolls. This research also used ratio analysis, hypothesis test and correlation analysis.

This research study made on "A study on working capital management of BPC and CHPCL" will be an effort to analyze on detail about working capital management of the two hydropower at present situation with the help of various related financial as well as statistical tools and techniques. This study will be beneficial to students, teachers, lecturer, professor, businessman and other related people and parties.

CHAPTER - THREE

RESEARCH METHODOLOGY

3.1. Introduction

Research methodology is a sequential procedure and collection of scientific methods to be adopted in a systematic study. It is the way to solve systematically about research problem. This study has also developed the definite methodology to achieve the set objective. In other words, research methodology describe the methods and process applied in the entire aspect of the study. In this chapter we study the various steps that are generally adopted by a researcher. In other words, research methodology provides the various tools and techniques as regard to the problem and also provides the various instructions as regard to the methods and process associated with overall study. During each work to accomplish the objectives effectively specified methods and process should be followed which is called research methodology. Research is the scientific and systematic process; it includes all types of investigation requiring solution to the problems. The scientific and systematic process of research involves activities of identifying problems, collecting facts and information tabulating and recording the data and taking conclusion with a view of findings answer of the problems. The methods is a description of the procedures of inquiry in particular field .This chapter highlights the methods and procedure that are applied during the research period and also define to analysis technique of the collected data. This Chapter deals with the research design, nature and sources of data, data gathering or processing procedure, tools of data analysis.

3.2 Research Design

Research design is a systematic planning structure and strategy for conducting a particular research work. In other words, it is a framework of the study. This study aims to portray accurately upon the working capital and its impact on

overall financial position of two hydropower companies. Every research work has some objectives to achieve these objectives, collected, evaluated, verified and synthesized past financial information or data. Then researcher can reach some conclusion. The research design generally asks the following questions:

- What approaches should be taken?
- What method will be used in the study?
- What strategy will be most preferable?

This study conducted by collection of data from secondary sources, then tabulated and analyzed by using various financial and statistical tools. This study takes five years historical data (i.e. 2064/65 to 2068/69) of both companies.

3.3 Population and Sample

According to NEA report some private and some government owner's hydropower are installed in Nepal. which are as follows:

Name of the Company	Name of the Project	Capacity(MW)
1. Himal power company	Khimtikhola	-60
2. Bhotekoshi power co.ltd	Bhotekoshi khola	-36
3. Ridi Hydropower deve.co.ltd	Ridikhola	-2.4
4. Arun valley hydro power co.ltd	Piluwa khola	- 3
5. Sanima hydro power co.ltd	Sunkoshi khola	- 2.5
6. Khudi hydro power ltd	Khudikhola	-1.5
7. Gandaki hydro power co.pvt.ltd	Mardi khola	-3.1
8. Butwal Power company	Jhimruk khola	-12
9. Chilime hydro power co.ltd	Chilime	-20
10. Butwal Power company	Andhi Khola	-5.1
11. Sanima hydropower company	Sunkoshi khola	-2.5
12. National hydropower com.ltd.	Indrawati third	-7.5
13. Butwal power company	Andhikhola	-5.1

14. Alliance power Nepal pvt.ltd	Chaku khola	- 1.5
15. Himal dolkha hydropower co.ltd	Mai khola	-4.5
16. United modi hydropower pvt.ltd.	Lower modi	-9.9
17. Nepal hydro development pvt.ltd	Charnawati khola	- 3.52
18. Kaligandaki A		-144
19. Kulekhani I		-60 etc

(Source : Annual report 2070 of NEA)

All of above hydropower assume population. Among these projects the researcher selects for sample only two hydro power companies which are Butwal Power Company (BPC) and Chilime hydro power company (CHPCL).

3.4 Nature And Sources Of Data

Research can be conducted on the basis of primary and secondary data but the study is mainly based on the secondary sources of information i.e. published annual report, journals, booklets and other magazine providing information relating to selected companies. But some cases and sometimes primary data can be used if needed. For primary data collection we take interview, personal visit, website and questionnaire etc. For this study five years data will be taken (i.e.2064/65 to2068/69bs) .

3.5 Data Gathering Or Processing Procedure

For this study data collection by secondary sources .After collection of data they will be presented analytical tabulated and graphically according to their nature .most of the data have been compiled in one form and processed and interpreted as required.

3.5 Tools of Data Analysis

Financial as well as statistical tools are used to make the analysis more reliable and authentic for data analysis different items from the balance sheet and other

are tabulated. In this study calculated ratios, percentages, mean, standard deviation, trend correlation of coefficients are also calculated .Two types of tools are used. They are as follows:-

- Financial Tools
- Statistical Tools

Ratios are used to calculate the financial condition of any company or organization. It helps to know the strength and weakness of the firm .The financial tools used in this study are as follows:-

- Liquidity Ratio
- Turnover Ratio/ Activity Ratio
- profitability Ratio

Liquidity Ratio

This ratio measures the liquidity position and short term solvency of the firm indicating the company's ability to meet short term obligation. Liquidity of any business organization is directly related to working capital or current assets and current liabilities of the organization. The main objectives of working capital management **are** keeping good liquidity position. These ratios focus on current assets and current liabilities and are used to ascertain the short term solvency position of a firm. Liquidity ratio calculated two types of ratio which are as follows:-

- Current Ratio
- Quick Ratio

Current Ratio

Current ratio includes current assets and current liabilities. Current assets means that assets which are converted in to cash within one year. Current liability means that liabilities which are payable within one year. This ratio

measures the relation or position of current assets with current liabilities. If the current assets meet the current liabilities the liquidity position or working capital position is very good and vice -versa. High and low level of current assets is not good so it must be balance. Current assets includes cash, inventories, account receivable, bank balance, prepaid expenses marketable securities etc. and current liabilities includes account payable, bank overdraft, notes payable, accruals, short term loan etc .current ratio is calculated as follows:-

$$\text{Current Ratio (CR)} = \frac{\text{Current Assets}}{\text{Current liability}}$$

The standard ratio of current ratio is 2:1

Quick Ratio

Quick ratio also called acid test ratio. Quick ratio means as the quantitative relationship between quick assets and current liabilities. Quick assets means that assets which are converted in to cash immediately without a loss of value. Cash and bank balance are the most liquid assets then other current assets. Basically quick assets includes current assets minus inventories. This ratio calculated as follows :-

$$\text{Quick Ratio} = \frac{\text{Quick assets}}{\text{Current liability}}$$

The standard ratio of quick ratio is 1:1

Turnover Ratio/Activity Ratio

This ratio measures the efficiency of the firm. How much times turnover it's equipment or inventory in to cash. In other word how effectively use it's total assets to generate the sales or profit. This ratio indicates how quickly certain assets are converted in to cash. This ratio moreover helps in measuring the firm's ability to utilize their available resources .This ratio includes this ratio:-

1. Current assets to total assets.
2. Current assets to fixed assets.
3. Receivable to total assets.
4. Receivable to current assets.
5. Inventory to current assets.
6. Cash and bank balance to total assets.
7. Cash and bank balance to current assets.
8. Inventory to total assets.

1. Current assets to total assets

This ratio includes that what percentage of total assets invest in current assets. In other word how much amount, the company able to invest as a working capital. This ratio calculated as follows:-

$$\text{Current assets to total assets} = \frac{\text{Current Assets}}{\text{Total assets}}$$

The high level of ratio indicates that increase in profitability and low risk and vice-versa.

2. Current assets to fixed assets

This ratio is slightly different from the current assets to total assets ratio because it calculated only fixed but total assets calculated fixed and current both. This ratio measures how much amount is used in current assets in comparison to fixed assets. It shows the relationship between current assets and fixed assets. It calculated as follows:-

$$\text{Current assets to fixed assets} = \frac{\text{Current Assets}}{\text{Fixed assets}}$$

3. Receivable to total assets

This ratio measures the relationship between receivable and total assets. This ratio calculated the percentage of total assets invested in the receivable. This ratio calculated as follows:-

$$\text{Receivable to total assets} = \frac{\text{Receivable}}{\text{Total assets}}$$

Large or high level ratio indicates that the management is taking liberal credit policy.

4. Receivable to current assets

This ratio calculated the percentage of receivable in current assets .It shows the portion of receivable in current assets. It is calculated as follows:-

$$\text{Receivable to current assets} = \frac{\text{Receivable}}{\text{Current assets}}$$

Lower percentage is favorable .Higher percentage of ratio indicates the weakness on policy and implementation for collection. Higher ratio indicates that the role of receivable is important.

5. Inventory to current assets

This ratio representing the percentage of current assets in the form of inventory. In other word how much amount is invest in inventory of total current assets. it calculated as follows :-

$$\text{Inventory to current assets} = \frac{\text{Inventory}}{\text{Current assets}}$$

Large ratio indicates that the management is adopting liberal inventory policy.

6. Cash and bank balance to total assets (CBTA)

This ratio calculate the relationship between the cash and bank balance with the total assets .This ratio measures the percentage of amount use cash and bank balance in total assets. This ratio is calculated as follows:-

$$\text{CBTA} = \frac{\text{Cash and bank balance}}{\text{Totalassets}}$$

7. Cash and bank balance to current assets (CBCA)

This ratio shows that the percentage of most liquid current assets in total current assets. Cash and bank balance are most liquid current assets because they can be converted into cash immediately without any loss of value. It shows the relationship between cash and bank balance and total current assets. It is calculated as follows:-

$$\text{CBCA} = \frac{\text{Cash and bank balance}}{\text{Totalcurrentassets}}$$

8 Inventory to Total Assets

This ratio calculates the relation of inventory and total assets. It measure the what percentage of total assets is invest in to the inventory. In other words how much amount is invest in inventory. It also shows that which policy is adopting the company for inventory. It is calculated as follows:-

$$\text{Inventory to total assets} = \frac{\text{Inventory}}{\text{Totalassets}}$$

Lower ratio indicates that the company takes strict policy for inventory and vice-versa

3 Profitability Ratio

This ratio is most important ratio because all of stakeholder of company concern with the maximum profit. Shareholder, management, promoter, staff and all of other stakeholders wants to maximum profit which calculated in profitability ratio. Profitability can be measure in terms of a relationship between net profit and assets. Various ratios can be developed based upon the profit. These different ratios are called profitability ratios. A required level of profit is necessary for survival and growth of a firm in a competitive environment. The main objective of the company is to earn maximum profit with providing service. The position of the profitability of the company is analyzed with the help of following ratios:

- i Return on working capital.
- ii Return on total assets.
- iii Net profit margin ratio.
- iv Gross profit margin ratio.

i. Return on working capital

This ratio measure the profit with respect to working capital or current assets.

It shows that how much amount invest in working capital and what effect in profit. This ratio calculated as follows:-

$$\text{Return on working capital} = \frac{\text{Net profit after tax}}{\text{Working capital}} \times 100$$

Higher the ratio indicates higher the utilization of working capital to earn profit and vice - versa.

ii Return on total assets

This ratio determine total profit earned from investments over the total assets of a company. The return on assets is a useful measure of the profitability of all

financial sources invested in the firm's assets. It also shows that all assets are optimum utilized or not. This ratio calculated as follows:

$$\text{Return on total assets} = \frac{\text{Net profit after tax}}{\text{Total assets}} \times 100$$

The higher percentage indicates the better efficiency to utilize of its total assets.

iii Net profit margin ratio

Net profit is obtain after deducting operating expenses, interest and income tax from gross profit. This ratio measures the relationship between net profit and sales. In other words, it measure the ability of a company to earn each rupee of sales in to net profit. It is calculated as follows:

$$\text{Net profit margin} = \frac{\text{Net profit after tax}}{\text{Sales}} \times 100$$

The higher percentage is favorable. It indicates the efficiency of company.

iv Gross profit margin ratio

Gross profit calculated deduction cost of goods sold from the sales. This ratio shows that how much percentage is gross profit on total net sales. This profit includes interest amount, tax amount and dividend amount. This ratio calculated as follows:

$$\text{Gross profit margin ratio} = \frac{\text{Gross profit}}{\text{Sales}} \times 100$$

The higher percentage is preferable. The higher percentage indicates the better efficiency of the company.

2 Statistical tools

Some financial tools are mentioned in above which calculate the financial position of the company. Now discuss about statistical tools, which are as follows:

- i Average.
- ii Correlation Coefficient Analysis.
- iii Hypothesis Analysis.

i Average

The average value is a single value within the range of the data that is used to represent all the values in the series. The most popular and widely used measure of representing the entire data by the one value is known as average. Average value is obtained by adding together all the times and the summation of times is divided by the number of sample period. Average value is calculated as follows:

$$\text{Average value} = \frac{\text{Sample periods items}}{\text{Number of period}}$$

ii Correlation Coefficient Analysis

Correlation is a statistical tool, it is used to describe the degree to which one value is linearly related to another. The correlation measure the degree of relationship between two sets of figures. The correlation coefficient analysis referred to the tools that is used in measuring the closeness of the relationship between two or more than two variables. The correlation is defined as the relationship between the dependent variables or factor and one or more than one independent variables or factors. Among the various methods of find out coefficient of correlation, Karl Pearson's method is applied in the study. The Karl Pearson's coefficient of correlation is denoted by symbol (r). It measure the relationship between two variables. It is calculated as follows:

$$r = \frac{\sum xy}{\sqrt{\sum x^2 \sum y^2}}$$

The result of coefficient of correlation is always lies between +1 to -1.

If r is +1, there is perfect positively correlation between the two variables. If r is -1, there is perfect negatively correlation between the two variables. If r is 0, there is no relationship between two variables.

iii Hypothesis Analysis

According to test of hypothesis, if sample size is less than 30, student's t-test is used. In order to apply t-test in the context of small sample, the t-value is calculated first and compared with the table value of t at a certain level of significance (at 5%) for given degree of freedom (d.f). If calculated value is greater than tabulated value, that is null hypothesis(H0) is rejected and if calculated value is less than tabulated value that null hypothesis (H0) is accepted. It is calculated as follows:

$$t = r \times \frac{\sqrt{n - 2}}{\sqrt{1 - r^2}}$$

Where,

t = Student's t-value

r = Coefficient of correlation

n = No. of observation

CHAPTER - FOUR

PRESENTATION AND ANALYSIS OF DATA

4.1 Introduction

This is the fourth step of research paper. Research works had done to know the facts, for this, data were presented and analyzed .In this chapter researcher presented data and analyzed them by financial and statistical tools and compared to relevant variable of selected companies (i.e. BPC & CHPCL) . The period covered five years (i.e. 2064/65 to 2068/69) .

4.2 Financial Tools

For financial analysis use structure of working capital and some ratios

- 4.2.1. Working capital structure.
- 4.2.2. Liquidity position of selected companies.
- 4.2.3. Activity or composition of working capital of selected companies.
- 4.2.4. Profitability position of selected companies.
- 4.2.5. Efficiency of working capital.

4.2.1 Working capital structure

In this topic, we can study what are the components or items manage for working capital. What items is used form of working capital, like receivable, cash, inventory, bank balance marketable securities, etc. Among them inventory is low liquid current assets or low liquid for working capital .If higher proportion of inventory the working capital will less liquid and vice-versa .

The working capital structure is as follows of BPC & CHPCL.

Table No. 1
Working Capital Structure of BPC

(Rs in thousand)

Fiscal year	Inventory	Debtors	Cash & bank balance	Advance and deposit
2064/65	74,647	88,407	412,635	170,447
2065/66	92,723	171,359	291,687	188,068
2066/67	104,543	93,690	234,888	218,398
2067/68	83,413	184,140	44,902	287,936
2068/69	42,857	283,626	322,797	374,569
Total	398,183	821,222	1,306,909	1239418
Average	79,636.6	164,244.4	261,381.8	247,883.6

Source:-Annual Report of BPC 2064/65 to 2068/69

According to financial statement (i.e. Balance Sheet) of BPC, the company manages these items for working capital, Inventory, Debtors, Cash and Bank Balance and Advance and Deposits. Up to third year the company manage maximum amount of working capital by cash and bank balance than other assets. In fourth year the company holds very few amounts of cash and bank balance. Advance and deposit also manage very high level every year. Inventory and debtors are low level than other. An average also cash and bank balance is higher than other. Advance and deposit amount is highest in fifth year. According to structure inventory is minimum than other, then debtors, then advance and deposit and then cash and bank balance. The average investment in working capital as follows:

Inventory = 10.57%

Debtors = 21.81%

Advance and Deposit = 32.91%

Cash and Bank Balance = 34.70%

Table No. 2
Working Capital Structure of CHPCL

(Rs in thousands)

Fiscal year	Inventory	Debtors	Cash & bank balance	Advance, deposit and short term investment
2064/65	22,321.95	189,691.91	277,109.92	157,106.63
2065/66	36,894.30	108,655.55	248,470.88	601,054.04
2066/67	30,901.73	209,483.49	44,129.48	1,165,578.29
2067/68	53,455.05	205,170.29	73,455.63	1,714,204.14
2068/69	42,112.46	209,751.25	304,166.51	2,568,249.94
Total	185,685.49	922,752.49	947,332.42	6,206,193.04
Average	37,137.098	184,550.498	189,466.484	1,241,238.608

Source:- Annual Report of CHPCL 2064/65 to 2068/69

According to financial statement (i.e. Balance Sheet) of CHPCL, the company manage these items for working capital: Inventory, Debtors, Cash and Bank Balance, Advance, deposit and Short term investment. Among them advance, deposit and short term investment is maximum use the company. The company manages more amounts of cash and bank balance than other in year 2064/65. Then the company manages more amounts by advance, deposit and short term investment. The company invest more amount in short term investment every year, may be which benefit the company. The company manages very low level of inventory then debtors, then cash and bank balance and then advance, deposit and short term investment. An average the company invests as follows:

Inventory	= 2.24%
Debtors	= 11.17%
Cash and Bank Balance	= 11.47%
Advance, Deposit and short term investment	= 32.91%

4.2.2 Liquidity Position of Selected Company

Liquidity position means the company can operate day to day transaction and meet its obligation. Liquidity ratio measures the liquidity position of company. The company must manage the current assets to meet its current liabilities. These ratios focus on current assets and current liabilities and are used to determine the short term solvency position of the firm. In the liquidity position, we study two types of ratios which are as follows:-

1. Current Ratio.
2. Quick Ratio.

4.2.2.1 Current Ratio (CR)

This ratio indicates that the company can or cannot meet its current liabilities by current assets. This ratio includes current assets and current liabilities. Current assets means that assets which are converted to cash within one year and current liabilities means that liabilities which are payable within one year. This ratio calculates or measures the relationship between current assets and current liabilities. Current assets include cash, inventory, receivable, bank balance, prepaid expenses, marketable securities etc. Current liabilities include accounts payable, bank overdraft, notes payable, accruals etc. This ratio is obtained by current assets divided by current liability.

Table No.3
Current Ratio of BPC

(Rs In Millions)

Fiscal year	Current Assets	Current Liability	Ratio(in times)	% change of Ratio
2064/65	746.14	595.87	1.25	
2065/66	743.84	691.20	1.07	-14.4
2066/67	651.52	653.67	0.99	-7.47
2067/68	600.40	436.11	1.37	38.38
2068/69	1023.85	593.00	1.73	26.27
Total	3765.75	2969.85	6.41	
Average	753.15	593.97	1.28	

Source:-Annual Report of BPC 2064/65 to 2068/69

According to table no. 3, The current ratio of the company is fluctuating over the study period (i.e.1.25, 1.07, 0.99, 1.37, 1.73). First three year the ratio is declining trend then fourth and fifth year ratio is increasing trend .The standard of current ratio is 2:1 but the BPC cannot meet the standard .Average ratio also less than standard .According to the table no. 3 the company manage the current assets and current liabilities when current liabilities increase then current assets also increase, so the company can get profit every year . In the fifth year the company increase current assets as well as current liabilities so it get more profit than other year profit . It shows that if current assets use properly the company can get profit.

Table No.4
Current Ratio of CHPCL

(Rs In Millions)

Fiscal year	Current Assets	Current Liability	Ratio(in times)	% change of Ratio
2064/65	646.23	504.09	1.28	
2065/66	995.07	364.89	2.72	112.5
2066/67	1450.09	102.70	14.11	418.75
2067/68	2046.28	107.39	19.07	35.15
2068/69	3124.28	115.17	27.13	42.26
Total	8261.95	1194.24	64.31	
Average	1652.39	238.85	12.86	

Source:-Annual Report of CHPCL 2064/65 to 2068/69

According to table no. 4, the ratio of CHPCL is very increasing trend (i.e.1.28, 2.72, 14.11, 19.07, 27.13,) . Beginning two year the ratio is low but after the three year ratio is increase because the company increase current assets but current liabilities does not increase .The standard of current ratio is 2:1, but CHPCL cannot meet the standard, first year less than standard then over the standard level. when CHPCL increase current assets profit also increase every year .its average ratio is 12.86 which is so over than standard .

4.2.2.2 Quick Ratio(QR)

Quick Ratio also called acid test ratio. This ratio measures the relationship between quick assets and current liabilities.

Quick assets means that assets which are converted into cash immediately without loss of value. cash and bank balance are most liquid assets than other current assets . Basically quick assets means or includes current assets minus inventories .This ratio obtain by quick assets divided by current liabilities. This ratio calculated as follows :-

Table No. 5
Quick Ratio of BPC

(Rs In Millions)

Fiscal year	Quick Assets	Current Liability	Ratio(in times)	% change of Ratio
2064/65	671.49	595.87	1.13	
2065/66	651.11	691.20	0.94	-16.81
2066/67	546.98	653.67	0.83	-11.70
2067/68	516.98	436.11	1.18	42.16
2068/69	980.99	593.00	1.65	39.83
Total	3367.55	2969.85	5.73	
Average	673.51	593.97	1.146	

Source:-Annual Report of BPC 2064/65 to 2068/69

Quick ratio shows the relationship between quick assets with current liabilities . The standard of quick ratio is 1:1 . According to table no. 5, the ratio of company is slightly fluctuated over the study period (i.e. 1.13, 0.94, 0.83, 1.18, 1.65) . second and third year ratio is decline but fourth and fifth year ratio is increase because forth year quick assets slightly decrease(i.e. 546.98 to516.98) but current liabilities suddenly decrease(653.67 to 436.11) . In fifth year quick assets increase suddenly (i.e. 516.98 to 980.99) and current liabilities increase

slightly than quick assets (i.e.436.11 to 593.00) . But the company meet the standard, not vast different from its standard.

Table No. 6
Quick Ratio of CHPCL

(In Rs million)

Fiscal year	Quick Assets	Current Liability	Ratio(in times)	% change of Ratio
2064/65	623.91	504.09	1.24	
2065/66	958.18	364.89	2.62	111.29
2066/67	1419.20	102.70	13.82	427.48
2067/68	1992.83	107.39	18.55	34.22
2068/69	3082.17	115.17	26.76	44.25
Total	8076.29	1194.24	62.99	
Average	1615.26	238.85	12.60	

Quick assets = CA - Inventories

Source:-Annual Report of CHPCL2064/65 to 2068/69

According to table no. 6, the ratio of CHPCL is increasing trend . The standard of quick ratio is 1:1, but the CHPCL's ratio is greater than standard .Its current liabilities are low but its quick assets are very high so its quick ratio also very high . Its average ratio is 12.60.

4.2.3 Composition of Working Capital

In this topic deals with the composition of working capital of both companies using financial ratios and test the significant of correlation co efficient. For the study of composition we take these ratios which are indicates in chapter three as follows:-

4.2.3.1. Current Assets to Total Assets.

4.2.3.2. Current Assets to Fixed Assets.

4.2.3.3. Receivable to Total Assets.

- 4.2.3.4. Receivable to Current assets.
- 4.2.3.5. Inventory to Current assets.
- 4.2.3.6. Inventory to Total assets.
- 4.2.3.7. Cash and Bank Balance to Total assets.
- 4.2.3.8. Cash and Bank Balance to Current assets.

4.2.3.1 Current Assets to Total Assets

This ratio indicates that how much amount or percentage of company's total assets has been invested in the current assets . For calculation of this ratio, we take current assets divided by total assets.

Table No.7

Current Assets to Total Assets Ratio of BPC

(Rs In Million)

Fiscal year	Current Assets	Total Assets	Ratio(in times)	% change of Ratio
2064/65	746.14	1991.70	0.37	
2065/66	743.84	2264.20	0.32	-13.51
2066/67	651.52	2341.44	0.27	-15.62
2067/68	600.40	3265.16	0.20	-25.93
2068/69	1023.85	4061.65	0.25	25
Total	3765.75	13924.15	1.41	
Average	753.15	2784.83	0.28	

Source:-Annual Report of BPC 2064/65 to 2068/69

According to table no. 7, the ratio of BPC is decreasing trend but at fifth year the ratio is slightly increase (i.e.0.37, 0.32, 0.27, 0.20, and 0.25). The average ratio of BPC is 0.28 which indicates that the company maintains 28% of liquidity position of total assets. The company increases its total assets but current assets is decrease in every year but last year current assets also increased. This ratio shows that how much the proportion of current assets over the total assets. About 28% of total assets invest in current assets.

Table N. 8
Current Assets to Total Assets Ratio of CHPCL

(Rs In Million)

Fiscal year	Current Assets	Total Assets	Ratio(in times)	% change of Ratio
2064/65	646.23	2865.71	0.22	
2065/66	995.07	3134.87	0.32	45.45
2066/67	1450.09	3577.42	0.40	25
2067/68	2046.28	4195.01	0.48	20
2068/69	3124.28	5389.30	0.58	20.83
Total	8261.95	19162.31	2	
Average	1652.39	3832.46	0.40	

Source:-Annual Report of CHPCL 2064/65 to 2068/69

Table no -8, shows that the relationship between total assets and current assets .The ratio of the CHPCL is increasing trend from first to last year of study period (i.e. 0.22, 0.32, 0.40, 0.48, 0.58) . The average ratio of the company is 0.40 which indicates the company maintain 40% liquidity position of its total assets .The company increase its total assets along with current assets every year. Percentage change of ratio is positive in every year which indicates the relation of total assets and current assets is positive.

4.2.3.2 Current Assets to Fixed Assets

This ratio indicates that the proportion of current assets and fixed assets. In other word this ratio shows the relationship between current assets with fixed assets. This ratio obtained by dividing the current assets by fixed assets. Higher ratio indicates the working capital position is good and vice -versa. This is shown as bellow table:-

Table No. 9
Current Assets to fixed Assets Ratio of BPC

(Rs In Million)

Fiscal year	Current Assets	Fixed Assets	Ratio(in times)	% change of Ratio
2064/65	746.14	725.74	1.03	
2065/66	743.84	765.34	0.97	-5.82
2066/67	651.52	781.67	0.83	-14.43
2067/68	600.40	1521.54	0.39	-53.01
2068/69	1023.85	1543.39	0.66	69.23
Total	3765.75	5337.68	3.88	
Average	753.15	1067.54	0.78	

Source:-Annual Report of BPC 2064/65 to 2068/69

According to table no. 9, the ratio of BPC is decreasing trend up to fourth year and fifth year slightly increase (i.e.1.03, 0.97, 0.83, 0.39, 0.66)

Current assets increase in fifth year so ratio also increases in fifth year. The decreasing level of ratio the company manage low level of liquidity position .If company can operate with low level of current assets it will get more profit because expenses of current assets will be low . Over the study period the company increase fixed assets in every year but decrease the current assets without fifth year. Average ratio of the company is 0.78.

Table No.10

Current Assets to Fixed Assets Ratio of CHPCL

(In Rs million)

Fiscal year	Current Assets	Fixed Assets	Ratio(in times)	% change of Ratio
2064/65	646.23	2011.86	0.32	
2065/66	995.07	1916.28	0.52	62.5
2066/67	1450.09	1869.35	0.77	48.07
2067/68	2046.28	1778.04	1.15	49.35
2068/69	3124.28	1687.03	1.85	60.87
Total	8261.95	9262.56	4.61	
Average	1652.39	1852.51	0.92	

Source:-Annual Report of CHPCL 2064/65 to 2068/69

Current assets to fixed assets ratio shows that the proportion of current assets with fixed assets . According to table no -10 the ratio of company is increasing trend over study period (i.e.0.32, 0.52,0.77, 1.15, 1.85) .The company increase its current assets but not fixed assets .Average ratio of company is 0.92 which indicates that the company maintain 92% liquidity position . It shows the working capital is sound position.

4.2.3.3 Receivable to Total Assets

This ratio shows the relationship between total assets and receivables. In other word how much proportion invests in receivable of total assets? It also shows that which policy is adopting the company for credit policy. High ratio of this ratio indicates the company taking liberal credit policy. This ratio obtains by receivable divided by total assets. Which is calculated as follows:-

Table No. 11**Receivable to total Assets Ratio of BPC**

(Rs in Million)

Fiscal year	Receivable	Total Assets	Ratio(in times)	% change of Ratio
2064/65	88.41	1991.70	0.04	
2065/66	171.36	2264.20	0.08	100
2066/67	93.69	2341.44	0.04	-50
2067/68	184.14	3265.16	0.05	25
2068/69	283.63	4061.65	0.07	40
Total	821.23	13924.15	0.28	
Average	164.25	2784.83	0.056	

Source:-Annual Report of BPC 2064/65 to 2068/69

This ratio indicates that the proportion of investment of receivable in total assets. The ratio of BPC is fluctuating during the study period (i.e.0.04, 0.08, 0.04, 0.05, 0.07). The average ratio is 0.056which indicates the company invests 5.6% of receivable in total assets. It is the favor of company there is less risk for receivable. Low level of ratio is preferable.

Table No. 12**Receivable to Total Assets Ratio of CHPCL**

(In Rs million)

Fiscal year	Receivable	Total Assets	Ratio(in times)	% change of Ratio
2064/65	189.69	2865.71	0.07	
2065/66	108.66	3134.87	0.03	-57.14
2066/67	209.48	3577.42	0.06	100
2067/68	205.20	4195.01	0.05	-16.67
2068/69	209.75	5389.30	0.04	-20
Total	922.78	19162.31	0.25	
Average	184.56	3832.46	0.05	

Source:-Annual Report of CHPCL 2064/65 to 2068/69

According to table no.12 the ratio of CHPCL is fluctuating trend (i.e.0.07, 0.03, 0.06, 0.05, 0.04). In second year ratio is decrease and third year increase then decrease the ratio .Average ratio is 0.05 which indicates the company invest only 5% in receivable. It is favorable for every company because low level of this ratio means low risk for collection of its debts.

4.2.3.4 Receivable to Current Assets

This ratio indicates that the proportion of receivable on total current assets. In other word this indication the relationship between receivable and current assets. High percentage of ratio indicates the weakness on collection policy. Lower percentage is favorable. This ratio obtains by receivable divided by current assets. it is calculated as follows :-

Table No. 13
Receivable to Current Assets Ratio of BPC

(In Rs million)

Fiscal year	Receivable	Current Assets	Ratio(in times)	% change of Ratio
2064/65	88.41	746.14	0.12	
2065/66	171.36	743.84	0.23	91.66
2066/67	93.69	651.52	0.14	-39.13
2067/68	184.14	600.40	0.31	121.42
2068/69	283.63	1023.85	0.27	-12.9
Total	821.23	3765.75	1.07	
Average	164.25	753.15	0.21	

Source:-Annual Report of BPC 2064/65 to 2068/69

This ratio shows the relationship between receivable and current assets. It calculated how much percentage of receivable is over the current assets. Low level of ratio is preferable .According to table no-13; the ratio of the company is fluctuating trend (i.e.0.12, 0.23, 0.14, 0.31, 0.27)

Average ratio of this company is 0.21. The Company invests 21% of receivable over the current assets.

Table No. 14
Receivable to Current Assets Ratio of CHPCL

(In Rs Million)

Fiscal year	Receivable	Current Assets	Ratio	% change of Ratio
2064/65	189.69	646.23	0.29	
2065/66	108.66	995.07	0.11	-62.07
2066/67	209.48	1450.09	0.14	27.27
2067/68	205.20	2046.28	0.10	-28.57
2068/69	209.75	3124.28	0.07	-30
Total	922.78	8261.95	0.71	
Average	184.56	1652.39	0.142	

Source:-Annual Report of CHPCL 2064/65 to 2068/69

According to table no.-14 the ratio of CHPCL is decreasing trend but in year three the ratio is slightly increase (i.e.0.29, 0.11, 0.14, 0.10, and 0.07). The company increases its current assets every year but its receivable is fluctuating .It means the company has not risk for collection of receivable. Average ratio of company is 0.142 which indicates the company invest 14.2% current assets in receivable .which is low according to its transaction.

4.2.3.5 Inventory to Current Assets Ratio

This ratio indicates the proportion of inventory on total current assets. In other word it shows the relationship between inventories with current assets. It also indicates that how much amount of the working capital is depends on inventory. It is calculated inventory divided by current assets.

Table No. 15
Inventory to Current Assets Ratio of BPC

(In Rs Million)

Fiscal year	Inventory	Current Assets	Ratio(in times)	% change of Ratio
2064/65	74.65	746.14	0.1	
2065/66	92.72	743.84	0.12	20
2066/67	104.54	651.52	0.16	33.33
2067/68	83.41	600.40	0.14	-12.5
2068/69	42.86	1023.85	0.04	-71.42
Total	398.18	3765.75	0.56	
Average	79.64	753.15	0.11	

Source:-Annual Report of BPC 2064/65 to 2068/69

This ratio shows the relationship between inventory and current assets. Inventory is very low liquid assets for working capital among other current assets .Table no.15 shows the ratio of BPC is fluctuating trend over the study period (i.e.0.1, 0.12, 0.16, 0.14, 0.04). The company increase its inventory up to third year then decrease as well as ratio also increase up to third year then decrease but its current assets is decrease up to fourth year and last year of study period is increase, so its effect over the ratio .

Table No. 16
Inventory to Current Assets Ratio of CHPCL

(In Rs Million)

Fiscal year	Inventory	Current Assets	Ratio	% change of Ratio
2064/65	22.32	646.23	0.03	
2065/66	36.89	995.07	0.04	33.33
2066/67	30.90	1450.09	0.02	-50
2067/68	53.46	2046.28	0.03	50
2068/69	42.11	3124.28	0.01	-66.67
Total	185.68	8261.95	0.13	
Average	37.14	1652.39	0.026	

Source:-Annual Report of CHPCL 2064/65 to 2068/69

According to table no.-16 the ratio of company is fluctuating trend (i.e.0.03, 0.04, 0.02, 0.03, 0.01) .The company increase its current assets every year but it's inventory is fluctuating so its ratio is very low. This company managed it's inventory very well because more idle inventory decrease the profit of company. Its average ratio is 0.026 which indicates the company manage only 2.6% inventory level over it's current assets.

4.2.3.6 Inventory to Total Assets

This ratio indicates that the company adopted which inventory policy. In other word this ratio shows that the relationship between inventory with total assets. At what percentage of amount invest in inventory among total assets. The higher ratio indicates the company taking the liberal policy and vice - versa. This ratio calculated inventory divided by total assets.

Table No. 17
Inventory to Total Assets Ratio of BPC

(In Rs Million)

Fiscal year	Inventory	Total Assets	Ratio(in times)	% change of Ratio
2064/65	74.65	1991.70	0.04	
2065/66	92.72	2264.20	0.04	-
2066/67	104.54	2341.44	0.04	-
2067/68	83.41	3265.16	0.03	-25
2068/69	42.86	4061.65	0.01	-66.67
Total	398.18	13924.15	0.16	
Average	79.64	2784.83	0.032	

Source:-Annual Report of BPC 2064/65 to 2068/69

Inventory is most important things for manufacturing company but for hydropower company inventory means some spare parts, some stationary goods, fuel/lubricants, power house equipments, electric goods, and lose tools etc .This ratio shows the relation of inventory and total assets of BPC . In other hand it shows the proportion of inventory over the total assets .According to above table the ratio of the company is decreasing trend but first three year the ratio is constant it means the company expenses inventory in same ratio, fourth and fifth year the ratio is decreasing trend (i.e.0.04, 0.04, 0.04, 0.03, 0.01). Its average ratio is 0.032 which means the company invests 3.2% investment over the total assets.

Table No. 18
Inventory to Total Assets Ratio of CHPCL

(In Rs Million)

Fiscal year	Inventory	Total Assets	Ratio	% change of Ratio
2064/65	22.32	2865.71	0.008	
2065/66	36.89	3134.87	0.012	50
2066/67	30.90	3577.42	0.008	-33.33
2067/68	53.46	4195.01	0.013	62.5
2068/69	42.11	5389.30	0.008	-38.46
Total	185.68	19162.31	0.05	
Average	37.14	3832.46	0.01	

Source:-Annual Report of CHPCL 2064/65 to 2068/69

According to table no.18 the ratio of company is fluctuating trend over the study period (i.e.0.008, 0.012, 0.008, 0.013, 0.008) .This company manage very low level of inventory according to its total assets, so this company's ratio is very low . If company hold more idle inventory it effects the profit, so company manage all transaction with low level of inventory .Its average ratio also is very low (i.e.0.01) which indicates the company invest inventory only 1% of total assets .

4.2.3.7 Cash and Bank Balance To Total Assets

This ratio indicates that the proportion of cash and bank balance in total assets. It shows that the relationship between cash and bank balance with the total assets. In other word at what amount the company separate to the working capital. Mostly liquid assets are cash and bank balance for working capital. This ratio obtains by cash and bank balance divided by total assets.

Table No.19**Cash and Bank Balance to Total Assets Ratio of BPC**

(In Rs Million)

Fiscal year	Cash and Bank Balance	Total Assets	Ratio(in times)	% change of Ratio
2064/65	412.64	1991.70	0.21	
2065/66	291.69	2264.20	0.13	-38.09
2066/67	234.89	2341.44	0.10	-23.07
2067/68	44.90	3265.16	0.014	-86
2068/69	322.80	4061.65	0.079	464.28
Total	1306.92	13924.15	0.533	
Average	261.38	2784.83	0.106	

Source:-Annual Report of BPC 2064/65 to 2068/69

For working capital cash and bank balance is most important assets among the other current assets. The company must be maintaining cash and bank balance properly according to company's activities. According to table no 19 the ratio of BPC is decreasing trend up to fourth year but in fifth year slightly increase because the company increase the current assets (i.e.0.21, 0.13, 0.10, 0.014 and 0.079). The company's average ratio is 0.106, which indicates that the company maintain 10.56% cash and bank balance over it's total assets. The company increase total assets every year but decrease the cash and bank balance.

Table No. 20
Cash and Bank Balance to Total Assets Ratio of CHPCL

(In Rs million)

Fiscal year	Cash and Bank Balance	Total Assets	Ratio	% change of Ratio
2064/65	277.11	2865.71	0.097	
2065/66	248.47	3134.87	0.08	-17.52
2066/67	44.13	3577.42	0.012	-85
2067/68	73.46	4195.01	0.018	50
2068/69	304.17	5389.30	0.056	211.11
Total	947.34	19162.31	0.263	
Average	189.47	3832.46	0.0526	

Source:-Annual Report of CHPCL 2064/65 to 2068/69

According to table no 20 the ratio of CHPCL is fluctuating trend. The ratio is decrease up to three year and increase in fourth and fifth year (i.e.0.097, 0.08, 0.012, 0.018 and 0.056). Average ratio is o.526 which indicates the company maintain cash and bank balance only 5.26% over it's total assets. The company maintains very low level of cash and bank balance.

4.2.3.8 Cash and Bank Balance To Current Assets

This ratio indicates that the management of cash in current assets. This ratio shows that relationship between cash and bank balance with current assets. This ratio indicates that at what percentage of cash in current assets. Cash and bank balance are most liquid assets for working capital. The higher and lower both is not good for company because higher is cash will idle and lower that can't meet it's working capital needed. This ratio obtains by cash and bank balance divided by current assets.

Table No. 21**Cash and Bank Balance to Current Assets Ratio of BPC**

(In Rs million)

Fiscal year	Cash and Bank Balance	Current Assets	Ratio(in times)	% change of Ratio
2064/65	412.64	746.14	0.55	
2065/66	291.69	743.84	0.39	-29.09
2066/67	234.89	651.52	0.36	-7.69
2067/68	44.90	600.40	0.075	-79.17
2068/69	322.80	1023.85	0.32	326.67
Total	1306.92	3765.75	1.69	
Average	261.38	753.15	0.339	

Source:-Annual Report of BPC 2064/65 to 2068/69

Cash and bank balance is very liquid current assets among the total current assets. The company maintain high level of cash and bank balance than other current assets but in fourth year the company maintain low level of cash and bank balance so ratio also decrease in fourth year (i.e.0.55, 0.39, 0.36, 0.075 and 0.32). The average ratio is 0.339 which indicates the company maintain an average 33.9% cash and bank balance over it's total current assets. There is positive relation between the cash and bank balance with total current assets because when cash is increase then total current assets also increase and vice-versa.

Table No. 22

Cash and Bank Balance to Current Assets Ratio of CHPCL

(In Rs million)

Fiscal year	Cash and Bank Balance	Current Assets	Ratio	% change of Ratio
2064/65	277.11	646.23	0.43	
2065/66	248.47	995.07	0.25	-41.86
2066/67	44.13	1450.09	0.03	-88
2067/68	73.46	2046.28	0.036	20
2068/69	304.17	3124.28	0.097	169.44
Total	947.34	8261.95	0.843	
Average	189.47	1652.39	0.168	

Source:-Annual Report of CHPCL 2064/65 to 2068/69

Cash and bank balance is very liquid current assets among the total current assets. The ratio of this company is fluctuating trend first three year ratio is decrease then fourth and fifth year ratio is slightly increase (i.e.0.43, 0.25, 0.03, 0.036 and 0.097). The average ratio is 0.168 which indicates the company maintain an average 16.8% cash and bank balance over it's total current assets.

4.2.4 The Profitability Position

This ratio is most important ratio because all of stack holder of company concern with the maximum profit. All stack holder wants to maximum profit which calculated in profitability ratio. The main objective of company is to earn maximum profit with providing service. The position of the profitability of the company is analyzed with the help of following ratios:-

4.2.4.1. Return on working capital.

4.2.4.2. Return on total assets.

4.2.4.3. Net profit margin ratio.

4.2.4.4. Gross profit margin ratio.

4.2.4.1 Return on Working Capital

This ratio indicates that what percentage of profit increases by working capital or current assets. It shows that how much amount invest working capital and what effect in profit. This ratio obtains by net profit after tax divided by current assets.

Table No. 23
Return on working capital Ratio of BPC

(In Rs million)

Fiscal year	Net profit after tax	working capital	Ratio(%)	% change of Ratio
2064/65	353.88	746.14	47.43	
2065/66	291.60	743.84	39.20	-17.35
2066/67	224.23	651.52	34.42	-12.19
2067/68	328.97	600.40	54.82	59.26
2068/69	483.50	1023.85	47.22	-13.86
Total	1682.18	3765.75	223.09	
Average	336.43	753.15	44.618	

Source:-Annual Report of BPC 2064/65 to 2068/69

Working capital is that assets, which is used to day to day transaction of every company. According to above table the ratio of this company has fluctuated ratio (i.e.47.43, 39.20, 34.42, 54.82 and 47.22). Up to third year the ratio is decreasing trend but fourth year increase and fifth year again decrease. The company decrease it's working capital up to fourth year but in fifth year the company increase and it's profit decrease up to three year but fourth and fifth year increase the profit. Working capital and profit has positive relation. The average ratio is 44.618 which indicate the company able to gain profit by using the working capital 44.618%.

Table No. 24

Return on working capital Ratio of CHPCL

(In Rs Thousand)

Fiscal year	Net profit after tax	Current Assets	Ratio (%)	% change of Ratio
2064/65	679.37	646.23	105.13	
2065/66	735.36	995.07	73.90	-29.70
2066/67	777.43	1450.09	53.61	-27.45
2067/68	843.14	2046.28	41.20	-23.14
2068/69	945.32	3124.28	30.26	-26.55
Total	3980.62	8261.95	304.10	
Average	796.12	1652.39	60.82	

Source:-Annual Report of CHPCL 2064/65 to 2068/69

According to above table shows that, the ratio of CHPCL is decreasing trend in every year (i.e. 105.13, 73.90,53.61,41.20 and 30.26)%. The company increase it's profit every year and working capital also increase every year but profit ratio is decrease every year because the increasing percentage of profit is lower than increasing percentage of working capital. An average ratio is 60.82%, it is not unsatisfactory profit level.

4.2.4.2 Return on total assets

This ratio indicates that at what percentage of profit can get the company by use of total assets. This ratio shows that the relationship between total assets and profit. This ratio also shows that the company optimum utilize total assets or not. This ratio obtains by profit after tax divided by total assets.

Table No. 25**Return on Total Assets Ratio of BPC**

(In Rs million)

Fiscal year	Net profit after tax	Total Assets	Ratio(in %)	% change of Ratio
2064/65	353.88	1991.70	17.77	
2065/66	291.60	2264.20	12.88	-27.52
2066/67	224.23	2341.44	9.58	-25.62
2067/68	328.97	3265.16	10.08	5.21
2068/69	483.50	4061.65	11.90	18.05
Total	1682.18	13924.15	62.21	
Average	336.43	2784.83	12.442	

Source:-Annual Report of BPC 2064/65 to 2068/69

Above table shows that, the ratio of BPC is fluctuating trend (i.e. 17.77, 12.88, 9.58, 10.08 and 11.90)%. The company increase it's total assets every year but it's profit is decrease up to third year then increase in year fourth and fifth. So, ratio also decrease up to third year and increase in fourth and fifth year. An average ratio is 12.442%.

Table No. 26**Return on Total Assets Ratio of CHPCL**

(In Rs million)

Fiscal year	Net profit after tax	Total Assets	Ratio(In %)	% change of Ratio
2064/65	679.37	2865.71	23.71	
2065/66	735.36	3134.87	23.46	-1.05
2066/67	777.43	3577.42	21.73	-7.37
2067/68	843.14	4195.01	20.09	-7.54
2068/69	945.32	5389.30	17.54	-12.70
Total	3980.62	19162.31	106.53	
Average	796.12	3832.46	21.306	

Source:-Annual Report of CHPCL 2064/65 to 2068/69

According to above table shows that, the ratio of CHPCL is decreasing trend in every year (i.e. 23.71, 23.46, 21.73, 20.09 and 17.54)%. The company increase it's total assets every year and profit also increase but ratio on return is decrease every year because the increasing percentage of profit is lower than increasing percentage of total assets. The company's average ratio is 21.306%.

4.2.4.3 Net Profit Margin Ratio

This ratio indicates that the ability of a firm to earn profit. It shows the relationship between net profits after tax with sales. It measures the firm's ability to earn each rupee of sales in to net profit. This ratio obtains by net profit after tax divided by sales.

Table No. 27
Net Profit Margin Ratio of BPC

(In Rs million)

Fiscal year	Net profit after tax	Sales	Ratio(in %)	% change of Ratio
2064/65	353.88	421.69	83.92	
2065/66	291.60	430.80	67.69	-19.34
2066/67	224.23	453.43	49.45	-26.95
2067/68	328.97	483.78	67.99	37.50
2068/69	483.50	518.43	93.26	37.16
Total	1682.18	2308.13	362.31	
Average	336.43	461.63	72.46	

Source:-Annual Report of BPC 2064/65 to 2068/69

Above table shows that, the ratio is fluctuating trend of BPC (i.e.83.92, 67.69, 49.45, 67.99 and 93.26)%. The company increase it's sales every year but it's NPAT is fluctuating. In third year NPAT is decrease but other year NPAT is increasing trend. an average ratio is 72.46%, which indicates, the company able to get profit 72.46% out of it's total sales.

Table No. 28
Net Profit Margin Ratio of CHPCL

(In Rs million)

Fiscal year	Net profit after tax	Sales	Ratio(In %)	% change of Ratio
2064/65	679.37	870.01	78.08	
2065/66	735.36	883.45	83.23	6.95
2066/67	777.43	886.56	87.70	5.37
2067/68	843.14	885.05	95.26	8.62
2068/69	945.32	900.64	104.96	-10.18
Total	3980.62	4425.71	449.23	
Average	796.12	885.14	89.84	

Source:-Annual Report of CHPCL 2064/65 to 2068/69

Above table shows that, the ratio is increasing trend(i.e. 78.08, 83.23, 87.70, 95.26 and 104.96)%. The company increased it's sales except fourth year. In fourth year sales was decreased slightly but NPAT is increase in every year. An average ratio is 89.84%, which indicates the company able to get 89.84% profit over it's sales.

4.2.4.4 Gross Profit Margin

Gross profit means that profit which is gain after less cost of sales from total sales. This ratio indicates that the ability of a firm to earn gross profit. If gross profit ratio is higher, it shows the company able to operate with low level of selling cost. This ratio shows the relationship between gross profits with sales. It measures the firm's ability to earn each rupee of sales in to gross profit. This ratio obtains by gross profit divided by sales.

Table No. 29
Gross Profit Margin Ratio of BPC

(In Rs Thousand)

Fiscal year	Gross profit	Sales	Ratio(in %)	% change of Ratio
2064/65	290.748	421.69	68.95	
2065/66	293.609	430.80	68.15	-1.16
2066/67	246.709	453.43	54.41	-20.16
2067/68	252.206	483.78	52.13	-4.19
2068/69	272.282	518.43	52.52	0.75
Total	1355.554	2308.13	296.16	
Average	271.11	461.63	59.232	

Source:-Annual Report of BPC 2064/65 to 2068/69

According to above table, the ratio is decreasing trend of BPC except fifth year. In fifth year increase ratio slightly (i.e. 68.95, 68.15, 54.41, 52.13 and 52.52). The company increased sales every year and gross profit also increase except third year. An average ratio is 59.232%, which indicates that the company able to earn 59.232% gross profit out of total sales.

Table No. 30
Gross Profit Margin Ratio of CHPCL

(In Rs million)

Fiscal year	Gross profit	Sales	Ratio(In %)	% change of Ratio
2064/65	807.73	870.01	92.84	
2065/66	825.31	883.45	93.42	0.62
2066/67	813.83	886.56	91.80	-1.73
2067/68	810.95	885.05	91.63	-0.18
2068/69	797.88	900.64	88.60	-3.30
Total	4055.70	4425.71	458.29	
Average	811.14	885.14	91.66	

Source:-Annual Report of CHPCL 2064/65 to 2068/69

Above table shows that, the ratio is fluctuating trend of CHPCL. In second year ratio is increase and then decrease every year (i.e. 92.84, 93.42, 91.80, 91.63 and 88.60)%. The company increase it's sales every year except fourth year and gross profit decrease except second year. The company has 91.66% an average, which indicates the company able to gain gross profit 91.66% of it's total sales.

4.2.5. Efficiency of Working Capital

Every company invests funds on various assets, like current assets, fixed assets intangible assets etc. Among them current assets is most important for day to day transaction. Current assets also known as working capital which is make maximum sales and earn profit. The efficiency measure which assets are managed directly affects the volume of sales. High proportion of current assets indicates the company adopted liberal policy on working capital or the company has more liquidity position. In this topic to know the company can take efficiency of working capital or not. Some turnover ratio is used for test the efficiency of working capital which are as follows:-

4.2.5.1. Inventory turnover ratio.

4.2.5.2. Debtors turnover ratio.

4.2.5.3. Cash turnover ratio

4.2.5.4. Total current assets turnover ratio.

4.2.5.1 Inventory Turn over Ratio

The inventory is low liquid current assets. This ratio shows the relationship between inventory and sales. This ratio indicates how frequently inventory moved in -out of company during period. This ratio obtains by sales divided by inventory.

Table No. 31
Inventory Turn Over Ratio of BPC

(In Rs Thousand)

Fiscal year	Sales	Inventory	Ratio(in times)	% Change of Ratio
2064/65	421.69	74.65	5.65	
2065/66	430.80	92.72	4.65	-17.69
2066/67	453.43	104.54	4.34	-6.67
2067/68	483.78	83.41	5.80	33.64
2068/69	518.43	42.86	12.10	108.62
Total	2308.13	398.18	32.54	
Average	461.63	79.64	6.508	

Source:-Annual Report of BPC 2064/65 to 2068/69

According to above table shows that, the ratio of BPC is fluctuating trend. Up to third year ratio is decrease but fourth and fifth year ratio is increase (i.e. 5.65, 4.65, 4.34, 5.80 and 12.10). The company increase sales in every year but inventory are increase up to third year and decrease in fourth and fifth year. The company holds very low level of inventory to compare with sales. Average ratio of BPC is 6.508, which indicates company turnover it's inventory 6.508 times in a year.

Table No. 32
Inventory Turnover Ratio of CHPCL

(In Rs million)

Fiscal year	Sales	Inventory	Ratio(In times)	% change of Ratio
2064/65	870.01	22.32	38.98	
2065/66	883.45	36.89	23.95	-38.55
2066/67	886.56	30.90	28.69	19.79
2067/68	885.05	53.46	16.55	-42.31
2068/69	900.64	42.11	21.39	29.24
Total	4425.71	185.68	129.56	
Average	885.14	37.14	25.912	

Source:-Annual Report of CHPCL 2064/65 to 2068/69

Above table shows that, the ratio of CHPCL is fluctuating trend (i.e. 38.98, 23.95, 28.69, 16.55 and 21.39). The company increase sales every year except fourth year but inventory is fluctuating. The company holds very low level of inventory, it is not goods manufacturing company so, it has no more inventories. An average ratio is 25.912, which indicates the company turnover it's inventory within a year is 25.912 times.

4.2.5.2 Debtors Turnover Ratio (DTR)

Debtors mean that assets which are receivable amount by debtors or customers. Debtors turnover ratio is a important measure of efficiency of working capital management which indicates the efficiency with which debtors are being utilized in the company. This ratio is expressed in the number of times the debtors turned over during a period. This ratio obtains by sales divided by debtors.

Table No .33
Debtors Turn Over Ratio of BPC

(In Rs Thousand)

Fiscal year	Sales	Debtors	Ratio(in times)	% Change of Ratio
2064/65	421.69	88.41	4.77	
2065/66	430.80	171.36	2.51	-47.38
2066/67	453.43	93.69	4.84	92.82
2067/68	483.78	184.14	2.63	-45.66
2068/69	518.43	283.63	1.83	-30.42
Total	2308.13	821.23	16.58	
Average	461.63	164.25	3.316	

Source:-Annual Report of BPC 2064/65 to 2068/69

According to above table, the ratio of BPC is fluctuating trend over the study period (i.e. 4.77, 2.51, 4.84, 2.63 and 1.83). The company increase sales every year but debtors are fluctuating. High level of ratio is favorable. Debtors

increase in second year, then decrease in third year then increase fourth and fifth year. Average ratio is 3.316 which indicate the company turnover it's debtors in 3.316 times in a year.

Table No. 34

Debtors Turnover Ratio of CHPCL

(In Rs million)

Fiscal year	Sales	Debtors	Ratio(In times)	% change of Ratio
2064/65	870.01	189.69	4.59	
2065/66	883.45	108.66	8.13	77.12
2066/67	886.56	209.48	4.23	-47.97
2067/68	885.05	205.20	4.31	1.89
2068/69	900.64	209.75	4.29	-0.46
Total	4425.71	922.78	25.55	
Average	885.14	184.56	5.11	

Source:-Annual Report of CHPCL 2064/65 to 2068/69

Above table shows that, the ratio of CHPCL is fluctuating trend over the study period (i.e. 4.59, 8.13, 4.23, 4.31 and 4.29). The company has fluctuates it's debtors but sales is increasing trend every year except fourth year. High level of ratio is favorable. Average ratio of CHPCL is 5.11, which indicates the company turnover it's debtors in 5.11 times.

4.2.5.3 Cash Turn Over Ratio

Cash turnover ratio measures the at what times cash moved or turn over in a period. Higher ratio is favorable it indicates the company can turnover it's cash properly. It shows the ability or efficiency of company to utilize the cash. This ratio obtained by sales divided by cash:

Table No. 35
Cash Turn Over Ratio of BPC

(In Rs. million)

Fiscal year	Sales	Cash	Ratio(in times)	% change of Ratio
2064/65	421.69	412.64	1.02	
2065/66	430.80	291.69	1.48	45.09
2066/67	453.43	234.89	1.93	30.40
2067/68	483.78	44.90	10.77	458.03
2068/69	518.43	322.80	1.61	-85.05
Total	2308.13	1306.92	16.81	
Average	461.63	261.38	3.362	

Source:-Annual Report of BPC 2064/65 to 2068/69

According to above table shows that, the ratio of BPC is increasing trend except fifth year (i.e. 1.02, 1.48, 1.93, 10.77 and 1.61). The company decrease cash every year but it increase in fifth year. So, fifth year ratio is decrease. In fourth year the company decrease it cash very low than other year, so ratio of this year is highest but the company increase sales every year. Average ratio is 3.362, which indicates the company turnover it's cash in 3.362 times.

Table No. 36
Cash Turnover Ratio of CHPCL

(In Rs Million)

Fiscal year	Sales	Cash	Ratio(In times)	% change of Ratio
2064/65	870.01	277.11	3.14	
2065/66	883.45	248.47	3.56	13.37
2066/67	886.56	44.13	20.09	464.32
2067/68	885.05	73.46	12.05	-40.02
2068/69	900.64	304.17	2.96	-75.43
Total	4425.71	947.34	41.80	
Average	885.14	189.47	8.36	

Source:-Annual Report of CHPCL 2064/65 to 2068/69

Above table shows that, the ratio of CHPCL is fluctuating trend. In second year ratio is decrease but third year is increase then fourth and fifth year decrease (i.e. 3.14, 3.56, 20.09, 12.05 and 2.96). In third year the company has very low level of cash so, this year's ratio is very high, Cash decrease every year except fifth year, sales also increase every year except fourth year. Average ratio is 8.36, which indicates the company turnover cash 8.36 times in a year.

4.2.5.4 Total Current Assets Turnover Ratio

The overall efficiency of working capital management of companies can be measured by current assets turnover ratio which indicates how efficiently the short term funds have been employed by companies for maximizing profitability with a given level of risk. The higher ratio indicates that the lower the investment in short term funds and hence greater the profit. This ratio shows the relationship between current assets and sales. How much current assets needed for sales maximization. This ratio calculated sales divided by current assets.

Table No. 37

Total Current Assets Turn Over Ratio of BPC

(In Rs. million)

Fiscal year	Sales	Total Current Assets	Ratio(in times)	% change of Ratio
2064/65	421.69	746.14	0.56	
2065/66	430.80	743.84	0.58	2.48
2066/67	453.43	651.52	0.69	20.20
2067/68	483.78	600.40	0.81	15.80
2068/69	518.43	1023.85	0.51	-37.22
Total	2308.13	3765.75	3.15	
Average	461627.6	753.15	0.63	

Source:-Annual Report of BPC 2064/65 to 2068/69

According to above table shows that, the ratio of BPC is increasing trend except fifth year (i.e. 0.56, 0.58, 0.69, 0.81 and 0.51). The company decrease

it's current assets every year except fifth year. In fifth year the company increase it's current assets but sales is increase in every year. So, it's ratio is very low level. Average ratios are 0.63 which indicates the company has low turnover ratio. It means the company can turnover it's current assets slowly. The company not able to move it's assets properly, high level of ratio is favorable.

Table No. 38

Total Current Assets Turnover Ratio of CHPCL

(In Rs million)

Fiscal year	Sales	Current Assets	Ratio(In times)	% change of Ratio
2064/65	870.01	646.23	1.35	
2065/66	883.45	995.07	0.89	-34.02
2066/67	886.56	1450.09	0.61	-31.20
2067/68	885.05	2046.28	0.43	-29.30
2068/69	900.64	3124.28	0.29	-33.33
Total	4425.71	8261.95	3.57	
Average	885.14	1652.39	0.71	

Source:-Annual Report of CHPCL 2064/65 to 2068/69

Above table shows that, the ratio of CHPCL is decreasing trend in every year (i.e. 1.35,0.89, 0.61, 0.43 and 0.29). The company increase it's current assets every year but sales also increasing every year except in fourth year. The increasing percentage of current assets is higher than increasing percentage of sales. Average ratio of CHPCL is 0.71 which is very low turnover it's current assets.

4.3. Statistical Tools

Every research has analysis with some financial and statistics tools. According to financial tools describe in above now analysis by statistical tools. For

statistical tools I take coefficient of correlation and hypothesis for relation analysis of variables.

According to the Carl Pearson's coefficient of correlation denoted by (r) which lies between always -1 to +1. Coefficient of correlation shows the relation of two or more two variables each other. If $r = +1$, then there is positively perfect relation between two variables and if $r = -1$, then there is negatively perfect relation between two variables.

According to test of hypothesis, if sample size is less than 30, t-test is used. In order to apply t-test in the context of small sample, the t-value is calculated first and compared with the table value of t at a certain level of significance (at 5%) for given degree of freedom (d.f) . If calculated value is greater than tabulated value that is null hypothesis (H_0) is rejected and if calculated value is less than tabulated value that null hypothesis (H_0) is accepted.

4.3.1. Liquidity position.

4.3.2. Composition of working capital.

4.3.3. Profitability position.

4.3.4. Efficiency of working capital.

4.3.1.1 Current Assets and Current Liabilities

The correlation coefficient of the Current Assets and Current Liabilities test them using student's t-test value at 5% level of significance with $3 = (5 - 2)$ degree of freedom.

**The correlation coefficient of current assets & current liabilities,
calculated student's t-value & table value**

Company	r	Calculated t-value	Table t-value	d.f. (n-2)	Result
BPC	0.26	0.4663	3.182	3	Not Significant
CHPCL	-0.76	2.0254	3.182	3	Not Significant

(source : Appendix No.1)

BPC - Above table, the correlation coefficient between current assets and current liabilities is 0.26, which indicates that there is positive relation between these two variables. Testing the hypothesis, the calculated value is less than tabulated value (i.e. $0.4663 < 3.182$), so, null hypothesis is accepted, it shows that there is no significant relation between these two variables of BPC.

CHPCL - Above table, the correlation coefficient between current assets and current liabilities is -0.76, which indicates that there is negative relation between these two variables. Testing the hypothesis, the calculated value is less than tabulated value (i.e. $-2.0254 < 3.182$). So, null hypothesis is accepted, it shows that there is no significant relation between these two variables of CHPCL.

4.3.1.2 Quick Assets and Current Liabilities

The correlation coefficient of the quick assets and current liabilities test them using student's t-test value at 5% level of significance with $3=(5-2)$ degree of freedom.

The correlation coefficient of quick assets & current liabilities, calculated student's t-value & table value

Company	r	Calculated t-value	Table t-value	d.f. (n-2)	Result
BPC	0.205	0.3627	3.182	3	Not Significant
CHPCL	-0.77	2.0903	3.182	3	Not Significant

(Source: Appendix No.2)

BPC- Above table shows that, the correlation coefficient between quick assets and current liabilities is 0.205, which indicates that there is positive relation between these two variables. For hypothesis, the calculated value is less than tabulated value (i.e. $0.3627 < 3.182$). So, null hypothesis is accepted. It shows that there is no significant relation between these two variables of BPC

CHPCL Above table shows that, the correlation coefficient between quick assets and current liabilities is -2.0903, which indicates that there is negative relation between these two variables. For hypothesis, the calculated value is less than tabulated value (i.e. $-2.0903 < 3.182$). So, null hypothesis is accepted. It shows that there is no significant relation between these two variables of CHPCL.

4.3.2.1 Current Assets and Total Assets

The correlation coefficient of the current assets and total assets test them using student's t-test value at 5% level of significance with $3 = (5-2)$ degree of freedom.

The correlation coefficient of current assets & total assets, calculated student's t-value & table value

Company	r	Calculated t-value	Table t-value	d.f. (n-2)	Result
BPC	1.30	2.7127	3.182	3	Not Significant
CHPCL	0.99	12.1608	3.182	3	Significant

(source : Appendix No.3)

BPC -The above table shows that, the correlation coefficient between current assets and total assets of BPC is 1.30, which indicates that there is highly positive relation between these two variables. For hypothesis, the calculated value is less than tabulated value (i.e. $1.30 < 3.182$). So, null hypothesis is accepted. It shows that there is no significant relation between these two variables of BPC.

CHPCL- The above table shows that, the correlation coefficient between current assets and total assets of CHPCL is 0.99, which indicates that there is positive relation between these two variables .For hypothesis, the calculated value is greater than tabulated value (i.e. $12.1608 > 3.182$). So, null hypothesis is rejected. It shows that there is significant relation between these two variables of CHPCL .In other words current assets affected to total assets.

4.3.2.2 Current Assets and Fixed Assets

The correlation coefficient of the current assets and total assets test them using student's t-test value at 5% level of significance with $3=(5-2)$ degree of freedom.

The correlation coefficient of current assets & fixed assets, calculated student's t-value & table value

Company	r	Calculated t-value	Table t-value	d.f. (n-2)	Result
BPC	0.84	2.6818	3.182	3	Not Significant
CHPCL	0.98	8.5337	3.182	3	Significant

(source : Appendix No.4)

BPC -Above table shows that, the correlation coefficient between current assets and fixed assets of BPC is 0.84, which indicates that there is positive relation between these two variables .For hypothesis, the calculated value is less than tabulated value (i.e. $0.84 < 3.182$). So, null hypothesis is accepted . It shows that there is no significant relation between these two variables of BPC .

CHPCL- Above table shows that, the correlation coefficient between current assets and fixed assets of CHPCL is 0.98, which indicates that there is positive relation between these two variables .For hypothesis, the calculated value is greater than tabulated value (i.e. $8.5337 > 3.182$). So, null hypothesis is rejected. It shows that there is significant relation between these two variables of CHPCL.

4.3.2.3 Receivable and Total Assets

The correlation coefficient of the Receivable and total assets test them using student's t-test value at 5% level of significance with $3=(5-2)$ degree of freedom.

The correlation coefficient of receivable & total assets, calculated student's t-value & table value

Company	r	Calculated t-value	Table t-value	d.f. (n-2)	Result
BPC	1.17	3.3368	3.182	3	Significant
CHPCL	0.51	0.4386	3.182	3	Not Significant

(source : Appendix No.5)

BPC -Above table shows that, the correlation coefficient between receivable and total assets of BPC is 1.17, which indicates that there is highly positive relation between these two variables. For hypothesis, the calculated value is greater than tabulated value (i.e. $3.3368 > 3.182$). So, null hypothesis is rejected. It shows that there is significant relation between these two variables of BPC.

CHPCL- Above table shows that, the correlation coefficient between receivable and total assets of CHPCL is 0.51, which indicates that there is positive relation between these two variables. For hypothesis, the calculated value is less than tabulated value (i.e. $0.4386 < 3.182$). So, null hypothesis is accepted. It shows that there is no significant relation between these two variables of CHPCL.

4.3.2.4 Receivable and Current Assets

The correlation coefficient of the Receivable and current assets test them using student's t-test value at 5% level of significance with $3=(5-2)$ degree of freedom.

The correlation coefficient of receivable & current assets, calculated student's t-value & table value

Company	r	Calculated t-value	Table t-value	d.f. (n-2)	Result
BPC	0.71	1.7462	3.182	3	Not Significant
CHPCL	0.50	1.00	3.182	3	Not Significant

(source : Appendix No.6)

BPC - Above table shows that, the correlation coefficient between receivable and current assets of BPC is 0.71, which indicates that there is positive relation between these two variables. For hypothesis, the calculated value is less than tabulated value (i.e. $1.7462 < 3.182$). So, null hypothesis is accepted. It shows that there is no significant relation between these two variables of BPC.

CHPCL- Above table shows that, the correlation coefficient between receivable and current assets of CHPCL is 0.50, which indicates that there is positive relation between these two variables. For hypothesis, the calculated value is less than tabulated value (i.e. $1.00 < 3.182$). So, null hypothesis is accepted. It shows that there is no significant relation between these two variables of CHPCL.

4.3.2.5 Inventory and Current Assets

The correlation coefficient of the inventory and current assets test them using student's t-test value at 5% level of significance with $3=(5-2)$ degree of freedom.

The correlation coefficient of inventory & current assets, calculated student's t-value & table value

Company	r	Calculated t-value	Table t-value	d.f. (n-2)	Result
BPC	-0.86	1.732	3.182	3	Not Significant
CHPCL	0.66	1.5217	3.182	3	Not Significant

(Source: Appendix No.7)

BPC - Above table shows that, the correlation coefficient between inventory and current assets of BPC is -0.86, which indicates that there is negative relation between these two variables. By considering the t-test, the calculated value is less than tabulated value (i.e. $-1.732 < 3.182$). So, null hypothesis is accepted. It shows that there is no significant relation between these two variables of BPC.

CHPCL- Above table shows that, the correlation coefficient between inventory and current assets of CHPCL is 0.66, which indicates that there is positive relation between these two variables. By considering the t-test, the calculated value is less than tabulated value (i.e. $1.5217 < 3.182$). So, null hypothesis is accepted. It shows that there is no significant relation between these two variables of CHPCL.

4.3.2.6 Inventory and Total Assets

The correlation coefficient of the inventory and total assets test them using student's t-test value at 5% level of significance with $3=(5-2)$ degree of freedom.

The correlation coefficient of inventory & total assets, calculated student's t-value & table value

Company	r	Calculated t-value	Table t-value	d.f. (n-2)	Result
BPC	0.43	0.8249	3.182	3	Not Significant
CHPCL	0.63	1.4052	3.182	3	Not Significant

(source : Appendix No.8)

BPC - Above table shows that, the correlation coefficient between inventory and total assets of BPC is 0.43, which indicates that there is positive relation between these two variables. By considering the t-test, the calculated value is less than tabulated value (i.e. $0.8249 < 3.182$). So, null hypothesis is accepted. It shows that there is no significant relation between these two variables of BPC.

CHPCL- Above table shows that, the correlation coefficient between inventory and total assets of CHPCL is 0.63, which indicates that there is positive relation between these two variables. By considering the t-test, the calculated value is less than tabulated value (i.e. $1.4052 < 3.182$). So, null hypothesis is accepted. It shows that there is no significant relation between these two variables of CHPCL.

4.3.2.7 Cash and Bank Balance and Total Assets

The correlation coefficient of the cash and bank balance and total assets test them using student's t-test value at 5% level of significance with $3=(5-2)$ degree of freedom.

The correlation coefficient of Cash and Bank Balance & total assets, calculated student's t-value & table value

Company	r	Calculated t-value	Table t-value	d.f. (n-2)	Result
BPC	-0.32	0.5849	3.182	3	Not Significant
CHPCL	0.09	0.1565	3.182	3	Not Significant

(source : Appendix No.9)

BPC - Above table shows that, the correlation coefficient between cash and bank balance and total assets of BPC is -0.32, which indicates that there is negative relation between these two variables. By considering the t-test, the calculated value is less than tabulated value (i.e. $-0.5849 < 3.182$). So, null hypothesis is accepted. It shows that there is no significant relation between these two variables of BPC.

CHPCL- Above table shows that, the correlation coefficient between cash and bank balance and total assets of CHPCL is 0.09, which indicates that there is positive relation between these two variables. By considering the t-test, the calculated value is less than tabulated value (i.e. $0.1565 < 3.182$). So, null

hypothesis is accepted. It shows that there is no significant relation between these two variables of CHPCL.

4.3.2.8 Cash and Bank Balance and Current Assets

The correlation coefficient of the cash and bank balance and current assets test them using student's t-test value at 5% level of significance with $3=(5-2)$ degree of freedom.

The correlation coefficient of Cash and Bank Balance & current assets, calculated student's t-value & table value

Company	r	Calculated t-value	Table t-value	d.f. (n-2)	Result
BPC	0.57	1.2016	3.182	3	Not Significant
CHPCL	0.05	0.0867	3.182	3	Not Significant

(source : Appendix No.10)

BPC - Above table shows that, the correlation coefficient between cash and bank balance and current assets of BPC is 0.57, which indicates that there is positive relation between these two variables. For the t-test, the calculated value is less than tabulated value (i.e. $1.2016 < 3.182$). So, null hypothesis is accepted. It shows that there is no significant relation between these two variables of BPC.

CHPCL- Above table shows that, the correlation coefficient between cash and bank balance and current assets of CHPCL is 0.05, which indicates that there is positive relation between these two variables. For the t-test, the calculated value is less than tabulated value (i.e. $0.0867 < 3.182$). So, null hypothesis is accepted. It shows that there is no significant relation between these two variables of CHPCL.

4.3.3. Profitability Position

4.3.3.1 Net Profit after Tax and Working Capital

The correlation coefficient of the net profit after tax and working capital test them using student's t-test value at 5% level of significance with $3=(5-2)$ degree of freedom.

The correlation coefficient of net profit after tax and working capital, calculated student's t-value & table value

Company	r	Calculated t-value	Table t-value	d.f. (n-2)	Result
BPC	0.84	2.6817	3.182	3	Not Significant
CHPCL	0.99	12.1607	3.182	3	Significant

(source : Appendix No.11)

BPC - Above table shows that, the correlation coefficient between net profit after tax and working capital of BPC is 0.84, which indicates that there is positive relation between these two variables. For the t-test, the calculated value is less than tabulated value (i.e. $2.6817 < 3.182$). So, null hypothesis is accepted. It shows that there is no significant relation between these two variables of BPC.

CHPCL- Above table shows that, the correlation coefficient between net profit after tax and working capital of CHPCL is 0.99, which indicates that there is positive relation between these two variables. For the t-test, the calculated value is greater than tabulated value (i.e. $12.1607 > 3.182$). So, null hypothesis is rejected. It shows that there is significant relation between these two variables of CHPCL.

4.3.3.2 Net Profit After Tax and Total Assets

The correlation coefficient of the net profit after tax and total assets test them using student's t-test value at 5% level of significance with $3=(5-2)$ degree of freedom.

The correlation coefficient of net profit after tax and total assets, calculated student's t-value & table value

Company	r	Calculated t-value	Table t-value	d.f. (n-2)	Result
BPC	0.74	1.9055	3.182	3	Not Significant
CHPCL	0.99	12.1607	3.182	3	Significant

(source : Appendix No.12)

BPC - Above table shows that, the correlation coefficient between net profit after tax and total assets of BPC is 0.74, which indicates that there is positive relation between these two variables. For the t-test, the calculated value is less than tabulated value (i.e. $1.9055 < 3.182$). So, null hypothesis is accepted. It shows that there is no significant relation between these two variables of BPC.

CHPCL- Above table shows that, the correlation coefficient between net profit after tax and total assets of CHPCL is 0.99, which indicates that there is positive relation between these two variables. For the t-test, the calculated value is greater than tabulated value (i.e. $12.1607 > 3.182$). So, null hypothesis is rejected. It shows that there is significant relation between these two variables of CHPCL.

4.3.3.3 Net Profit After Tax and Sales

The correlation coefficient of the net profit after tax and sales test them using student's t-test value at 5% level of significance with $3=(5-2)$ degree of freedom.

The correlation coefficient of net profit after tax and sales, calculated student's t-value & table value

Company	r	Calculated t-value	Table t-value	d.f. (n-2)	Result
BPC	0.64	1.4427	3.182	3	Not Significant
CHPCL	0.93	4.3829	3.182	3	Significant

(source : Appendix No.13)

BPC - Above table shows that, the correlation coefficient between net profit after tax and sales of BPC is 0.64, which indicates that there is positive relation between these two variables. For the t-test, the calculated value is less than tabulated value (i.e. $1.4427 < 3.182$). So, null hypothesis is accepted. It shows that there is no significant relation between these two variables of BPC.

CHPCL- Above table shows that, the correlation coefficient between net profit after tax and sales of CHPCL is 0.93, which indicates that there is positive relation between these two variables. For the t-test, the calculated value is greater than tabulated value (i.e. $4.3829 > 3.182$). So, null hypothesis is rejected. It shows that there is significant relation between these two variables of CHPCL.

4.3.4. Efficiency Of Working Capital

4.3.4.1 Sales and Inventory

The correlation coefficient of the sales and inventory test them using student's t-test value at 5% level of significance with $3=(5-2)$ degree of freedom.

The correlation coefficient of sales and inventory, calculated student's t-value & table value

Company	R	Calculated t-value	Table t-value	d.f. (n-2)	Result
BPC	-0.65	1.4815	3.182	3	Not Significant
CHPCL	0.57	1.2016	3.182	3	Not Significant

(source : Appendix No.14)

BPC - Above table shows that, the correlation coefficient between sales and inventory of BPC is -0.65, which indicates that there is negative relation between these two variables. For the t-test, the calculated value is less than tabulated value (i.e. $1.4815 < 3.182$). So, null hypothesis is accepted. It shows that there is no significant relation between these two variables of BPC.

CHPCL- Above table shows that, the correlation coefficient between sales and inventory of CHPCL is 0.57, which indicates that there is positive relation between these two variables. For the t-test, the calculated value is greater than tabulated value (i.e. $1.2016 > 3.182$). So, null hypothesis is accepted. It shows that there is no significant relation between these two variables of CHPCL.

4.3.4.2 Sales and Debtors/Receivable

The correlation coefficient of the sales and receivable test them using student's t-test value at 5% level of significance with $3=(5-2)$ degree of freedom.

The correlation coefficient of sales and receivable, calculated student's t-value & table value

Company	R	Calculated t-value	Table t-value	d.f. (n-2)	Result
BPC	0.84	2.6818	3.182	3	Not Significant
CHPCL	0.25	0.4472	3.182	3	Not Significant

(Source: Appendix No.15)

BPC - Above table shows that, the correlation coefficient between sales and receivable of BPC is 0.84, which indicates that there is positive relation between these two variables . For the t-test, the calculated value is less than tabulated value (i.e. $2.6818 < 3.182$). So, null hypothesis is accepted . It shows that there is no significant relation between these two variables of BPC .

CHPCL- Above table shows that, the correlation coefficient between sales and receivable of CHPCL is 0.25, which indicates that there is positive relation between these two variables . For the t-test, the calculated value is less than tabulated value (i.e. $0.4472 < 3.182$). So, null hypothesis is accepted . It shows that there is no significant relation between these two variables of CHPCL.

4.3.4.3 Sales and Cash and bank balance

The correlation coefficient of the sales and Cash and bank balance test them using student's t-test value at 5% level of significance with $3=(5-2)$ degree of freedom.

The correlation coefficient of sales and Cash and bank balance, calculated student's t-value & table value

Company	R	Calculated t-value	Table t-value	d.f. (n-2)	Result
BPC	-0.37	0.6898	3.182	3	Not Significant
CHPCL	0.03	0.0519	3.182	3	Not Significant

(Source: Appendix No.16)

BPC - Above table shows that, the correlation coefficient between sales and Cash and bank balance of BPC is -0.37, which indicates that there is negative relation between these two variables . For the t-test, the calculated value is less than tabulated value (i.e. $0.6898 < 3.182$). So, null hypothesis is accepted . It shows that there is no significant relation between these two variables of BPC .

CHPCL- Above table shows that, the correlation coefficient between sales and Cash and bank balance of CHPCL is 0.03, which indicates that there is positive relation between these two variables . For the t-test, the calculated value is less than tabulated value (i.e. $0.0519 < 3.182$). So, null hypothesis is accepted . It shows that there is no significant relation between these two variables of CHPCL.

4.3.4.4 Sales and Current Assets

The correlation coefficient of the sales and Current Assets test them using student's t-test value at 5% level of significance with $3=(5-2)$ degree of freedom.

The correlation coefficient of sales and Current Assets, calculated student's t-value & table value

Company	R	Calculated t-value	Table t-value	d.f. (n-2)	Result
BPC	0.51	1.0269	3.182	3	Not Significant
CHPCL	0.91	3.8015	3.182	3	Significant

(Source: Appendix No.17)

BPC - Above table shows that, the correlation coefficient between sales and current assets of BPC is 0.51, which indicates that there is positive relation between these two variables . For the t-test, the calculated value is less than tabulated value (i.e. $1.0269 < 3.182$). So, null hypothesis is accepted . It shows that there is no significant relation between these two variables of BPC .

CHPCL- Above table shows that, the correlation coefficient between sales and current assets of CHPCL is 0.91, which indicates that there is positive relation between these two variables . For the t-test, the calculated value is less than tabulated value (i.e. $3.8015 < 3.182$). So, null hypothesis is rejected . It shows that there is significant relation between these two variables of CHPCL.

4.4. Major Findings

On the basis of the interpretation and evaluation of the method of analysis financial statement during the study period some factors obtained, which are as follows :

4.4.1 Working capital structure

According to working capital structure the CHPCL is stronger than BPC because CHPCL maintain 43% working capital of it's total assets and BPC maintain only 27% working capital of it's total assets. BPC holds large amount of cash and bank balance than other current assets but CHPCL holds large amount of advance and short term investment than other current assets. Both company holds lower level of inventory but BPC holds high level than CHPCL. BPC holds high level of cash and bank balance than CHPCL.

4.4.2. Liquidity position

4.4.2.1 Current Ratio

Current ratio is fluctuating trend of BPC but increasing trend of CHPCL. According to this ratio, CHPCL holds large amount of current assets than current liability. It increase the current assets every year but current liability decrease, So it's current ratio is very high than the standard. The standard of current ratio is 2:1 but this company's average ratio is 12.86, but the BPC, it has slightly difference between it's current assets and current liabilities, So it's current ratio is less than standard i.e. 1.28. According to correlation analysis the current assets and current liability of BPC is positive but CHPCL is negative relation. If BPC increase the current assets than current liability also increase but CHPCL increase current assets it does not affect the current liabilities. For hypothesis analysis both company has no significant relation between current assets and current liability.

4.4.2.2 Quick Ratio

Quick ratio is fluctuating trend of BPC but increasing trend of CHPCL. BPC holds slightly high level of quick assets than current liability so its quick ratio is slightly higher than standard. The standard of quick ratio is 1:1, but the CHPCL holds high amount of quick assets but the smaller amount of liabilities. So, its quick ratio is higher than standard i.e. 12.60 but BPC is only 1.146. Quick assets and current liability, there is positive relation of BPC but negative relation of CHPCL. It shows that CHPCL'S current liabilities does not affect its current assets as well as quick assets but BPC's current liability affect the current assets and quick assets. There is no significant relation between these two variables of both company by hypothesis analysis.

4.4.3. Composition of working capital

4.4.3.1 Current assets to total assets

BPC holds decreasing trend of its current assets every year except fifth years but increase the total assets. CHPCL increase both assets current and total. So, BPC's ratio is decreasing trend but CHPCL is increasing trend. CHPCL invest high level of current assets than BPC. Correlation of both variable of both company is positive (i.e. 1.30 and 0.99) respectively, by testing the hypothesis BPC has no significant relation between two variable but CHPCL has significant relation between these two variables.

4.4.3.2 Current Assets to Fixed Assets

According to this ratio shows that the ratio is decreasing trend of BPC but increasing trend of CHPCL. Current assets is decrease in every year except fifth year of BPC but fixed assets is increase in every year. so, current assets not affect fixed assets. But CHPCL increase current assets every year but decrease fixed assets every year it also current assets not affect to fixed assets.

By calculate correlation of current assets and fixed assets of BPC is positive but CHPCL is negative (i.e. 0.84 and -0.98) respectively. While testing the t-test, there is no significant relation between two variables of BPC but significant relation of CHPCL.

4.4.3.3 Receivable To Total Assets

This ratio is fluctuating trend of both company. The percentage of receivable in total assets of BPC is only 5.6% and CHPCL is 5%. It indicates that both company has not more receivable. It is favorable for both company. Receivable does not more affect to total assets of both company. Calculation of correlation both company has positive relation(i.e. 1.17 and 0.51) respectively. It indicates receivable not effect highly but relation keeps positive if both company. while testing t- test, relation of two variable of BPC is significant but CHPCL is not significant.

4.4.3.4 Receivable and current assets

According to ratio analysis both company has fluctuating trend of ratio. BPC invest more amount in receivable than CHPCL. An average BPC has 21% and CHPCL has 14.2% receivable overall the study period in current assets. Receivable effect to current assets for both company than total assets of both company because receivable to total assets is lower than receivable to current assets. By calculation of correlation, there is positive relation between two variables of both company(i.e. 0.71 and 0.50) respectively. while testing the t-test, both company's null hypothesis is accepted and there is no significant relation between receivable and current assets.

4.4.3.5 Inventory and current assets

According to ratio analysis both company invest or holds minimum amount of inventory. Both company are not goods manufacturing company, so they have no Hugh amount of inventory. Inventory does not significant effect to the current assets of BPC because inventory increase up to three years but current

assets is decrease and decrease inventory in fourth and fifth year but the current assets is increase. Average ratio of BPC is only 11%. CHPCL's inventory is fluctuating in over the period but current assets is increase every year. CHPCL holds an average only 2.6% of inventory in total current assets. BPC holds more inventory than CHPCL.

According to calculation of correlation, there is negative relation of these two variable of BPC (i.e.-0.86) but positive relation of CHPCL

(i.e.0.66). while testing the t-test, both company's null hypothesis is accepted and there is no significant relation between these two variables.

4.4.3.6 Inventory and Total assets

Both companies holds very minimum level of inventory all of total assets. Inventory does not significant effect to the total assets of both companies. Inventory increase or decrease but total assets is increase in every year of both companies. BPC invest only 3.2% and CHPCL invest only 2% total assets. It shows that both companies manage a good inventory management or maintain a minimum level of Inventory. Both company holds very minimum level of working capital. By calculation of correlation between these two variables is positive relation of BPC and CHPCL(i.e. 0.43 and 0.63) respectively. By testing the t-test, there is no significant relation between these two variable of both company.

4.4.3.7 Cash and Bank Balance and total assets

According to calculation of ratio analysis, the ratio is decreasing trend up to fourth year but in fifth year ratio is slightly increase of BPC. BPC decrease it's cash and bank balance up to fourth year but it's total assets increase in every year. CHPCL's ratio also decreasing trend, it also fluctuating over the study period. Both company holds very low level of cash and bank balance. BPC holds only 10.56% cash and bank balance and CHPCL holds only 5.26% of total assets. Both company maintain very sound management of it's cash and

bank balance. By calculation of correlation, negative relation of these two variable of BPC and positive relation of CHPCL(i.e. -0.32 and 0.09) respectively. while testing t-test, both company's null hypothesis is accepted it means there is no significant relation between these two variables of both companies.

4.4.3.8 Cash and Bank Balance and Current Assets

According to financial statement of BPC, it decrease the cash and bank balance up to fourth years but increase in fifth year as well as current assets also decrease up to fourth year and increase in fifth year. It's ratio also like same as. According to CHPCL's financial statement, it decrease it's cash and bank balance up to third year then increase but current assets increase in every years. An average the proportion of cash and bank balance of BPC is 33.90% overall it's current assets but CHPCL's is only 16.84%. It indicates that the BPC is used more level of cash than CHPCL. By analysis of correlation, both company has positive relation between these two variables(i.e. 0.57 and 0.05) respectively. Both company's null hypothesis is accepted, it means there is no significant relation between these two variables. For total current assets is more affected by cash and bank balance of BPC than CHPCL.

4.4.4. Profitability Position

4.4.4.1 Return on Working Capital

According to financial statement of BPC and CHPCL, the ratio of return on working capital is fluctuating trend of BPC but decreasing trend of CHPCL. BPC decrease it's working capital up to fourth year, increase in fifth year, but profit is decrease up to third year and increase in fourth and fifth year. CHPCL increase it's working capital every year and NPAT also increase in every year but every year ratio is decrease (i.e.105.13% to 30.26%) because the portion of increasing working capital is higher than NPAT of CHPCL. An average ratio of return of BPC is 44.618% and CHPCL is 60.82%. By calculation of

correlation, both company has positive relation between two variables (i.e.0.84 and 0.99) respectively. while test the t- test, BPC has null hypothesis is accepted, it means there is no significant relation between two variables but CHPCL has null hypothesis is rejected, it means there is significant relation between two variables.

4.4.4.2 Return on Total Assets

According to financial statement of BPC and CHPCL, the ratio of return on total assets is fluctuating trend of BPC but decreasing trend of CHPCL, BPC increase it's total assets every year but NPAT is decrease up to third year and increase in fourth and fifth year. BPC ratio also decrease up to third year and increase fourth and fifth year. CHPCL increase it's total assets every year and NPAT also increase but it's ratio is decrease every year because the percentage change of total assets is higher than NPAT. The average ratio of CHPCL is higher than BPC(i.e. 21.306% >12.442%). By analysis of correlation, both company has positive relation of these two variables (i.e.0.74 and 0.99) respectively. Every company total assets effects to the profit. while testing the t-test, there is no significant relation between two variables of BPC but significant relation between these two variables of CHPCL.

4.4.4.3 Net Profit Margin Ratio

According to ratio analysis, BPC has fluctuating trend, ratio is decrease up to third year then increase in fourth and fifth year. BPC increase it's sales every year over study period but NPAT increase only fourth and fifth year. It shows that in this period the company has more operating expenses. An average ratio of company is 72.46%, It is not lower level percentage of profit. CHPCL's ratio is increasing trend it's ratio percentage is very high. In fifth year it's profit percentage is more than 100% because I take only sale of electricity but on company's income statement company keeps other extra income also. Mainly this company is seller of electricity so, I take only electricity sale not other. It's sales and profit both are increase in every year. It's average sales is 885.14 and

profit is 796.12. Calculation of correlation, both company has positive relation between sale and profit (i.e.0.64and 0.93) respectively. while testing the t-test, there is no significant relation between these two variable of BPC but significant relation of CHPCL.

4.4.4.4 Gross Profit Margin

According to financial statement of BPC and CHPCL, the gross profit margin ratio is decreasing trend of BPC except fifth year and CHPCL also decreasing trend except second year. BPC 's sales is increase in every but gross profit is fluctuating trend and CHPCL's sales also increase every year except fourth year but gross profit is decreasing trend except second year. An average ratio of BPC is 59.23% and CHPCL is 91.66%. CHPCL's gross profit is higher than BPC. According to correlation both company has negative relation between these two variables. while testing the t- test, both company's null hypothesis is accepted and there is no significant relation between these two variables.

4.4.5. Efficiency of Working Capital

4.4.5.1 Inventory Turnover

Inventory turnover ratio is fluctuating trend of both company. Both company holds very low level of inventory according to sales. Both company increase sales every year but inventory is fluctuating trend. Average of ratio is 6.508 times of BPC and 25.912 times of CHPCL, which indicates, the inventory turnover over the study period. According to calculation of correlation BPC has negative relation of both variables and positive relation of CHPCL (i.e. -0.65 and 0.57) respectively. while testing the t-test both company has null hypothesis is accepted and there is no significant relation between these two variables.

4.4.5.2 Debtors Turn Over

According to debtors turnover ratio fluctuating trend of BPC but CHPCL is like constant except second year. CHPCL's ratio is increase in second year then other year like same times turnover (i.e. around 4 times). Debtors is increase of BPC except third year but higher turnover times also is in this year. Both company has positive relation between these two variables (i.e. 0.84 and 0.25) respectively. while testing the t- test, both company null hypothesis is accepted and there is no significant relation between these two variables.

4.4.5.3 Cash Turnover

According to cash turnover ratio both company has fluctuating trend of ratio. BPC holds more cash than CHPCL. BPC holds cash relatively nearest with sales but CHPCL hold more difference with sales. So these company's ratio difference gap is very high (i.e. 10.77 to 1.02) of BPC and (i.e. 20.09 to 2.96) of CHPCL. Both company has increase sales every year but cash is fluctuating trend. BPC has negative relation between these two variables but CHPCL has positive relation between two variables. Both company's null hypothesis is accepted and there is no significant relation between two variables.

4.4.5.4 Total Current Assets Turnover

According to total current assets turnover ratio, increasing trend of BPC except fifth year but CHPCL has decreasing trend. BPC decrease current assets except fifth year but sales are increase every year. CHPCL increase current assets rapidly but sales increase slowly. So, the ratio is decrease of CHPCL. BPC invest high amount of current assets in fifth year but sales not increase highly. So, ratio decrease in this year. Both company has positive relation between two variables (i.e. 0.51 and 0.91) respectively. while testing the t-test BPC's calculation value is lower than tabulated value. So, null hypothesis is accepted and there is no significant relation between two variables but CHPCL is higher

than tabulated value s_0 , null hypothesis is rejected and there is significant relation between two variables.

CHAPTER - FIVE

SUMMARY, CONCLUSION AND RECOMMENDATION

This is the fifth and last steps of research work or thesis. This chapter attempts to summarize the whole study. This chapter is dedicated to provide conclusions after comparatively analyzing the working capital management of two hydro power company (i.e. BPC and CHPCL). This chapter also shows some recommendation.

5.1 Summary

The main objective of this study is to examine and find out the working capital management of both companies. This study mainly aims to identify the existing situation and to analyze the relation between different variable of working capital for the study period of BPC and CHPCL. The specific objectives of this study are (i) to determine the structure of working capital.(ii) to identify liquidity position of selected company.(iii) composition of working capital. (iv) to calculate the profitability position of both company.(iv) to assess the efficiency of working capital of selected company. To fulfill these objectives analyze some financial data by financial tools and statistical tools.

This study mainly deals about working capital management of selected hydro power company. For these objectives this study divided in to five chapter.

The first chapter focus on introduction of company and working capital and it's role in electricity in Nepal. BPC and CHPCL are main hydropower company in Nepal, these two company starts another subsidiaries company by themselves. In this chapter also deals statement of problems, objective of the study, significance of the study, limitation of the study, and organization of the study.

In second chapter deals review literature with general knowledge of working capital management, basic concept of working capital, need of working capital, policies of working capital, types of working capital factor affecting the determination of working capital, main this chapter review some literature and some thesis and research gap. The summarization of the period has been done to provide knowledge about the back ground of the work done by earlier researcher.

In third chapter, describe about whole study method by research methodology and this chapter also describe research design, nature and sources of data, data gathering or processing procedure and tools for data analysis. The data are obtain from secondary data. Financial and statistical tools are used for analysis. For financial tools ratio analysis and statistical average, correlation and hypothesis analysis are used.

In the fourth chapter, this is the most important chapter for study because in this chapter analysis of data. This chapter describe these topic: working capital structure, liquidity position of company, composition of working capital/ activity ratio, profitability position of both company, efficiency of working capital. For statistical tools average, correlation and hypothesis are used. The necessary data are obtain from the balance sheet and income statement of both company which are published in annual report(i.e.2064/65 to 2068/69).

5.2 Conclusion

In conclusion, it can be said that working capital is one of the most important parts of every company. This is a crucial capital, which is often compared to lifeblood of the human being. The proper management of working capital is necessary for day to day operation of every company because it plays vital role in success and failure of the organization. The role of working capital is more significant for every company irrespective to their nature. The researcher found some conclusion after descriptive and analytical study on the basis of past

historical data(i.e.2064/65 to 2068/69) of BPC and CHPCL. These following conclusions are found by researcher:

- i. Structure of working capital and liquidity position: - According to working capital structure, the CHPCL has more liquidity than BPC. An average CHPCL invest for inventory only 2.24% but BPC invest 10.57% out of total current assets. BPC use more liquid items for working capital i.e. cash but CHPCL use advance, deposit and short term investment. BPC invest for advance deposit only 32.91% but CHPCL invest 75.12%. CHPCL manage 43.12% of working capital but BPC manage 27.04% working capital out of total assets of both company. So, CHPCL has more liquidity position. Quick assets also higher of CHPCL than BPC. Current ratio and quick ratio both are higher of CHPCL than BPC. Current ratio of CHPCL has 12.86 and BPC has 1.28 an average. The standard of current ratio is 2:1 but CHPCL has very higher than standard but BPC has lower than standard. The standard of quick ratio is 1:1 but CHPCL ratio is higher than standard (i.e. 12.60:1) and BPC also slightly higher than standard (i.e. 1.146:1).
- (ii) Current assets does not affects to fixed assets of BPC because when current assets decrease then the fixed assets is increase but for CHPCL current assets not affect to fixed assets when current assets increase then fixed assets is decrease over the study year. Ratio is increasing trend of CHPCL but BPC also increasing trend except fifth year. BPC has 0.78 times of current assets of fixed assets and CHPCL has 0.92 times of current assets of fixed assets. BPC decrease it's current assets but fixed assets is increase but CHPCL has current assets is increase but fixed assets is decrease in every year.
- (iii) Account receivable/ Debtors of both company has more amount with Nepal electricity authority. Both company's most important debtors is Nepal electricity authority. According to DSO calculation BPC has more

DSO, which indicates BPC can not manage collection period. BPC has 125.402 days an average but CHPCL has only 74.278 days average. Nepal electricity authority is a major debtors of both company. Both company has fluctuating trend of receivable. BPC has 88.41 to 283.63 and CHPCL has 108.66 over the study period.

- (iv) Both company holds very low level of inventory. BPC holds an average 79.64 and CHPCL holds only 37.14m. Ratio also very low according with current and total assets. BPC holds minimum 42.86m. and highest is 104.54m. and CHPCL has minimum 22.32 and maximum is 53.46m. only. CHPCL maintain low level of inventory than BPC. Inventory is not important for both hydropower company. So. they maintain very small size, but for manufacturing company inventory keeps very important place.
- (v) Cash and bank balance is most important and liquid assets for working capital. This items is very liquid than other current assets. Both company decrease cash and bank balance up to fourth years but in fifth year both company increase cash and bank balance. BPC holds higher level of cash and bank balance than CHPCL. BPC holds an average 261.38mi. but CHPCL holds only 189.47mi. an average over the study period. Both company decrease cash every year except fifth year it means both company invest all of amount of cash except only keeps minimum requirement for transaction of company overall activities.
- (vi) CHPCL has higher percentage of return on working capital than BPC. CHPCL has 60.82% an average and BPC has 44. 618%. CHPCL increase it's working capital every year but BPC has fluctuating. Return on total assets ratio also not good because ratio is very low level (i.e. 9.58 to 17.77) an average is only 12 .442 which is low percentage of NPAT and total assets of BPC but CHPCL has slightly higher level an average 21.306%. Both company can not employed total assets properly Both

company increase total assets every year but NPAT is fluctuating of BPC but increasing trend of CHPCL. According to this, CHPCL is more able to get NPAT than BPC. NPAT and sales ratio of CHPCL is increasing trend but BPC is fluctuating. CHPCL's sales and NPAT both are increase but BPC has sales is increase but NPAT is fluctuating. Average ratio of BPC is 72.46 and CHPCL is 89.84%. The percentage of increasing NPAT is higher than sales of CHPCL but BPC is fluctuating NPAT but increasing sales. Gross profit and sales ratio also decreasing trend of both companies. BPC has 59.232 and CHPCL 91.66 an average, In comparison CHPCL is good. Both company has gross profit is fluctuated but Sales is increase. BPC's cost of sales is higher than CHPCL. The difference between sales and gross profit of BPC is higher than CHPCL. According to overall profitability ratio CHPCL is good than BPC.

Both company holds minimum inventory. BPC holds only 79.64mi. out of 461.63mi. sales an average. Ratio is fluctuates of both company. up to third year ratio is decrease and then increase of BPC. Sales is increase every year of both company but inventory is increase up to third year then decrease of BPC and every year fluctuates of CHPCL. CHPCL has inventory 185.68 out of sales 885.14 an average every year. So, inventory is not most important assets for both companies. Debtors turnover ratio also is very low, it means debtors are turnover very low in a year. Both company sales is increase every year but debtors is fluctuate and ratio also fluctuates. Both company has low level of turnover an average (i.e. 3.316 and 5.11) respectively. BPC turnover it's debtors only 3.316 times in a year and CHPCL 5.11 times. Collection policy of both company has liberal. Cash turnover ratio also both company has low. BPC has 3.362 an average and CHPCL has 8.36. CHPCL manage good turnover ratio than BPC. BPC used more amounts of cash than CHPCL. The percentage of cash is higher of BPC than CHPCL. An overall current assets turnover ratio of BPC is only 0.63 which is very low and CHPCL is 0.71 an average. BPC decrease current assets up to fourth year but in fifth year increase. Ratio of

BPC is very low below than one. CHPCL increase current assets every year and sales also increase. CHPCL manage it's current assets more efficiency than BPC. This ratio shows that efficiency of the firm. This ratio measure how much time the company can turnover it's assets in year for generate the sales. According to calculation of overall turnover ratio both company has low level of ratio. In between these two company CHPCL is higher manage than BPC.

5.3 Recommendation

According to analysis and findings of the study following recommendation are forwarded for the improvement of BPC and CHPCL:

i. Working capital structure

Both company manage some items for working capital structure. BPC manage highest amount of cash and bank balance for working capital management. High level of cash also not effective for company because high level of cash will be idle which increase cost of capital and low level also not good for company, which creates liquidity problems. which company may be goes to solvency. So, the company manage cash and other current assets at requirement level only. CHPCL invest highest level of amount by advance deposit and short term investment. CHPCL manage very low level of inventory because it is not goods manufacturing company. Inventory must be manage high level only goods manufacturing company. It has only 2.24% of total current assets. But advance deposit and short term investment is 75.12%, most of this amount deposit in bank which is not productive. If this amount invest other hydropower or invest on long term which creates more profit than bank interest rate.

(ii) Liquidity position

The current ratio and quick ratio of both company no meet the standard. The standard of current ratio is 2:1 and the standard of quick ratio is 1:1. Current ratio of BPC is lower than it's standard (i.e. $1.28 < 2:1$). BPC must be try to meet the standard. Current ratio of CHPCL is higher than it's standard (i.e.

12.86>2:1). CHPCL also must be try to maintain it's standard. Higher level of current assets also not benefits for the company because more assets increase the cost of and decrease the profit. Quick ratio also higher than standard of both company (i.e. 1.146 and 12.60) respectively. So, both company must be try to meet the standard.

(iii) Composition of working capital BPC and CHPCL both company increase debtors which is not good signal for company. If debtors increase, it means the amount is tied up on receivable. So, both company must be attention about collection of debtors. If possible cash sale of electricity if not so collection period manage in short period. BPC has 125.402 days an average DSO and CHPCL has 74.278 days, which is very longer period. BPC has two types of debtors which are Nepal electricity authority and Subsidiaries Company. Last year of study period most of the account receivable include kabeli energy limited which is it's joint venture company. But BPC must be managing how much amount invests for joint-venture Company. If invest was short term, the company must be collection on time but for new project company must be invest long term investment which is low risk than account receivable. CHPCL has most of the amount of account receivable is NEA. The DSO of CHPCL is 74.278, it must be decrease it's DSO. CHPCL invest most of the amount of current assets on short term investment which is all in bank. But, if company invest long term in hydropower it will be better for company as well as all of company. So, CHPCL invest high rate of return than bank interest rate. BPC also higher level of advance and deposit invest on current assets, but BPC also must be investing in long term investment for new hydropower construction. BPC cash and bank deposit also very high but it also must be invest in long term investment. Both company has minimum of inventory which is good. CHPCL use lower level of inventory than BPC. So, BPC also attention about inventory level.

(iv) Profitability Position

BPC decrease its working capital up to fourth year but return percentage is decrease up to third year and fifth year working capital increase but return percentage is decrease than fourth year. So, BPC must be maximum utilize working capital for NPAT. CHPCL increase its working capital every year but NPAT return percentage is decrease every year. CHPCL also not properly utilize its working capital. CHPCL also use its working capital for long term investment, which helps to earn maximum profit.

BPC has very lower percentage of return on total assets. Its average return percentage is only 12.442%. So, BPC must be utilize its total assets properly. BPC increase its total assets every year but NPAT is not increase so the company must be attention about it. CHPCL also increase its total assets and NPAT also increase every year but percentage of return is decrease every year. So, CHPCL utilize total assets maximum for gain additional profit.

BPC increase sales every year but NPAT increase only fourth year and fifth year. Return percentage decrease up to third year and fourth and fifth year increase. BPC 's expenditure also increase every year, so BPC must be minimize unnecessary expenditure and balance the NPAT return percentage. But CHPCL has increasing percentage of return every year, it has sales and NPAT are both increase every year.

The gross profit ratio of both company has decreasing trend, it means cost of sales of both company has increase every year. Both companies has sales increase every year but gross profit is decrease. So, both companies minimize cost of sales. Both companies must be attention about operating expenses.

iv. Efficiency of working capital

Both company are not goods manufacturing company. So, they manage very low level of inventory. Both company has fluctuating trend of inventory but sales is increasing trend which is good. CHPCL has more turnover ratio than BPC. CHPCL has low level of inventory than BPC, so it shows high turnover ratio. BPC also should try to maintain low level of inventory, only should try maintain minimum requirement level of inventory.

Both company has more level of receivable, which is not good for company. BPC has more receivable than CHPCL. NEA is a main debtors of both company. So, both company has more amount of receivable with NEA. Comparatively BPC has more amount of receivable from NEA. Since two years ago BPC can't collect it's total sales from NEA. So, BPC must be renew it's agreement with NEA. Now in between of BPC and NEA has a problem of PPA. BPC must be agreement with NEA ASAP. CHPCL also manage it's collection period in short term. These company must be attention about collection policy.

Both company has very low turnover ratio of cash. They cannot moved cash according to sales. BPC holds very high level of cash but it cannot increase sales or turn over cash. BPC must be invest it's cash for increasing sales. In comparatively CHPCL seems highly turnover it's cash than BPC. Both company invest all of own cash in short term as well as long term, do not kept cash idle.

Both company has total current assets is higher than sales, they cannot utilized assets properly. BPC has very low level of total current assets turnover ratio it means the company can not utilize it's assets. BPC must be utilized it's assets to generate or increasing sales. CHPCL also current assets turnover ratio is very low. CHPCL also seriously attention about it. This company sales is increasing trend but increasing percentage of current assets is higher than sales.

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**A STUDY ON WORKING CAPITAL MANAGEMENT OF BUTWAL
POWER COMPANY LIMITED & CHILIME HYDROPOWER
COMPANY LIMITED**

A THESIS

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*In partial fulfillment of the requirement for the degree of
Master of Business Studies (MBS)*

Kathmandu, Nepal

March, 2014

RECOMMENDATION

This is to certify that the thesis:

Submitted by:

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Entitled

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POWER COMPANY LIMITED and CHILIME HYDROPOWER COMPANY
LIMITED**

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

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VIVA-VOCE SHEET

We have conducted the Viva-Voce Examination of the thesis presented by

ARJUN GAUTAM

Entitled

A STUDY ON WORKING CAPITAL MANAGEMENT OF BUTWAL POWER COMPANY LIMITED and CHILIME HYDROPOWER COMPANY LIMITED

and found the thesis to be the original work of the student and written according to the prescribed format. We recommend the thesis to be accepted as partial fulfillment of the requirement for Master's Degree in Business Studies (M.B.S.)

Viva-Voice Committee

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DECLARATION

I hereby declare that the thesis research report entitled “**A Study on Working Capital Management of Butwal Power Company Limited and Chilime Hydropower Company Limited**” submitted Nepal commerce campus, Faculty of Management, Tribhuvan University, is my original work done in the form of partial fulfillment of the requirement for the Master’s Degree in Business studies (MBS) under the supervision of respected teacher Mr. Rajeshwor Neupane and Mr. Tirtha Raj Ghimire, Lecturer, Nepal Commerce Campus Minbhawan, Kathmandu.

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Arjun gautam
Researcher

LIST OF CONTENTS

RECOMENDATION	
VIVA-VOCE SHEET	
DECLARATION	
ACKNOWLEDGEMENTS	
TABLE OF CONTENTS	
LIST OF TABLES	
ABBREVIATION	
CHAPTER – I	1
INTRODUCTION	1
1.1 General Background	1
1.2 Private sector in Hydroelectric power in Nepal	2
1.3 General Introduction of selected hydro power company	4
1.3.1 Butwal Power Company	4
1.3.2 Chilime hydro power company ltd (CHPCL)	6
1.4 Statement of problem	9
1.5 Objectives of the study	10
1.6 Significance of the study	10
1.7 Limitation of the study	11
1.8 Organization of the study	11
CHAPTER TWO	13
REVIEW OF LITERATURE	13
2.1 Introduction	13
2.2 General background of working capital management	13
2.3 Basic concept of working capital	15
2.4 Need of working capital	16
2.5 Working capital policy	16
2.6 Types of Working Capital	21
2.7 Factor Affecting the Working Capital	22
2.8 Literature Review	24
2.8.1 Review of Articles/Journals	24
2.9 Review Some Related Thesis	27
2.10 Research Gap	33
CHAPTER - THREE	34

RESEARCH METHODOLOGY	34
3.1. Introduction	34
3.2 Research Design	34
3.3. Population and Sample	35
3.4 Nature And Sources Of Data :-	36
3.5 Data Gathering Or Processing Procedure	36
3.6 Tools of Data Analysis	36
CHAPTER - FOUR	46
PRESENTATION AND ANALYSIS OF DATA	46
4.1 Introduction	
4.2 Financial Tools	46
4.2.1 Working capital structure	46
4.2.2 Liquidity Position of Selected Company	48
4.2.3 Composition of Working Capital	52
4.2.4 Profitability Position	67
4.2.5 Efficiency of Working Capital	74
4.3 Statistical Tools	80
4.3.1 Liquidity Position	81
4.3.2 Composition of Working Capital	83
4.3.3 Profitability Position	89
4.3.4 Efficiency of Working Capital	92
4.4 Major Findings	96
CHAPTER - FIVE	105
SUMMARY, CONCLUSION and RECOMMENDATIONS	105
5.1 Summary	105
5.2 Conclusion	106
5.3 Recommendations	110
BIBILOGRAPHY	
APPENDIX	

LIST OF TABLES

	Page No.
Table No. 1 : Working Capital Structure of BPC	47
Table No. 2 : Working Capital Structure of CHPCL	48
Table No.3 : Current Ratio of BPC	49
Table No.4 : Current Ratio of CHPCL	50
Table No. 5 : Quick Ratio of BPC	51
Table No. 6 : Quick Ratio of CHPCL	52
Table No.7 : Current Assets to Total Assets Ratio of BPC	53
Table N. 8 : Current Assets to Total Assets Ratio of CHPCL	54
Table No. 9 : Current Assets to fixed Assets Ratio of BPC	55
Table No. 10 : Current Assets to Fixed Assets Ratio of CHPCL	56
Table No. 11 : Receivable to total Assets Ratio of BPC	57
Table No. 12 : Receivable to Total Assets Ratio of CHPCL	57
Table No. 13 : Receivable to Current Assets Ratio of BPC	58
Table No. 14 : Receivable to Current Assets Ratio of CHPCL	59
Table No. 15 : Inventory to Current Assets Ratio of BPC	60
Table No. 16 : Inventory to Current Assets Ratio of CHPCL	61
Table No. 17 : Inventory to Total Assets Ratio of BPC	62
Table No.18 : Inventory to Total Assets Ratio of CHPCL	63
Table No.19 : Cash and Bank Balance To Total Assets Ratio of BPC	64
Table No. 20 : Cash and Bank Balance to Total Assets Ratio of CHPCL	65
Table No. 21 : Cash and Bank Balance To Current Assets Ratio of BPC	66
Table No. 22 : Cash and Bank Balance to Current Assets Ratio of HPCL	67
Table No. 23 : Return on working capital Ratio of BPC	68
Table No. 24 : Return on working capital Ratio of CHPCL	69
Table No. 25 : Return on Total Assets Ratio of BPC	70
Table No. 26 : Return on Total Assets Ratio of CHPCL	70
Table No. 27 : Net Profit Margin Ratio of BPC	71
Table No. 28 : Net Profit Margin Ratio of CHPCL	72
Table No. 29 : Gross Profit Margin Ratio of BPC	73

Table No. 30 : Gross Profit Margin Ratio of CHPCL	73
Table No. 31 : Inventory Turn Over Ratio of BPC	75
Table No. 32 : Inventory Turnover Ratio of CHPCL	75
Table No. 33 : Debtors Turn Over Ratio of BPC	76
Table No. 34 : Debtors Turnover Ratio of CHPCL	77
Table No. 35 : Cash Turn Over Ratio of BPC	78
Table No. 36 : Cash Turnover Ratio of CHPCL	78
Table No. 37 : Total Current Assets Turn Over Ratio of BPC	79
Table No. 38 : Total Current Assets Turnover Ratio of CHPCL	80

ABBREVIATION

BPC	Butwal power company
CHPCL	Chilime hydropower company
NPAT	Net profit after tax
CA	Current assets
CL	Current liability
WCM	Working capital management
BS	Bikram sambat
FY	Fiscal year
HP	Hydro power
MW	Megawatt
QR	Quick ratio
DF	Degree of freedom
NEA	Nepal Electricity Authority
DSO	Days sales outstanding
DTR	Debtors Turnover Ratio
PPA	Power Purchase Agreement
ASAP	AS Soon As Possible
SCBNL	Standard Chartered Bank Nepal Limited
HBL	Himalayan Bank Limited