

# ANALYSIS OF WORKING CAPITAL MANAGEMENT EFFICIENCY OF THE CANNANOR SPINNING AND WEAVING MILL, MAHE – AN ORGANIZATIONAL STUDY

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## ABSTRACT

Management of working capital is regarded as one of the most essential part of business management. This paper studied the impact of working capital management on the financial health and profitability of Kannur spinning and weaving mill, Mahe and the study period was of 5 years i.e. 2013-2018. A proper working capital management ensures a company with sufficient cash flow in order to meet its short-term debt obligations and operating expenses. An efficient Working Capital Management is expected to contribute to the high financial performance. Various tools such as ratio analysis, statement of changes in working capital and correlations were used for interpretation. The working capital management of the company was found inefficient and needs be improved. Efforts should be taken to increase sales, which will improve profitability as well as turnover ratio of the company. The current ratio and quick ratio of the company did not meet the standard during the five years, so the company's assets have to be increased. The company should take steps to improve the efficiency of working capital management and the company must reduce its cost of production. There was an increasing trend in current liability, so the management must be cost conscious and should utilize its resources in an efficient manner. The cash balance of the company is required to be improved in order to have immediate liquidity position. The ultimate aim of this paper is to provide some useful strategic recommendations for the managers responsible for the working capital management of this public organization.

**Key words** : Working capital management, Current ratio, Quick ratio, Financial health.

## 1. INTRODUCTION

Every business whether big, medium or small, needs finance to carry on its operations to achieve its target. In fact, finance is so indispensable today that it is the lifeblood of an enterprise. Without adequate finance, no enterprise can possibly accomplish its objectives. The term working capital refers to that part of firm's capital which is required for financing short term or current assets such as cash, marketable securities, debtors and inventories. Funds invested in current assets keep revolving fast and are being constantly converted in to cash and this cash flows out again in exchange for other current assets. Hence working capital is also known as revolving or circulating capital. On the whole, Working Capital Management performs a key function and is of top priority for every finance manager. All managers must, however, keep in mind the liquidity of working capital and the basic goal of profitability of the company. They should be able to attain a judicious mix of liquidity and profitability while managing their working capital. The financial managers should use the working capital in such a way to meet its short term obligations and its

continued flow can be guaranteed from a profitable venture. The importance of cash as an indicator of continuing financial health should not be surprising in view of its crucial role within the business. This requires that business must be run both efficiently and profitably. In the process, an asset-liability mismatch may occur which may increase firm's profitability in the short run but at a risk of its insolvency. On the other hand, too much focus on liquidity will be at the expense of profitability. Thus, the manager of a business entity is in a dilemma of achieving desired trade off between liquidity and profitability in order to maximize the value of a firm. Working capital management deals with the most dynamic fields in finance, which needs constant interaction between finance and other functional managers. The finance manager acting alone cannot improve the working capital situation and it should be a combined effort of financial and functional managers.

Working capital refers to the funds invested in the current assets i.e., investment in stock, sundry debtors, cash and other current assets that are essential to use the fixed assets profitably e.g. Machinery cannot be used without raw materials. The investment on the purchase of raw materials is identified as working capital. It is obvious that a certain amount of fund is always tied up in raw material inventories. Its effective provision can do much to ensure the success of the business, while its inefficient management can lead not only to the loss of the profits but also the ultimate downfall of what otherwise might be considered as a promising concern. The importance of working capital in commercial undertakings can never be over emphasized. A concern need funds for its day today running. A large amount of working capital would mean that the company has a lot of idle funds and the various studies conducted by the bureau of public enterprises have shown that one of the reasons for poor performance of the public sector undertakings in our country has been the large amount of the funds locked up in working capital. Since funds have a cost, the company has to pay huge amount as interest on funds. This results in over capitalization which implies that company has too much funds for its requirements, resulting in a lower rate of return, a situation which implies a less than optimal utilisation of resources. A firm has to be therefore very careful in establishing its working capital requirements. This paper deals with studying various aspects of working capital management of the Kannur spinning and weaving mill, Mahe , a public Ltd. undertaking, that is necessary to carry out the day-to-day operations.of the firm.

### ***Rationale and objectives of the study***

Every business need funds for two purposes; one for the establishment and the other to carry out the day to day operation. It needs some amount of working capital to meet daily obligations. The need for working capital arises due to the time gap between the production and realization of cash from sales. Management of working capital is concerned with the problem that arises in attempting to manage current assets and current liabilities and the interrelationship that exists between them. Effective and efficient working capital management of a firm has a great effect on its profitability, liquidity and the structural health of the organization. The major objectives of the present study were (i) to conduct an organizational study to understand overall functioning of kannanore spinning and weaving mill (ii) to assess the efficiency of kannanore spinning and weaving mill in managing their working capital. (iii) to study the liquidity position of the company through various working capital related ratios (iv) to analyze how effectively the resources or assets are being utilized by the company. (v) to analyze the impact of working capital on profitability of the company and (vi) to study the optimum level of current assets and current liability of the company.

## **2. RESEARCH METHODOLOGY**

The study was based mainly on secondary data and primary data. The secondary data for a period of five years ( 2013-14 to 2017-18) have been collected from the audited financial statements of the company which included published annual reports, audited profit and loss account and balance sheet of the company. Whenever there is a gap observed in secondary data, it has been filled through primary data collected through direct interview with officials of the company. The study conducted was analytical in nature. The tools used for the study were i) ratio analysis ii) statement of changes in working capital and iii) correlation.

### 3. REVIEW OF LITERATURE'

Working capital is all the short-term assets used in the daily operations of firms Hampton (2003),. He further explained working capital as the difference between current assets and current liabilities. Atrill (2009) considered working capital as current assets less current liabilities. Working capital measures the liquidity of firms by considering the adequacy of short-term cash in fulfilling the firm's obligation (Hampton, 2003). A firm is highly liquid when it has enough cash to pay off its liabilities as and when they arise. Working capital has gained a significant position for the twin objects of liquidity and profitability (Vijayakumar, 2001), hence continues to hold a central position in the fast changing business environment (Hrishikes, 2009). It is a functional area of finance that covers all the current accounts of the firm and concerns itself with the policies for managing current assets and liabilities as well as technical measures for maximizing the benefits from its management (Hampton, 2003). There are two types of working capital namely the Gross working capital and the Net working capital. The Gross working capital refers to the firm's investment in all the current assets taken together. Net working capital is the excess of total current assets over total current liabilities. The working capital requirement of a firm depends, to a great extent upon the operating cycle of the firm. Operating cycle is the duration starting from the procurement of goods or raw materials and ending with sales realization (Rustagi, 1999).

#### 3.1 *vWorking Capital Management*

Working capital management is an important aspect of the short-term planning of the business. Changes in the business environment affects working capital therefore management efforts must be made at identifying such changes and efforts made consciously at curtailing them to ensure an efficient level of investment in working capital (Atrill, 2009). Unless the required working capital for a project is ascertained, investment decision cannot be said to be complete. The total amount of working capital needed by firms varies from period to period with regards to production (Ghosh, 2010).

#### 3.2. *Factors Affecting Working Capital Management*

Hampton (2003) postulated that working capital management is affected by the following factors. 1. Sales volume: firms maintain current assets to meet operational activities that result in sales. 2. Seasonal and cyclical factors: the fluctuations in demand for a firm's goods and services amidst changes in economic conditions call for the maintenance of adequate working capital. 3. Changes in technology: development in technology affects the maintenance of working capital. If a firm acquires a machine that produces large amount of goods at any stage of production calls for keeping huge amount of stock at all time. 4. Policies of the firm: the firm at a point in time can decide to alter the amount of working capital to maintain at a point in time. Working capital management includes and refers to the procedures and policies required to manage the working capital. It may be noted that long term profitability of a firm depends on the investment decision of a firm (Rustagi, 1999).

#### 3.3. *Inventories Management*

Inventories are the total amount of goods or materials contained in a store at any given time. They are held by firms for the purpose of meeting day-to-day demands of customers and production. Storage cost, financing cost and opportunity cost forgone in tying up funds impose on management the responsibility of minimizing the amounts of inventories held. According to Kotler & Keller (2007) inventory management refers to all activities involved in developing and managing the inventory levels of raw materials, semi-finished materials, work-inprogress and finished goods so that adequate supplies are available and the costs of over or under stocks are low. Atrill (2009) suggested some techniques to be employed in order to manage inventories. The techniques are as follows. Forecasting future demand: realistic forecast of trends in demands of goods and services as well as related prices of inventories must be ensured by management. A system designed to ensure that firms order only the amount of inventories needed to satisfy a particular production.

### 3.4. Managing Receivables

Hampton (2003), defined receivables as assets account representing amounts owed to the firm as a result of the sale of goods and services in the ordinary course of business. Management at any point in time must consider the customers to receive goods on credit, the amount to be offered on credit, the time frame for payments, collection policies, and measures of reducing the risk associated with noncompliance and above all, whether discounts should be offered.

## IV. FINDINGS AND DISCUSSION

### 4.1. Financial Ratios.

Both the current ratio and quick ratio measure a company's short-term liquidity, or its ability to generate enough cash to pay off all debts should they become due at once. Although they're both measures of a company's financial health, they're slightly different.

### 4.2. Current Ratio (CR):

Current ratio or working capital ratio is a liquidity ratio that measures a company's ability to pay short term obligations within one year. It shows how a company can maximize the current assets on its balance sheet to satisfy its current debt and other payables.

$$\text{Current ratio (CR)} = \frac{\text{Current assets}}{\text{Current liabilities}}$$

A current ratio that is in line with the industry average or slightly higher is generally considered acceptable. A current ratio that is lower than the industry average indicate a higher risk of distress or default. Similarly if a company has a very high current ratio compared to their peer group, it indicates that the management may not be using their assets efficiently. A company with a current ratio less than one does not have the capital on hand to meet its short term obligation while a CR above one indicate the rich financial resources to remain solvent in the short term.

The current ratio of the Kannur, spinning and weaving mill for five years (2012-13 to 2017-18) is furnished in Fig.1 . It is evident that the current ratio (CR) of the company was not satisfactory in all the five years studied. This means the company does not have the capital on hand to meet its short term obligations. The maximum CR of the company was during 2013-14 (0.16) which is 1/8<sup>th</sup> of the satisfactory level of CR 1.0. The efficiency of the company was found decreasing in every year and during 2017-18, the CR of the company was only 0.03 which is 33 time less than the satisfactory CR level of 1.0. Hence the existence of the company is in threat.

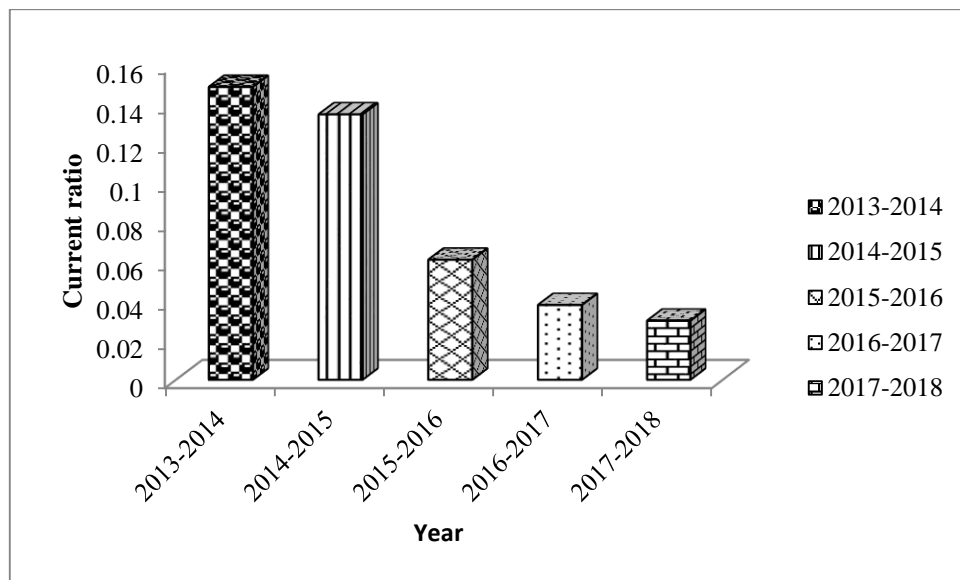


Fig.1. Current ratio for five years

### 4.3. Quick Ratio (QR)

The quick ratio is an indicator of a company's short-term liquidity position and measures a company's ability to meet its short-term obligations with its most liquid assets. The quick ratio is a measure of how well a company can meet its short-term financial liabilities. Also known as the acid-test ratio and its calculation is as follows:

$$\text{Quick Ratio (QR)} = \frac{(\text{Cash} + \text{Marketable Securities} + \text{Accounts Receivable})}{\text{Current Liabilities}} \dots$$

A quick ratio higher than 1:1 indicates that the business can meet its current financial obligations with the available quick funds on hand. A quick ratio lower than 1:1 may indicate that the company relies too much on inventory or other assets to pay its short-term liabilities. Companies with an acid-test ratio of less than 1 do not have enough liquid assets to pay their current liabilities and should be treated with caution. If the acid-test ratio is much lower than the current ratio, it means that a company's current assets are highly dependent on inventory. If a company has a current ratio of less than one then it has fewer current assets than current liabilities. If a company has a current ratio of more than one then it is considered less of a risk because it could liquidate its current assets more easily to pay down short-term liabilities.

The quick ratio offers a more conservative view of a company's liquidity or ability to meet its short-term liabilities with its short-term assets because it doesn't include inventory and other current assets that are more difficult to liquidate (i.e., turn into cash). By excluding inventory, and other less liquid assets, the quick ratio focuses on the company's more liquid assets. Both ratios include accounts receivable, but some receivables might not be able to be liquidated very quickly. As a result, even the quick ratio may not give an accurate representation of liquidity if the receivables are not easily collected and converted to cash. The quick ratio is considered more conservative than the current ratio because its calculation factors in fewer items. The quick ratio of the company for five years under study is furnished in fig.2.

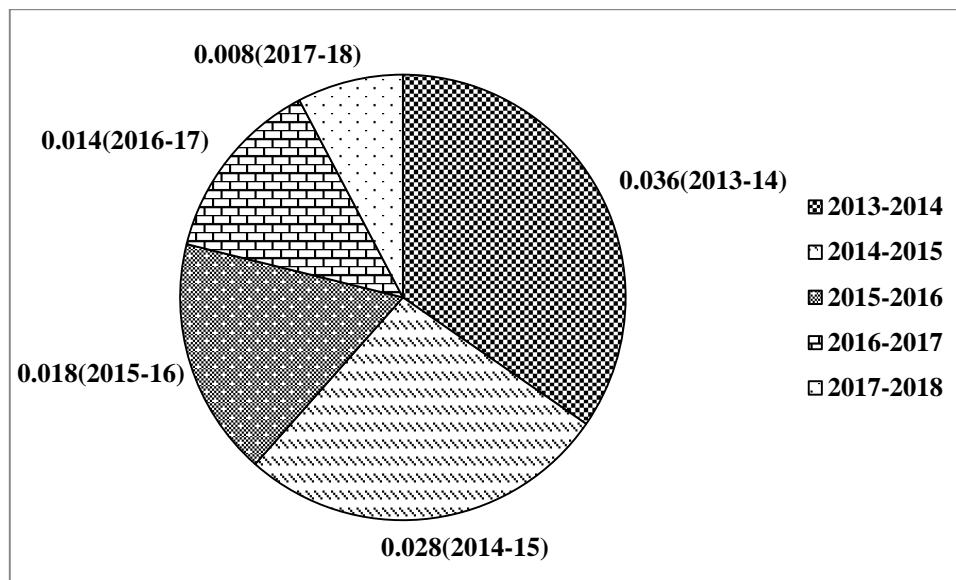


Fig.2. Quick ratio for five years

It is clear from the above figure that the quick ratio of the company is far less than the ideal ratio of 1:1. As compared to current ratio, the fall in quick ratio indicates excessive inventory of the company and the company is at risk to meet the day to day expenses. Hence the management needs to take utmost care to improve the liquidity of the company.

#### 4.4. Debtors turnover ratio (DTR)

The Debtors Turnover Ratio also called as Receivables Turnover Ratio shows how quickly the credit sales are converted into the cash. This ratio measures the efficiency of a firm in managing and collecting the credit issued to the customers.

$$\text{Debtors Turnover Ratio} = \frac{\text{Net credit sales}}{\text{Average account receivable}}$$

While calculating this ratio, only the net credit sales alone were taken into consideration. Higher the Debtors turnover ratio, indicates better credit management of the firm. The accounts receivable turnover ratio is an efficiency ratio that measures the number of times over a year (or another time period) that a company collects its average accounts receivable. The ratio indicates whether debtors are being allowed excessive credit. A high figure (more than the industry average) may suggest general problems with debt collection or the financial position of major customers.

Year	Net credit sale (Crores)	Debtors including bills receivable (Crores)	Debtors turnover ratio
2013-2014	36.32	2.04	17.80
2014-2015	31.11	1.45	21.46
2015-2016	32.12	1.35	23.79
2016-2017	34.17	50.18	0.680
2017-2018	31.53	90.25	0.349

Table-1. The Debtors turnover ratio of the company for five years

It is evident from the table 1 that the debtor's turnover ratio is on an increasing trend except the financial years 2016-2017 and 2017-2018. It indicate that the management was efficient in collecting its debts upto 2015-16 and after that the effort for debt collection was decreased drastically. Hence the credit management of the company needs to be very active for debt collection..

#### 4.5. Inventory Turnover Ratio (ITR)

Inventory turnover is one way of measure of a company's performance and financial health. Inventory turnover is a ratio showing how many times a company has sold and replaced inventory during a given period. The inventory turnover ratio is calculated by dividing the cost of goods sold for a period by the average inventory for that period. The ideal inventory turnover ratio is about 4 to 6 for many businesses. Higher inventory turnover ratios are considered a positive indicator of effective inventory management. However, a higher inventory turnover ratio does not always mean better performance. It sometimes may indicate inadequate inventory level, which may result in decrease in sales. Low inventory turnovers generally mean a company is holding too much inventory compared to its sales. Low inventory turnovers generally mean a company is holding too much inventory compared to its sales. The most common cause of decreasing inventory turnover is a decrease in sales. Higher the inventory turnover ratio, better is the financial performance of the production units. Inventory turnover is important because a company often has a significant amount of money tied up in its inventory. ITR is calculated using the formula

$$\text{Inventory turnover ratio (ITR)} = \frac{\text{Cost of goods sold}}{\text{Average stock}}$$

It is clear from the fig.3 that the inventory turnover ratio of the company ranged from 2.7 to 7.4 over the five years. Though the ITR value between 4 – 6 is considered as ideal it was below 4.0 for the first three years and increased substantially during 2016-17 and 2017-18. During the first three years, the low value if ITR indicated accumulation of huge stock without sale. However there was an increasing trend of sale from the year 2015-16 onwards which shows the increasing financial health of the company.

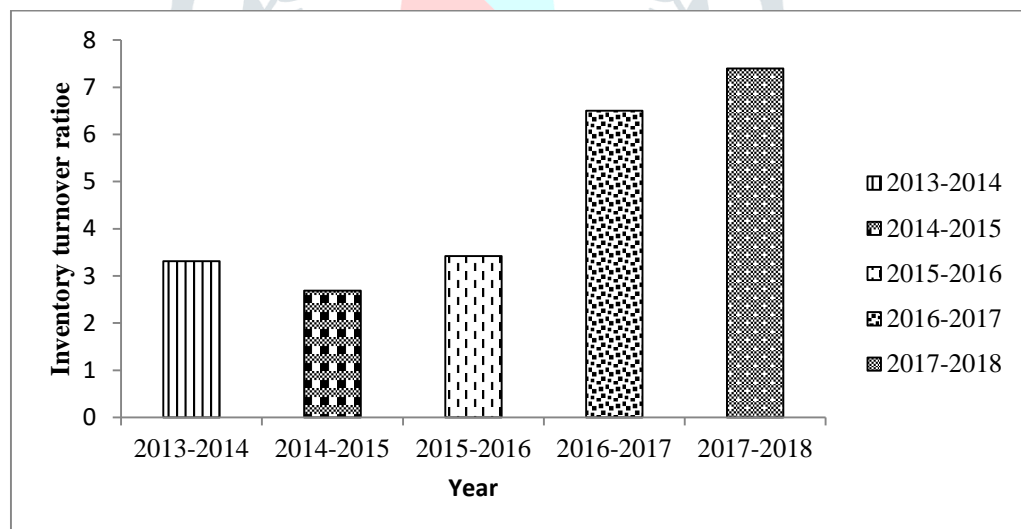


Fig.3. Inventory turn over ratio for five years

#### 4.6. Working Capital Turnover Ratio (WCTR)

Working capital turnover ratio establishes relationship between cost of sales and net working capital. As working capital has direct and close relationship with cost of goods sold. The working capital turnover ratio measures how well a company is utilizing its working capital to support a given level of sales. The working capital turnover ratio is also referred to as net sales to working capital. It indicates a company's effectiveness in using its working capital. Working capital turnover ratio is an activity ratio that measures rupees of revenue generated per rupee of investment in working capital. Increasing ratio indicates that working capital is more active; it is supporting, comparatively, higher level of production and sales; it is being used more intensively.

$$\text{working capital turnover ratio (WCTR)} = \frac{\text{Cost of sales}}{\text{Average net working capital}}$$

Where ,cost of sales = (Opening stock + Net purchases + Direct expends - Closing stock)

Net working capital = (Current assets - Current liabilities)

A company's working capital turnover ratio can be negative when a company's current liabilities exceed its current assets. Since net sales cannot be negative, the turnover ratio can turn negative when a company has a negative working capital

From the fig.4 it is clear that the working capital turnover ratio of the company is negative from the year 2013-14 to 2017-2018. The ratio became negative because of the insufficient working capital in the company due to its increased level of current liability as working capital =current assets – current liability.

### 4.7. Correlation analysis

The correlation between working capital of the company to turnover was calculated using the formula  $r = \frac{n\sum xy - (\sum x * \sum y)}{\sqrt{n\sum x^2 - (\sum x)^2} \sqrt{n\sum y^2 - (\sum y)^2}}$  and observed that there was a high negative correlation (- 0.49) between working capital and turnover which emphasises that the sales will be increased when the working capital decreases.

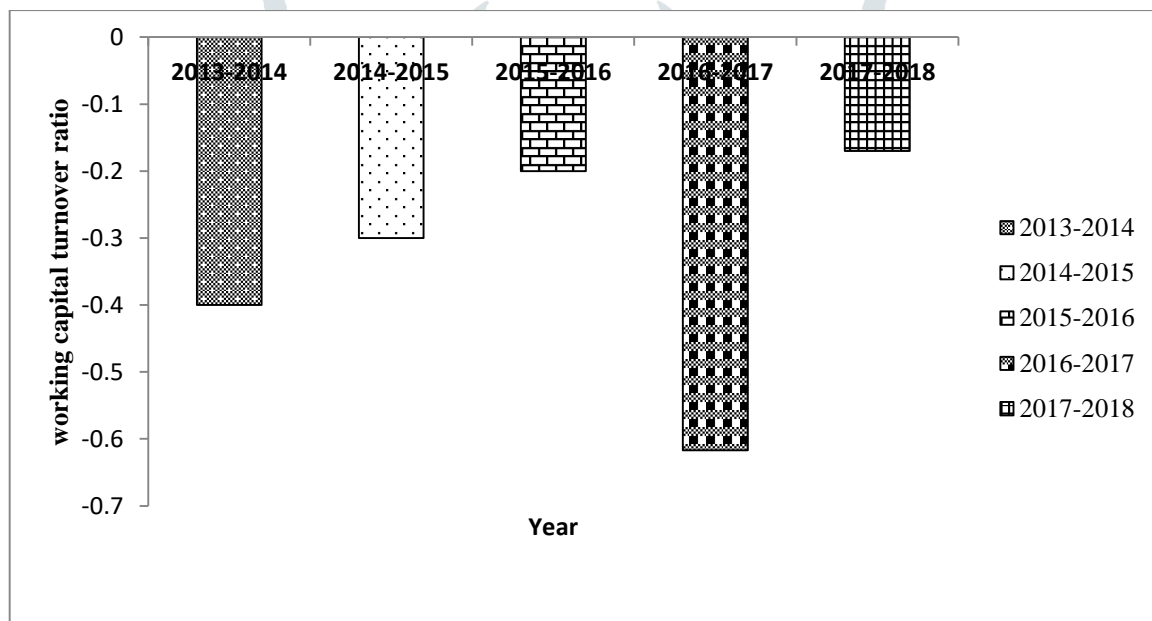


Fig.4.Working Capital Turnover Ratio

Particulars	Year		Changes in working capital	
	2014	2015	Decrease	Increase
Current asset				
Cash and bank	350456.43	4562260.89	105770.46	
Stock	109519912.36	115460581.85	5940669.85	
Loan and advances	3422122.43	3351540.44		70581.99
Debtors	20432596.48	14521005.73		5911591.11
Other current asset	10473190.83	11487146.83	1013956	
Total	144198278.9	145276500.9		
Current liability				



Trade payable	39208286.18	24366640.47		14841645.71
Other current liability	10046700.80	12213184.40	216648306	
Short term borrowings	5150848025	9715247.25	4564399	
Head office fund	906853810.87	1025463117.25	118609306	
Short term provision	7056476	7921496	865020	
Total	968316122.1	1079679685.37		
Net working capital	(824117843.2)	(934403184.5)		
Net decrease in working capital				110285341.3

**Table-2. Statement showing the changes in working capital 2014-2015**

The changes in working capital of the company was analysed over years and observed that there was a net decrease in working capital during the years 2014 and 2015 which indicate that the company had more current liability and less current assets (table-2) and the same trend was observed during 2015-16 (table-3).

Particulars	Year		Changes in working capital	
	2015	2016	Decrease	Increase
Current asset				
Cash and bank	456226.89	1632976.68	1176750.68	
Stock	115460581.85	93667013.07		21793568.78
Loan and advances	3351540.44	4205608.27	854067.83	
Debtors	14521005.73	13549998.53		971007
Other current asset	11487146.83	11467380.83		19766
Total	145276500.9	124522977.38		20753523.52
Current liability				
Trade payable	24366640.47	39391204.03	6856970.24	
Other current liability	12213184.40	19070154.64	6856970.24	
Short term borrowings	9715247.25	Nil		9715247.25
Head office fund	1025463117.25	1139637123.67	114174006.4	
Short term provision	7921496	8981961	1060465	
Total	1079679685.37	1207080443.34	127400758	
Net working capital	(934403184.5)	(1082557446)		
Net decrease in working capital				148154281.5

**Table-3. Statement showing the changes in working capital 2015-2016**

But during the year 2016-17, there was a net increase in working capital as compared to the financial year 2015-2016 (table-4).. During the year 2017-18 also, there was a net increase in working capital of the company compared to the financial year 2016-17 (table- 5) . This increase in working capital was due to decrease in current liability of the company during these years . During the year 2017-18 also, there was a net increase in working capital of the company compared to the financial year 2016-17 (table- 5) . This increase in working capital was due to decrease in current liability of the company during these years.

Particulars	Year		Changes in working capital	
	2016	2017	Decrease	Increase
Current asset				
Cash and bank	1632976.68	1013867.18		619109.5
Stock	93667013.07	52534109		41132904.07
Loan and advances	4205608.27	761000		344608.27
Debtors	13549998.53	3710009.51		9839989.02
Other current asset	11467380.83	4372154.41		7095226.42
Total	124522977.38	61478659.1		
Current liability				
Trade payable	39391204.03	15381652.05		24009551.98
Other current liability	19070154.64	8340042.51		10730112.13
Other financial liability	Nil	14804847.67	14804847.67	
Head office fund	1139637123.67	1265079993.72	125442870.0	
Short term provision	8981961	4736306		4245655
Total	1207080443.34	5591364816.7		
Net working capital	(1082557446)	(5529886157)		
Net increase in working capital			4447328711	

Table-4. Statement showing the changes in working capital 2016-2017

Particulars	Year		Changes in working capital	
	2017	2018	Decrease	Increase
Current asset				
Cash and bank	1013867.18	121841.67		892025.51
Stock	52534109	42287155.78		48305393.22
Loan and advances	761000	2470241.40	170924104	
Debtors	3710009.51	9024639.30	5314629.79	
Other current asset	4372154.41	1733564.16	2638590.25	
Other financial asset	Nil	710913	71093	
Total	61478659.1	56348355.31		
Current liability				
Trade payable	15381652.05	20833944.94	5452291.95	
Other current liability	8340042.51	2186850.21		6153192.3
Short term borrowings	14804847.67	Nil		14804847.67
Head office fund	1265079993.72	1419396716.58	154316722.9	
Short term provision	4736306	1539063		3197243
Total	5591364816.7	1868495623		3722869194
Net working capital	(5529886157)	(1812147267)		
Net increase in working capital			3717738890	

Table-5. Statement showing the changes in working capital 2017-2018

## V. CONCLUSIONS:

Working capital is the prime and most important requirement for carrying out the day to day operations of the business. The study was helpful to identify the working capital management and the efficiency of the company. Various tools such as ratio analysis, statement of changes in working capital and correlations were used for this analytical study. Based on various ratios, some important interpretations were made. Effort should be taken for increasing sales, which will improve profitability as well as turnover ratio of the company. The working capital management of the company was inefficient and it should be improved. The current ratio of the company did not meet the standard during the five years, so the company's assets have to be increased. The quick ratio of the company did not achieve standard in any year. The company should take steps to improve the efficiency of working capital management and the company must reduce its cost of production. There is an increasing trend in current liability, so the management must be cost conscious and should utilize its resources in an efficient manner. The cash balance of the company is required to be improved in order to have immediate liquidity position. But at the same time, precaution should be taken to see that too many funds are not locked up in stock, which ultimately leads to improper utilization of fund.

### *Strategic Management Suggestions*

Based on the present study, the authors put forward the following suggestions for working capital management of the company for enhancing its financial health and better profitability.

- i) The financial managers should take utmost care in controlling current liabilities for maintaining better working capital management.
- ii) The excessive stock in the company should be reduced by using proper stock control measures.
- iii) Working capital must be effectively utilized in the business for enhancing the sale and net profitability.
- iv) As there is an increasing trend in current liability, the management must be cost conscious and should utilize its resources in an efficient manner.

### **Limitations of the study**

- i) This project was completed mainly with the use of secondary data.
- ii) Only limited year's data could be analyzed.
- iii) It was difficult to review respondents as they were busy in their schedule, and collection of data was very difficult. So the study had to carry out based on the availability of respondents.
- iv) The detailed data of other companies related to the same business was not available to make comparative study.

### **Acknowledgement**

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