

# Working Capital Management Of Rajasthan Cooperative Dairy Federation Ltd. In India

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**ABSTRACT :** Working capital management plays significant roles in better performance in a firm. Every business organization requires some funds to carry on its operations and to produce goods for sale to earn profit. The dairy occupation holds a pivotal & premier position in our Indian economy. The main objective of the paper is to understand the liquidity management of Rajasthan Dairy Federation Ltd. region as well the problems in liquidity management of these units. In this paper we use secondary data for analysis of working capital liquidity and profitability of RCDF five units. We included last five year data 2009 to 2013. For measuring and compare the working capital of different units we use ratio analysis.

## INTRODUCTION

Working capital management is the life blood for every organization. Working capital is a financial metric which represents operating liquidity available to a business, organization. These funds which are represented by the current capital used through the various steps of production and distribution and are invested in Current assets. Effective working capital management has always increased profitability of the firm. Our interest in examining working capital management of RCDF LTD. and to determine management performance and efficiency of working capital management is determined by the efficient administration of its various components like cash management, accounts receivable management, and inventory management. Positive working capital is required to ensure that a firm is able to continue its operations and that it has sufficient funds to satisfy both maturing short-term debt and upcoming operational expenses. There should be a proper planning of liquidity. If there is no proper planning of liquidity a time may come when a business may tend to drift towards liquidation. The quantum of working capital funds reflects the solvency of the business but there is no single barometer to judge the efficiency of running a business. The adequacy or inadequacy of working capital in a business is to be judged from the nature of business, its operating cycle, the working capital turnover, the size of business and other factors. These factors influence the working capital needs of the business. The ratios may not be a guiding factor for all times to come in the life of a business. Management's attitude towards liquidity versus profitability is a vital contributing factor in assessing working capital requirements.

## DAIRY INTRODUCTION

The dairy occupation holds a pivotal & premier position in our Indian economy. Milk production in India has increased from 20 million tones to during 1970 to 77 million. India's dairy industry generates an annual business of nearly Rs. 88,000 Crore. Dairy sector provides regular employment to 9.8 million people in principal status and 8.6 million people in subsidiary status, which together constitute 5 percent of total work force. Rajasthan Cooperative Dairy Federation (RCDF) set up in 1977 as the implementing agency for dairy development programmes in Rajasthan is registered as a society under the Rajasthan cooperative societies act 1965. The dairy infrastructure now comprises 23 states federation, 170 district milk unions and around 1, 00,000

village cooperative societies; through which rural Milk production and procurement system have been effectively linked to urban markets consumption centers.

## AJMER UNION

Established in the year 1972 as Ajmer Zila Dugdh Utpadak Sahakari Sangh Ltd (AZDUSS Ltd.). Established by National Dairy Development Board (NDDB). Under the aegis of Rajasthan Co-Operative Dairy Federation. Established under Operation Flood Programme based on Amul model. Currently working under the chairmanship of Mr. Ramchandra Chaudhary & Management controlled by Mr. Jeevan Prabhakar. Have quality assurance certification of ISO 9001:2000 & HACCP. The liquid milk handling capacity 12 lakhs liter per day. The liquid milk storage capacity 30 lakhs liter per day. The pasteurized milk storage capacity 1.05 lakhs liter per day. The Ghee making capacity 5 ton per day. AZDUSS LTD. has 2 chilling centers at Beawer and Vijaynagar.

Year	2009	2010	2011	2012	2013
Current assets	1235 6321 3.76	156287 456.87	17322 7415.4 9	37649 3162.3 2	56725 4907.9 0
Current Liabilities	1563 9875. 78	128968 36.78	13899 949.88	33857 687.58	46289 765.98
Working capital	1079 2333 7.98	143390 620.09	15932 7465.6 1	34263 5474.7 4	52096 5141.9 2
Investment	9846 3987	993783 77.67	11536 8021	49367 021.00	67367 298.78
Fixed Assets	3567 8376. 87	574638 36.98	80344 498.00	13058 2795.0 0	24567 3219.9 8
Current Ratio	7.900 5	12.1182	12.46	11.119 8	12.254 4

## INTERPRETATION:

From the above table it can be analyzed that the current ratio in 2009 is 7.9005, 2010 is 12.1182, 2011 is 12.46, and 2012 and 2013 is 11.1198 and 12.2544. Ajmer union have more working capital. This is not good for union. Because union more funds are unused this fund union for many other productive works. Because working capital ideal ratio is 2:1 but union all years working capital ratio is high to 2:1.

**ALWAR MILK UNION**

Alwar Dairy is a dairy registered under Rajasthan cooperative act and is owned by thousands of its milk producers members. It works on world famous Amul pattern. It was established in the year 1972 to implement dairy development activities in the Alwar district, under Operation Flood Program. The task of milk collection started from 22nd August 1973. Presently the dairy plant has a capacity to process 1.50 lakh litre milk, prepare 10 M.T. milk powder and 9.0 M.T. ghee per day. The plant also has a capacity to pack 2.50 lakh litre milk per day. The Alwar plant of Saras (AZDUSS Ltd., Alwar) has been certified under internationally accepted quality and food safety management systems in accordance with ISO 9001-2000 with HACCP.

Year	2009	2010	2011	2012	2013
Current Assets	1956 7236 7.45	279161 775.13	44785 9001.9	547788 989.38	6487 6893 7.78
Current Liabilities	1876 3676 1.31	333330 199.11	50301 4087.9 7	536899 768.87	6077 9693 9.33
Working capital	8035 606.1 4	- 541684 23.98	- 55155 086.07	108892 20.51	4097 1998. 45
Investment	7547 789.7 6	823203 4.35	99954 60.42	167979 7.87	1797 070.2 3
Fixed Assets	3686 8639. 56	466311 02.00	10151 9362.7 5	150797 97.78	1780 7777. 98
Current Ratio	1.042 8	.8374	.8903	1.0208	1.067 4

**INTERPRETATION:**

Alwar union in 2009 current ratio is 1.0428 . In 2010 and 2011 year current ratio is decrease .8374 and .8903 . And in 2012 and 2013 Alwar union increase its current ratio 1.0208 and 1.0674. this show company have equal liabilities to equal assets . In 2010 and 2011 union have more liabilities to current assets. Its time is not good for union. Alwar union have not idle ratio of working capital 2:1. So this condition is not good for union .

Year	2009	2010	2011	2012	2013
Current Assets	2922761070.11	1945070677.93	1338777625.79	1303953789.9	1282676526.78
Current Liabilities	887334965.55	885064670.18	1202512413.16	1202512413.16	1229287543.23
Working capital	2035426104.56	1060006007.75	136265212.63	101441376.74	53388983.55
Investment	6009000.00	6009000.00	6009000.00	6009000.00	6009000.00
Fixed Assets	125842469.29	130641296.41	151517167.02	219568509.89	246537658.29
Current Ratio	3.2938	2.197	1.113	1.084	1.0434

**INTERPRETATION:**

Jaipur union in 2010 have idle working capital ratio 2.197 and in 2009 more cash liquidity this is not good for union . Union 2009 have 3.2938 ratio then next continues years decrease current ratio 2010 2.197 , 2011 1.113, 2012 1.084, 2013 1.0434 in these years showing low liquidity position as it is below standard liquidity ratio

**BHILWARA MILK UNION**

Bhilwara Milk Union was registered under Rajasthan co-operative act 1965. It has a Dairy plant handling capacity 2.0 lakh ltrs. per day. Bhilwara Milk Union is an ISO 9001:2008 & IS 15000 (HACCP) certified organisation. This Milk Union is affiliated to Rajasthan Co-operative Dairy Federation Ltd., Jaipur.

Year	2009	2010	2011	2012	2013
Current assets	3908 9854 6.19	39265 0192.6 6	48698 8698. 78	518174 373.18	744810 871.49
Current liabilities	1756 9936 1.65	17332 7834.0 5	14853 4816. 80	185961 479.23	172575 189.25
Working capital	2151 9918 4.54	21932 2358.6 1	33453 881.9 85	332212 893.95	572235 682.24
Investment	5126 146.0 0	51261 46	51261 46	512614 6	956364 7
Fixed Assets	717 022 77. 00	6831 4103 .20	701 140 10.4 4	7204 2066. 41	8331 9855. 41
Current Ratio	2.224	2.265	3.278	2.786	4.315

**INTERPRETATION:**

Bhilwara unit current ratio is 2009 is 2.224 ,2010 2.265 , and 2011 increase 3.278 but in 2012 again decrease 2.786 and again 2013 current ratio increase 4.315. Ratio in all the years in above standard ratio of 2:1 indicating liquidity position. But in 2011 and 2013 more liquidity comparison to idle working capital ratio 2:1 . This time company may be use there funds in other uses .

**JAIPUR UNION**

Jaipur Union Registered March 1975. Plant commissioned June 1981 APS April 1984 Coverage Jaipur & Dausa Started with 25 DCS. Jaipur union affiliated to Rajasthan Co-Operative Dairy Federation Ltd., Jaipur Milk Union was registered under Rajasthan co-operative Societies Act 1965.

**UDAIPUR MILK UNION**

Udaipur Milk Union is an ISO 9001:2008 & IS 15000 (HACCP) certified organization established in 1972 affiliated to Rajasthan Co-Operative Dairy Federation Ltd., Udaipur Milk Union was registered under Rajasthan co-operative Societies Act 1965. The Processing capacity of

60000 LPD is likely to be escalated to 1.5 lakh LPD within a short span of time.

Year	2009	2010	2011	2012	2013
Current assets	71137 694.35	998344 89.71	92458 795.58	187030 375.05	140167 667.90
Current liabilities	55064 716.67	609625 51.47	66585 133.10	741039 34.26	658884 44.21
Working capital	16072 977.68	388719 38.24	25873 662.48	112926 440.79	742792 23.69
Investment	20728 374.35	371280 80.35	67173 663.35	420624 66.35	480903 41.35
Fixed Assets	49972 423.93	714777 72.70	68251 261.45	989893 00.00	103995 202.18
Current Ratio	1.2918	1.6376	1.3885	2.538	2.127

### Interpretation:

Udaipur union in current ratio 2009 1.2918, 2010 1.6376, and 2011 1.3885 these years showing low liquidity position as it is below standard liquidity ratio 2:1. Then union improve its working capital ratio so in 2012 and 2013 union have

sufficient working capital ratio 2:1. These condition is better then last three years .Because union have liquidity for its current liabilities .

### PRESENT STATE OF DAIRY COOPERATIVE

Years	Growth Rate	No. of Dairy cooperative
2009-10	6	11751
2010-11	5	12348
2011-12	2	12563
2012-13	1	12699
2014-15	1	12767

UNIONS	REGISTERED (DCS)
AJMER	676
ALWAR	1014
BHILWARA	975
JAIPUR	1799
UDAIPUR	689

### WORKING CAPITAL ASSESSMENT OF DIFFERENT UNION

Year /Union	2009	2010	2011	2012	2013
AJMER	107923337.98	143390620.09	159327465.61	342635474.74	520965141.92
ALWAR	8035606.14	-54168423.98	-55155086.07	10889220.51	40971998.45
BHILWARA	215199184.54	219322358.61	33453881.985	332212893.95	572235682.24
JAIPUR	2035426104.56	1060006007.75	136265212.63	101441376.74	53388983.55
UDAIPUR	16072977.68	38871938.24	25873662.48	112926440.79	74279223.69

### LITERATURE REVIEW:

In the year 1988 one book published on "Working Capital Structure of Private Enterprises" by **J. Panda and A.K. Satapathy**. It covers a study of 10 private sector companies engaged in production of Cement. The study covers the various aspects of working capital period from 1965 to 1985. He had analyze working capital position of selected units as a whole and as well as individual analysis. Finally he had made suggestions for the better utilization of various component of working capital. In the year 1998 a study was made by **Prof. S.J.Parmar** on "Profitability analysis of Cement Industry in Gujarat State" for the period from 1998-89 to 1994-95. He had made an attempt to analyze financial strength, liquidity, Profitability, Cost and sales trend and social welfare trend by using various ratios analysis, Common size analysis and Value added analysis. He made several suggestions for the improvement of profitability of industry. In his analysis he indicated various reasons for higher cost, low profitability, inefficient use of internal resources. In the Year July 2012 an study by the **Rao, p. sarveswara** "working capital -- Management \*dairy industry -- India" In this study two dairy units were studied from the point of view of the management of working capital. Debtors turnover reveals that Sangam Dairy is following a little liberal credit policy than heritage. Inventory turnover ratio conveyed that Heritage is more efficient than Sangam. Working capital turnover ratio revealed that Sangam is using its working capital more efficiently to improve sales. Current and quick ratios showed that the creditors in Heritage are more secured than that of Sangam. The findings revealed that in certain areas of working capital management Heritage Foods (India) Ltd is having better performance. It is

inferred from the study that Sangam Dairy is better in working capital management besides protecting the interests of the milk producers.

**Chandra Prakash Gupta** Examines Working Capital Performance of Corporate India: An Empirical Survey for the Year 2000 2001 he present study is in continuation of our earlier attempt of developing quantitative benchmarks at the firm as well as at the industry level to evaluate Working Capital Management Performance of Corporate India from time to time. The present study provides their estimates by using data of 427 companies over the period 1998-99 to 2000-01 for each company and for each industry. It is believed that the presence of these three in the overall working capital performance criterion not only helps in performance evaluation but also will capture the dynamics of risk-return trade off. Liesbeth Dries examines in Foreign Direct Investment, Vertical Integration, and Local Suppliers: Evidence from the Polish Dairy Sector Studies argue that foreign investment has negative implications for small local suppliers, as they cannot comply with higher standards or they are laid off to reduce transaction costs. We analyze the impact of FDI in the Polish dairy sector, a sector dominated by small suppliers and of crucial importance for poor rural households. The analysis shows that FDI does not cause a rapid consolidation of the supply base. Instead, foreign companies introduce farm assistance programs to overcome market imperfections.

**Lazaridis, Ioannis; Tryfonidis, Dimitrios** ("RELATIONSHIP BETWEEN WORKING CAPITAL MANAGEMENT AND PROFITABILITY OF LISTED COMPANIES IN THE ATHENS STOCK EXCHANGE. )

investigate the relationship of corporate profitability and working capital management. Researcher used a sample of 131 companies listed in the Athens Stock Exchange (ASE) for the period of 2001-2004. The purpose of this paper is to establish a relationship that is statistically significant between profitability, the cash conversion cycle and its components for listed firms in the ASE. The results of these research showed that there is statistical significance between profitability, measured through gross operating profit, and the cash conversion cycle. managers can create profits for their companies by handling correctly the cash conversion cycle and keeping each different component (accounts receivables, accounts payables, inventory) to an optimum level.

**Pedro Juan García-Teruel**, investigate on “Effects of working capital management on SME profitability “ The object of the research presented in this paper is to provide empirical evidence on the effects of working capital management on the profitability of a sample of small and medium-sized Spanish firms. The results, which are robust to the presence of endogeneity, demonstrate that managers can create value by reducing their inventories and the number of days for which their accounts are outstanding. Moreover, shortening the cash conversion cycle also improves the firm's profitability.

**Raheman and Nasr (2007)** selected a sample of 94 listed Pakistani companies from different sectors of economy for a period of 8 years, from 1999-2004. The independent variables used were current ratio, day's receivable, day's inventory, days payable and cash conversion cycle. The results show that there is a strong negative relationship between variables of the working capital management and profitability of the firm. Researcher find that there is a significant negative relationship between liquidity and profitability and a positive relationship between size of the firm and its profitability.

A study by **Amarjit Gill 1, Nahum Biger 2, Neil Mathur 3 (2010)**, under the title "The Relationship between Working Capital Management and Profitability: Evidence from the United States", the aim of this paper is to find the relationship between working capital management and profitability. A sample of 88 American firms listed on New York Stock Exchange for a period of 3 years from 2005 to 2007 was selected.

Working capital starvation is generally credited as a major cause if not the major cause of small business failure in many developed and developing countries (**Rafuse, 1996**).

**Shin and Soenen, (1998)** highlighted that efficient Working Capital Management (WCM) was very important for creating value for the shareholders. The way working capital was managed had a significant impact on both profitability and liquidity

## Tools used for Analysis

**Current ratio**, also known as liquidity ratio and working capital ratio, shows the proportion of current assets of a business in relation to its current liabilities.

Formula Current Ratio = Current Asset / Current Liabilities

**Explanation.....** Current ratio expresses the extent to which the current liabilities of a business (i.e. liabilities due

to be settled within 12 months) are covered by its current assets (i.e. assets expected to be realized within 12 months). A current ratio of 2 would mean that current assets are sufficient to cover for twice the amount of a company's short term liabilities. –

**Interpretation & Analysis.....** Current ratio is a measure of liquidity of a company at a certain date. It must be analyzed in the context of the industry the company primarily relates to. The underlying trend of the ratio must also be monitored over a period of time. –

**Importance Current ratio.....** is the primary measure of a company's liquidity. Minimum levels of current ratio are often defined in loan covenants to protect the interest of the lenders in the event of deteriorating financial position of the borrowers. Financial regulations of various countries also impose restrictions on financial institutions to lend credit facilities to potential borrowers that have a current ratio which is lower than the defined limits. – The working capital ratio is useful in telling us whether the business can support itself with its current assets despite its current liabilities. The mathematical formula to calculate the working capital ratio is:

Working capital ratio = current assets / current liabilities

## Analysis

If current assets of a business at the point in time are more than its current liabilities the working capital is positive, and this tells that the company is not expected to suffer from liquidity crunch in near future. However, if current assets are less than current liabilities the working capital is negative, and this communicates that the business may not be able to pay off its current liabilities when due

## RESEARCH METHODOLOGY

### Nature of Data

The study on Working Capital Management of RCDF LTD.region has been conducted by using secondary data.

### Data Collection

Secondary data has been collected using annual reports of the firms, newspaper, magazines other periodicals and websites. Data from various departments of S aras dairy , Ajmer by talking to heads and staff members to each departments. By preparing a questionnaire and to get it filled from respondents. Data collected by conducting interviews. SECONDARY METHODS: Data from annual accounts of the Saras Dairy , Ajmer. Data collection from annual publication of Saras (magazine

### Universe of the Study

The universe of the study consists of five the units working in RCDF LTD

### Sampling Design

At present, there are about 50 units in the RCDF LTD. We has selected 5 units using convenient sampling. Data have been collected using annual reports of the units and websites.

## HYPOTHESIS OF THE STUDY:

The study has been pursued to test the following

hypothesis with reference to RCDF Ltd.

- That proper management of working capital improves both 'Liquidity and Profitability position of a business firm.
- That external sources of finance particularly bank borrowings are being liberally utilized in financing the working capital requirement of RCDF Ltd.
- That the scope for improvement in the management of working capital is greater in inventory as well as receivables management than in cash management.

We often start with as assertion or a hypothesis and use our research data to prove or to disprove it. Every hypothesis put to test with known statistical procedure and unless such tests are carried out a research is not complete.

### The Organisation – An Overview

Number of Producer Members	6,69,546
Number of Village Dairy Cooperative Societies	1176
Total Milk Handling Capacity	2.4 Million liters per day
Milk Collection (Daily Average)	1.5 Million liters
Milk Drying Capacity	100 Mts per day
Whey Drying Capacity	60 Mts per day
Cattle Feed Manufacturing Capacity	1100 Mts per day

Sales Turnover	Rs (Million)	US \$ (in million)
2002-03	4880	102
2003-04	5460	116
2004-05	6000	138
2005-06	7090	160
2006-07	8220	202
2007-08	10770	272
2008-09	13780	310
2009-10	16950	360
2010-11	21110	469
2011-12	24660	528

### CONCLUSION:

During the past decades , india holds a significant position and has undergone revolutionary changes in the profile of dairy industry. There have been considered improvement in formulating the method and technology of manufacturing the dairy product . In spite of having a signifying role in the Indian economy ,the dairy industry still faces some problems and challenges .More than 80% of the dairy occupation is still within the purview of unorganized sector. Working Capital management is an integral part of overall financial management. A firm may exist without making profits but cannot survive without liquidity. The function of working capital management organization is similar that of heart in a human body. The financial manager must determine the satisfactory level of working

capital funds and also the optimum mix of current assets and current liabilities. Ajmer union have more working capital. This is not good for union .Because union more funds are unused this fund union for many other productive works. Ajmer union have very high liquidity and it is financed by creditors rather than own funds and carries a high long term debt exposure Alwar union have more liabilities to current assets. These shows low liquidity position as it is below standard liquidity ratio. Its time is not good for union. Alwar union have not idle ratio of working capital 2:1. So this condition is not good for union . Bhilwara union have good liquidity position but prefer financing from own financial sources rather than borrowed funds. This time company may be use there funds in other uses . Jaipur union in 2010 have idle working capital ratio 2.197 and in 2009 more cash liquidity this is not good for union . Then next continues years decrease current ratio in these years showing low liquidity position as it is below standard liquidity ratio Udaipur union in current ratio 2009 2010,1nd 2011 these years showing low liquidity position as it is below standard liquidity ratio 2:1.Then union improve its working capital ratio so in 2012 and 2013 union have sufficient working capital ratio 2:1. These condition is better then last three years .Because union have liquidity for its current liabilities . So it can be concluded that Ajmer union have high liquidity postion this is not good for union .Alwar union had high debt exposure and doesn't maintain good liquidity which may be a dangerous trend. Bhilwara union have good liquidity position but prefer financing from own financial sources rather than borrowed funds.jaipur union will have improve its liquidity postion Further Udaipur union now have improve its liquidity condition

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