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A Study on Financial Statement Analysis with Special Reference to Chengalrayan Co-operative Sugar Mill Limited

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Abstract

This paper focuses on the financial statement analysis of Chengalrayan Co-operative Sugar Mill Limited. The objective is to assess the financial health and performance of the organization through an in-depth evaluation of its financial statements. The study involves collecting relevant data and applying analytical tools to interpret the company's financial condition. By examining key financial ratios, trends, and working capital management, the research aims to offer insights into the operational efficiency and financial stability of the mill. This analysis supports informed decision-making for stakeholders and contributes to the overall understanding of the mill's financial framework.

Keywords: Financial performance, working capital, trend analysis, Co-operative sugar mill

1. Introduction

Financial statements serve as crucial tools for studying the financial health and operational performance of the company. It provides detailed insights into various aspects of a company's finances, such as assets, liabilities, income, expenses, and overall profitability. This is centred on Chengalrayan Co-operative Sugar Mill Limited, a key player in the sugar industry. The primary objective of this study is to analyse the financial condition of the company by interpreting data from its balance sheet, income statement, and other relevant financial documents. By applying tools like ratio analysis, comparative statements, and trend analysis and working capital the study aims to uncover the mill's strengths and weaknesses in financial management.

2. Review of Literature

Mr. Sivadhasan, et al., (2024) studied the financial performance of sugar companies by examining profitability ratios, emphasizing that Return on Equity (ROE) alone is insufficient for assessment. DuPont and Path analysis were used to explore factors affecting ROE. The findings indicate a significant difference in ROE among companies but no significant link between the equity multiplier and ROE, stressing the need for a comprehensive financial analysis beyond basic profitability metrics.

Karthikeyan. K (2021) discussed the financial statement analysis of Primary Agricultural Cooperative Credit Society in Paiyanoor branch at Chengalpattu district, the study based last five year annual report of 2014 to 2019 form PACCS. The Accounting ratios like Current ratio, Quick ratio, Debt ratio, Debt equity ratio, Net assets turnover ratio, Gross profit ratio, Net profit ratio, Return on equity ratio, Return on equity ratio, Solvency ratio used analysis the performance of financial statement analysis of Primary Agricultural Cooperative Credit Society. It shows that the PACCS gradually increase financial performance in last five years from 2014 to 2019.

Srinivasan P (2018) evaluates the financial performance of Vellore Cooperative Sugar Mills Ltd from 2013 to 2017 using ratio analysis. By analysing balance sheets and profit & loss accounts, it assesses the company's financial position, aiding decision-making and profitability improvement. The research, based on secondary data, examines key financial metrics, including Activity, Liquidity, Solvency, and Profitability Ratios, providing insights into the company’s strengths and areas for improvement.

3. Research Methodology

Research methodology is the specific procedures or techniques used to identify, select, process, and analyse information about a topic.

Research Design

The research design used is Analytical in nature.

Financial Tools used: Ratio Analysis, Comparative Balance Sheet, Trend Analysis, Working Capital Analysis.

4. Data Analysis and Interpretation

Ratio Analysis

Net Profit Ratio

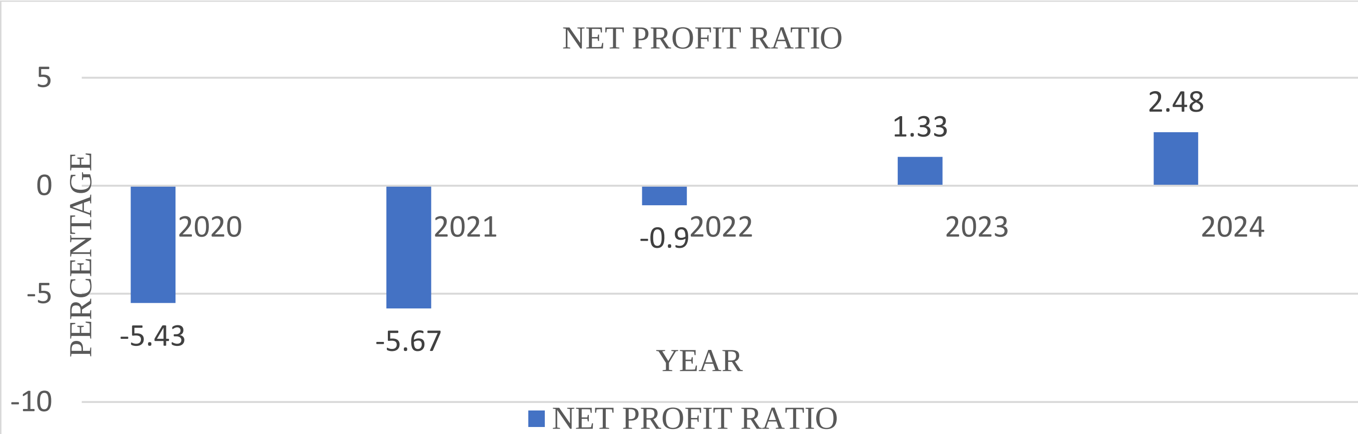
Table 1: Calculation of Net Profit Ratio

(Rs. in lakhs)

Parameters	2019-2020	2020-2021	2021-2022	2022-2023	2023-2024
Net Profit	-300.22	-495.71	-102.91	182.71	410.01
Sales	5531.67	8737.16	11395.46	13742.50	16540.50
Net Profit Ratio	-5.43	-5.67	-0.9	1.33	2.48

The above data is pictured in the next graph

Figure 1: Net Profit Ratio



Inference: From the above table, it is inferred that the net profit ratio was negative in 2019-2020 to 2021-2022, indicating losses. It turned positive in 2022-2023 (1.33) and further improved in 2023-2024 (2.48).

Return on Equity

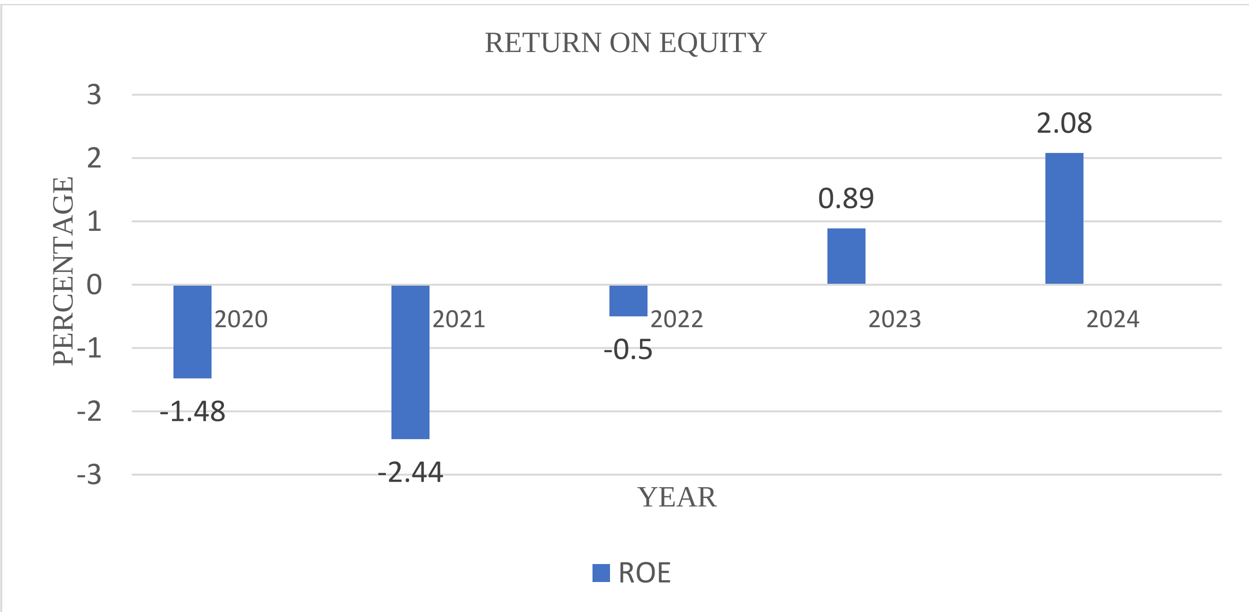
Table 2: Calculation of Return on equity

(Rs. in lakhs)

Parameters	**2019-2020**	**2020-2021**	**2021-2022**	**2022-2023**	**2023-2024**
Net Profit	-300.22	-495.71	-102.91	182.71	410.01
Shareholders Fund	20294.95	20299.48	20612.99	20634.96	19723.26
Return On Equity	-1.48	-2.44	-0.5	0.89	2.08

The above data is pictured in the next graph

Figure 2: Return on Equity



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Inference: From the above table, it is inferred that the ROE was negative in the first three years, mirroring the net losses. It improved significantly in 2022-2023 (0.89%) and 2023-2024 (2.08%).

Cash Ratio

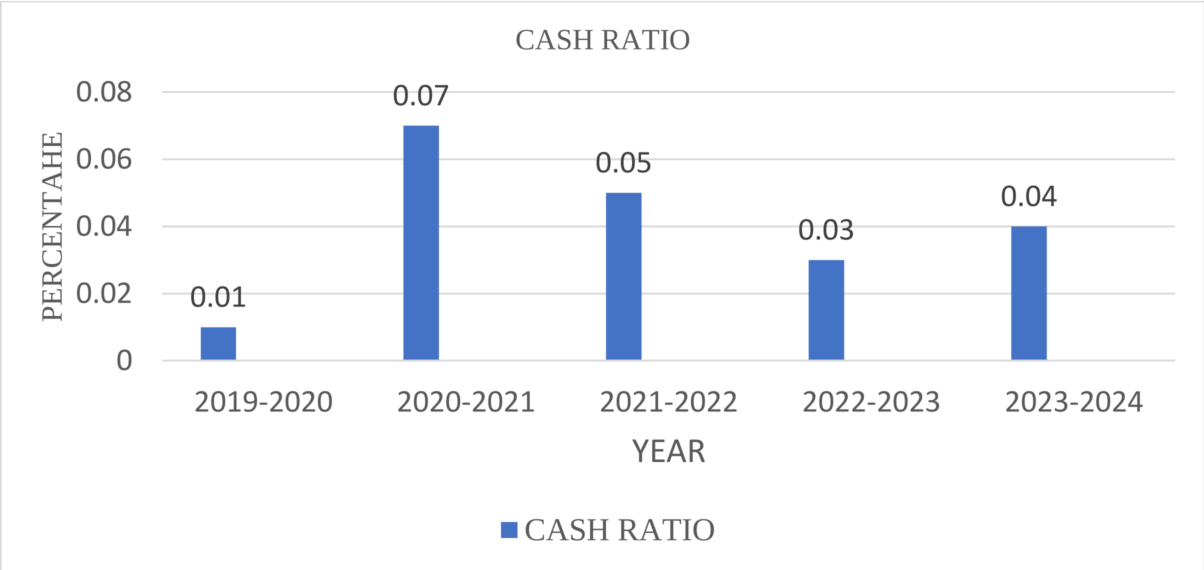
Table 3: Calculation of Cash Ratio

(Rs. in lakhs)

Parameters	**2019-2020**	**2020-2021**	**2021-2022**	**2022-2023**	**2023-2024**
Cash & cash equivalent	128.33	1147.85	772.91	409.7	727.63
Current liabilities	14004.45	17198.26	14747.74	15497.16	18609.74
Cash Ratio	0.01	0.07	0.05	0.03	0.04

The above data is pictured in the next graph

Figure 3: Cash Ratio



Inference: From the above table, it inferred that the cash ratio fluctuates considerably across the years. It was very low in 2019-2020 (0.01), peaked in 2020-2021 (0.07), and slightly dropped in 2023-2024 (0.04).

Proprietary Ratio

Table 4: Calculation of Proprietary Ratio

(Rs. in lakhs)

Parameters	**2019-2020**	**2020-2021**	**2021-2022**	**2022-2023**	**2023-2024**
Shareholders fund	20294.95	20299.48	20612.99	20634.96	19723.26
Total Asset	26124.78	26611.88	29189.01	30417.65	30346.61

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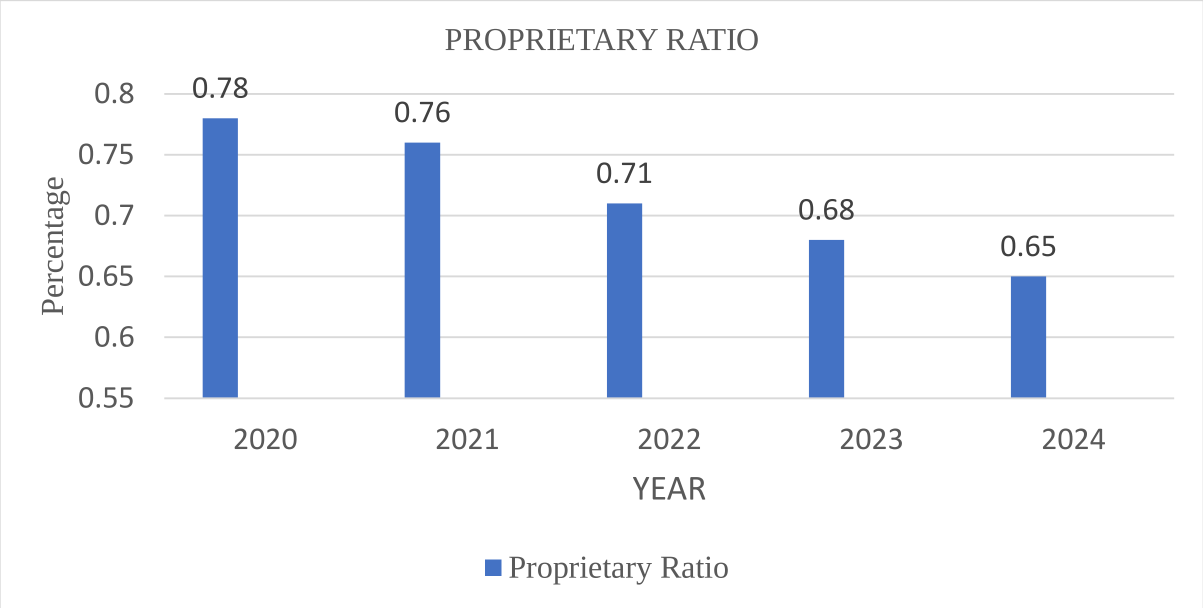
Proprietary Ratio	0.78	0.76	0.71	0.68	0.65

The above data is pictured in the next graph

Figure 4: Proprietary Ratio



Inference: From the above table, it is inferred that the proprietary ratio has slightly declined over the years from 0.78 (2019-2020) to 0.65 (2023-2024).

5. Trend Analysis

Trend Analysis on Liabilities

Table 5: Trend Analysis on Liabilities

(Rs. in lakhs)

PARTICULARS	YEAR END					TREND PERCENTAGE BASE YEAR				
Sources of Funds (Liabilities)	2020	2021	2022	2023	2024	2020	2021	2022	2023	2024
Shareholder's Funds										
Share Capital	16731	167391	167534	16769	16785	100	100.1	100.13	100.22	100.32
Share Deposits	53.04	544.03	549.71	55.43	55.77	100	102.6	103.64	104.51	105.15
Reserves And Surplus	3510	35059	38046.6	3811	2883	100	99.87	108.38	108.56	82.12
Loan Funds										
Secured Loan	-0.26	0	0	0	0	100	0	0	0	0
Unsecured Loan	5830	63124	85760.2	9782.7	10623	100	108.3	147.1	167.8	182.22

Total Liabilities	26125	266119	291890	30418	30347	100	101.9	111.73	116.43	116.16

Inference: From the above table, it is inferred that the share capital remained constant and slightly increasing, but reserves dropped to 82.12% in 2024, hinting at losses and the rise in unsecured loans showing reliance on external borrowings

Trend Analysis on Asset

Table 6: Trend Analysis on Asset(Rs. in lakhs)

PARTICULARS	**YEAR END**					**TREND PERCENTAGE**				
Application of Funds (Asset)	2020	2021	2022	2023	2024	2020	2021	2022	2023	2024
Fixed Assets										
Gross Block	4729	48196	48987.3	5107.2	5369	100	101.9	103.58	107.99	113.53
Less Accumulated Depreciation	4488	45662	46487.6	4726.3	4834	100	101.8	103.59	105.31	107.71
Net Block	241.5	2533.9	2499.73	380.95	535.2	100	104.9	103.52	157.77	221.64
Capital/ Cogen Working Progress	2719	27187	27187.2	2718.7	2719	100	100	100	100	100
Sub Total	2960	29721	29686.9	3099.7	3254	100	100.4	100.29	104.71	109.92
Investments And Deposits	134.2	349.87	360.91	84.33	86.14	100	26.07	26.89	62.83	64.17
Current Assets										
Inventories	8825	104663	90969.9	9738.3	10165	100	118.6	103.09	110.35	115.19
Sundry Debtors	5948	67865	81749.8	9928.4	12369	100	114.1	137.45	166.93	207.96
Cash And Bank Balance	128.3	11479	7729.07	409.7	727.6	100	894.5	602.28	319.26	567
Loans And Advance	1456	12282	16100	1560	1670	100	84.37	110.6	107.17	114.71
Sub Total	16356	196289	196549	21636	24932	100	120	120.17	132.28	152.43
Less Current Liabilities & Provisions	14004	171983	147477	15497	18610	100	122.8	105.31	110.66	132.88
Net Current Asset	2352	24306	49071.3	6139.3	6322	100	103.4	208.65	261.04	268.82
Miscellaneous Expenditure	0	0	0	0	0	100	0	0	0	0
Profit And Loss Account	-20678	-2E+05	-212771	-21094	-20684	100	102.4	102.89	102.01	100.03
Total Asset	26125	266119	291890	30418	30347	100	101.9	111.73	116.43	116.16

Inference: From the above table, it is inferred that total assets have shown steady growth, increasing from 101.86% in 2021 to 116.16% by 2024. Fixed assets, especially net block, have significantly increased (221.64%). Cash and bank balance, investments showed inconsistency leading to uneven liquidity management

6. Working Capital Analysis

Statement of Changes in Working Capital for the Year 2020 and 2021

Table 7: Working Capital Statement 2020 – 2021

(Rs. in lakhs)

Particular	**31-Mar-2020(Rs.)**	**31-Mar-2021(Rs.)**	**Increase (Rs.)**	**Decrease (Rs.)**
A. Assets				
Current Assets				
(a) Inventories	8824.54	10466.29	1641.75	-
(b) Sundry debtors	5947.78	6786.54	838.76	-
(b) Cash and Bank balance	128.33	1147.85	1019.52	-
(d) Loans and advance	1455.68	1228.17	-	227.51
Total Current Asset (A)	**16356.33**	**19628.86**		
B. Liabilities				
Current Liabilities and provisions	14004.45	17198.26	-	3193.81
Total Current Liabilities (B)	**14004.45**	**17198.26**		
Working capital (A-B)	2351.88	2430.6	-	78.72
Net Increase in working capital	78.72			
TOTAL	**2430.6**	**2430.6**	**3500.04**	**3500.04**

Inference: From the above table, it is inferred that the net working capital is slightly increased during the year of 2020–2021 by 78.72 lakhs.

Statement of Changes in Working Capital for the Year 2021 and 2022

Table 8: Working Capital Statement 2021– 2022

(Rs. in lakhs)

Particular	**31-Mar-2021(Rs.)**	**31-Mar-2022(Rs.)**	**Increase (Rs.)**	**Decrease (Rs.)**
A. Assets				
Current Assets				
(a) Inventories	10466.29	9096.98	-	1369.31
(b) Sundry debtors	6786.54	8174.98	1388.44	-
(b) Cash and Bank balance	1147.85	772.91	-	374.94
(d) Loans and advance	1228.17	1610	381.83	-
Total Current Asset (A)	**19628.86**	**19654.87**		

B. Liabilities				
Current Liabilities and provisions	17198.26	14747.74	2450.52	-
Total Current Liabilities (B)	**17198.26**	**14747.74**		
Working capital (A-B)	2430.6	4907.13	-	2476.53
Net Increase in working capital	2476.53			
TOTAL	**4907.13**	**4907.13**	**6697.32**	**6697.32**

Inference: From the above table, it shows that the working capital is increased by 2476.53 lakhs in year from 2021 to 2022.

Statement of Changes in Working Capital for the Year 2022 and 2023

Table 9: Working Capital Statement 2022– 2023

(Rs. in lakhs)

Particular	**31-Mar-2022(Rs.)**	**31- Mar-2023 (Rs.)**	**Increase (Rs.)**	**Decrease (Rs.)**
A. Assets				
Current Assets				
(a) Inventories	9096.98	9738.29	641.31	-
(b) Sundry debtors	8174.98	9928.4	1753.42	-
(b) Cash and Bank balance	772.91	409.7	-	363.21
(d) Loans and advance	1610	1560.04	-	49.96
Total Current Asset (A)	**19654.87**	**21636.43**		
B. Liabilities				
Current Liabilities and provisions	14747.74	15497.16	-	749.42
Total Current Liabilities (B)	**14747.74**	**15497.16**		
Working capital (A-B)	4907.13	6139.27	-	1232.14
Net Increase in working capital	1232.14			
TOTAL	**6139.27**	**6139.27**	**2394.73**	**2394.73**

Inference: From the above table, it is inferred that in 2022–2023, working capital increased (by ₹1232.14 lakhs), mainly due to higher receivables, but cash reduced and liabilities increased.

Statement of Changes in Working Capital for the Year 2023 and 2024

Table 10: Working Capital Statement 2023– 2024

(Rs. in lakhs)

Particular	**31-Mar-2023(Rs.)**	**31-Mar-2024(Rs.)**	**Increase (Rs.)**	**Decrease (Rs.)**
A. Assets				
Current Assets				
(a) Inventories	9738.29	10165.4	427.11	-
(b) Sundry debtors	9928.4	12369.13	2440.7	-
(b) Cash and Bank balance	409.7	727.63	317.93	-
(d) Loans and advance	1560.04	1669.79	109.75	-
Total Current Asset (A)	**21636.43**	**24931.95**		
B. Liabilities				
Current Liabilities and provisions	15497.16	18609.74	-	3112.6
Total Current Liabilities (B)	**15497.16**	**18609.74**		
Working capital (A-B)	6139.27	6322.21	-	182.94
Net Increase in working capital	182.94			
TOTAL	**6322.21**	**6322.21**	**3295.54**	**3295.54**

Inference: From the above table, it is inferred that in 2023–2024, working capital increased only slightly (by ₹182.94 lakhs) because liabilities grew more than assets.

Findings

Ratio Analysis

- Cash ratio fluctuated between 0.01 and 0.07, reflecting inconsistent cash and bank management.
- Net profit ratio was negative until 2021–2022 but turned positive in 2022–2023 (1.33%) and improved further in 2023–2024 (2.48%).
- Return on Equity (ROE) remained negative for the first three years but improved to 2.08% by 2023–2024.
- Proprietary Ratio decreased from 0.78 to 0.65, indicating declining equity support.

Comparative Balance Sheet Analysis

- In 2020–2021, total assets and shareholders' funds increased by 1.86% and 2.48% respectively, showing slight growth.
- In 2021–2022, total assets grew by 9.68% and unsecured loans stood up by 35.86%, indicating increased borrowing.
- In 2022–2023, total assets and fixed assets lifted moderately, with higher current liabilities.
- In 2023–2024, total assets slightly declined by 0.23%, and shareholders' funds also dropped, indicating financial instability**.**

Trend Analysis

- Liabilities showed a steady increase from 2020 to 2024. While share capital remained constant, reserves declined by 82.12% , and unsecured loans increased by 182.22% in 2024

- Assets displayed consistent growth over the five-year period increasing from 101.86% in 2021 to 116.16% by 2024. Fixed assets, especially net block, have significantly increased (221.64%). However, inconsistencies in cash and bank balances reflect uneven liquidity planning and cash flow management.

Working Capital Analysis

- In 2020–2021, working capital increased only a little (by ₹78.72 lakhs) because liabilities went up a lot, even though assets also increased.
- In 2021–2022, working capital improved a lot (by ₹2476.53 lakhs) because current liabilities dropped and receivables increased.
- In 2022–2023, working capital increased (by ₹1232.14 lakhs), mainly due to higher receivables, but cash reduced and liabilities increased.
- In 2023–2024, working capital increased only slightly (by ₹182.94 lakhs) because liabilities grew more than assets.

Suggestions

- The company should focus on improving cash and bank balance to enhance immediate liquidity. Although profitability is improving, cost control measures should be adopted to further enhance net profit margins.

- The decrease in proprietary ratio suggests growing dependence on debt management should raise internal equity or reduce external borrowings.

- The increase in unsecured loans should be controlled to avoid excessive interest burdens. Management must prioritize low-cost financing and internal fund generation.

- Trend analysis indicates inconsistent investment and cash flow patterns strategic financial planning is essential for long-term stability.

- High and increasing current liabilities are weakening working capital gains. Negotiating better credit terms with suppliers and reducing short-term debts can help improve the position.

7. Conclusion

The study on financial statement analysis of Chengalrayan Co-operative Sugar Mill Limited from 2020 to 2024 successfully met the objectives by providing clear insights into the company's profitability, financial trends, and overall performance. Through tools like ratio analysis, working capital analysis, trend analysis, and comparative balance sheets, the study revealed improvements in liquidity, asset efficiency, and financial planning. The mill showed better management of current assets and liabilities, with year-over-year changes highlighting strengths and areas of concern for improvement to support sustainable growth.

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