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A STUDY OF FINANCIAL PERFORMANCE INDICATORS OF SELECTED DAIRY COMPANIES IN GUJARAT

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ABSTRACT

The dairy industry plays a crucial role in Gujarat's economy, with cooperative dairies like Amul, Baroda, and Panchamrut contributing significantly to the state's milk production and processing capabilities. This study aims to analyze the financial performance indicators of selected dairy companies in Gujarat over a five-year period (2018-19 to 2022-23) using key ratios, including Return on Assets (ROA), Return on Capital Employed (ROCE), Asset Turnover Ratio (ATR), Current Ratio, and Quick Ratio. The findings reveal that Amul Dairy consistently outperforms its peers in terms of profitability and operational efficiency, as evidenced by higher ROA, ROCE, and ATR values. However, its liquidity position, particularly reflected in the quick ratio, remains significantly below the ideal benchmark, indicating heavy reliance on inventory to meet short-term obligations. Baroda Dairy exhibits weaker profitability and efficiency metrics, though it maintains a relatively stable liquidity position compared to its peers. Panchamrut Dairy demonstrates moderate profitability and asset utilization but shows a steady improvement in liquidity ratios over the years, indicating prudent financial management. The study concludes that while Amul enjoys a dominant position in terms of profitability and operational scale, it needs to strengthen its liquidity management. Baroda Dairy must improve asset utilization and profitability, while Panchamrut Dairy should focus on maintaining its liquidity improvements alongside enhancing efficiency. The findings provide critical insights for cooperative management and policymakers to devise strategies that ensure sustainable growth and financial stability in the dairy sector of Gujarat.

KEYWORDS: Dairy Industry, Financial Performance, Profitability, Liquidity, Gujarat, Co-operative Dairies, Ratio Analysis

1. INTRODUCTION

The dairy industry of Gujarat occupies a unique and significant position in the agricultural and industrial landscape of India. Known as the "Milk Bowl of India," Gujarat has played a pioneering role in shaping the cooperative dairy movement through the world-famous Amul Model, which has become synonymous with rural empowerment and sustainable development. The state accounts for a substantial share of India's total milk production, contributing significantly to the livelihood of millions of farmers, especially those in rural and semi-urban areas. With its integrated cooperative structure, Gujarat has set an example for other states in terms of collective effort, farmer participation, and efficient supply chain management.

The foundation of Gujarat's dairy sector was laid with the establishment of the Kaira District Cooperative Milk Producers' Union in Anand in 1946, which later evolved into Amul, the largest dairy brand in India. This initiative gave birth to the White Revolution in India under the leadership of Dr. Verghese Kurien, who is often regarded as the father of the Indian dairy industry. The success of Amul not only transformed Gujarat into a leading milk-producing state but also created a model for rural development through cooperatives, where profits are shared among milk producers rather than concentrated in the hands of a few.

Today, Gujarat's dairy industry comprises a robust network of cooperative dairies and private sector dairies, operating in a competitive yet complementary manner. The Gujarat Cooperative Milk Marketing Federation (GCMMF), which markets the Amul brand, is the largest food product marketing organization in India. It serves as the apex body for various district milk unions spread across the state, linking millions of dairy farmers to national and international markets. Apart from cooperatives, numerous private dairies have also entered the sector, offering diverse dairy products and investing in advanced processing technologies, which has further strengthened the industry.

The dairy sector in Gujarat is not limited to milk procurement and distribution; it has diversified into value-added products such as butter, cheese, ghee, yogurt, and milk-based sweets. The increasing demand for high-quality dairy products in urban markets, along with export opportunities, has driven continuous innovation and modernization in the industry. Moreover, the government of Gujarat and institutions like the National Dairy Development Board (NDDB) have actively supported the sector through various initiatives aimed at improving productivity, quality standards, and farmer income.

In recent years, the dairy industry in Gujarat has faced both opportunities and challenges. While rising consumer demand and technological advancements present growth prospects, issues such as fluctuating milk prices, high operational costs, and global market volatility pose risks. Nonetheless, the strong foundation of cooperative principles, strategic leadership, and farmer-centric policies has enabled the state to maintain its dominance in India's dairy sector. This rich history and dynamic present make the Gujarat dairy industry a subject of great academic and economic significance.

2. NEED OF THE STUDY

The need for the study titled "A Study of Financial Performance Indicators of Selected Dairy Companies in Gujarat" arises from the critical role that the dairy industry plays in the socio-economic development of the state and the country. Gujarat is considered one of the leading states in dairy production, with its cooperative structure and private sector dairies contributing significantly to rural income generation and employment. The dairy sector has been instrumental in uplifting rural economies by providing a sustainable source of livelihood for millions of farmers. Given the economic and social relevance of this sector, assessing the financial performance of dairy companies becomes essential to ensure their long-term sustainability and growth.

Financial performance indicators act as vital tools for measuring the operational efficiency, profitability, and financial stability of an organization. In the case of dairy companies, which operate under fluctuating market conditions, rising input costs, and competitive pressures, understanding their financial health is crucial for stakeholders such as investors, policymakers, management, and farmers. By analyzing indicators like liquidity ratios, profitability ratios, solvency ratios, and efficiency ratios, this study seeks to provide a comprehensive assessment of how well these companies utilize their resources, manage their debts, and generate returns. Such an evaluation becomes particularly important in the context of Gujarat, where both cooperative dairies and private players coexist and compete for market share.

The dairy industry in Gujarat has witnessed significant structural changes over the past few decades due to technological advancements, policy reforms, and growing consumer demand for value-added products. These changes have placed additional pressure on companies to maintain strong financial fundamentals. A systematic analysis of financial performance will help identify areas where these companies excel and where they face challenges. This understanding can guide strategic decisions, such as improving cost efficiency, enhancing capital structure, and adopting innovative practices for sustained profitability. Furthermore, it can highlight the resilience of these companies in the face of economic uncertainties and market dynamics.

Another reason for conducting this study is the growing demand for transparency and accountability in business operations. Stakeholders today seek data-driven insights to make informed decisions, whether for investment, credit appraisal, or policy formulation. An in-depth study of financial performance indicators will provide empirical evidence regarding the financial soundness of selected dairy companies in Gujarat. The findings will be useful not only for the companies themselves but also for regulators, cooperative societies, and investors who wish to assess the viability and future prospects of the sector. Thus, this research addresses a vital gap in the literature by offering a detailed financial analysis of a key segment of Gujarat's economy, contributing to informed decision-making and sustainable growth of the dairy sector.

3. LITERATURE REVIEW

Gayathri V (2025) examined the Salem District Cooperative Milk Producers Union Limited (SDCMPU) using a comprehensive ratio analysis framework to gauge liquidity, solvency, activity, and profitability over multiple financial years. The study reported mixed liquidity, with current and quick ratios hovering near threshold levels that suggest tight short-term finances, alongside uneven profitability driven by fluctuations in procurement prices and processing costs. Gayathri emphasized that working-capital discipline—particularly receivables control and inventory turnover—was the most immediate lever available to a district union to stabilize margins, and recommended closer monitoring of cash conversion cycles and vendor credit terms to guard against liquidity stress while sustaining payments to member producers.

Bhatia, H. and Shah, K. (2024) compared selected dairy units from Gujarat and Punjab across an eleven-year period, focusing on returns, leverage, and liquidity indicators to benchmark co-operative financial resilience. They found that Gujarat units generally exhibited stronger returns on capital employed and steadier operating margins, whereas several Punjab units showed pressure on ROCE—including some years with negative readings—reflecting higher leverage and volatile cost structures. The authors concluded that federated procurement strength, scale in value-added products, and disciplined capital structure were associated with more robust—and less cyclical—financial performance among co-operative dairies.

Yuvasri, S. and Chandra Mohan, T. (2024) analysed how working-capital management affects the profitability of Aavin, the Tamil Nadu state dairy co-operative. Drawing on secondary financials and ratio diagnostics, they reported that profitability is highly sensitive to the efficiency of inventory, receivables, and payables management; specifically, shorter inventory holding periods and tighter receivables collection were associated with healthier operating margins. They argued that aligning procurement, production planning, and distribution to reduce cash tied up in stocks—while preserving milk quality and service levels—is pivotal for co-operatives operating on thin margins, and recommended instituting policy targets for key working-capital ratios along with periodic variance reviews.

Sulthana, M. Nasrin (2024) investigated Aavin's asset–liability management practices and their linkage to profitability and liquidity risk. The paper highlighted that mismatches between the tenor of assets (notably receivables and inventories tied to seasonal procurement) and liabilities (including short-term borrowings used to fund flush-season stock) can elevate financing costs and compress margins. The author recommended better duration matching, stress-testing for commodity price swings (such as skim milk powder cycles), and tighter treasury controls to lower interest burden and stabilize returns, noting that governance discipline in co-operatives is essential to translate operational strengths into sustainable financial performance.

Santhosha, K. M., Gaddi, G. M., and Gracy, C. P. (2020) reviewed performance of the Shivamogga–Haveri–Uttar Kannada Milk Union (SHIMUL) within the Karnataka Milk Federation to assess how procurement growth and cost management translated into financial outcomes. They observed that while volumes and member participation expanded, operating surpluses remained sensitive to input cost spikes and marketing expenses, underscoring the need for continuous efficiency gains in processing and logistics. The authors concluded that improving capacity utilization, rationalizing distribution routes, and strengthening value-added product lines were key to improving co-operative profitability without compromising producer price realization.

Narchonai, R. and Jayanthan, D. (2025) conducted a solvency and long-term financial stability assessment of the Karaikal Cooperative Milk Producers Union. Using debt–equity, proprietary, and interest-coverage ratios, they found a moderate dependence on debt financing, acceptable coverage of finance costs, and scope to improve capital structure through retained surpluses and prudent term-loan management. Their recommendations centered on cost discipline in processing and transportation, gradual deleveraging as cash flows permit, and careful timing of capital expenditure so that working-capital adequacy for milk procurement is never compromised.

Thakker, S., Patel, P., and Patel, H. (2021) evaluated working-capital efficiency at Kaira District Cooperative Milk Producers' Union Limited (Amul Dairy) over three years and found liquidity pressures reflected in current ratios below 1 and very low cash ratios, even as inventory turnover remained relatively healthy. They concluded that while operational efficiency in moving product was evident, liquidity buffers were thin; they urged bolstering cash management practices, optimizing the mix of payables and short-term borrowings, and tightening receivables to ensure that procurement obligations and day-to-day expenses are met without undue financing strain.

Gauswami, M. K., and Dwivedi, V. J. (2022) compared profitability and liquidity of the Rajkot and Bharuch district unions in Gujarat to understand the trade-offs co-operatives face between growth and financial prudence. Their analysis showed Rajkot achieving relatively stronger profitability metrics on average, while liquidity indicators required careful monitoring; Bharuch, by contrast, displayed more conservative liquidity at the cost of weaker returns in some years. The authors concluded that co-operative unions with diversified product portfolios and disciplined cost control tend to realize better margins, but sustained performance depends on simultaneously safeguarding short-term solvency through structured working-capital policies.

4. RESEARCH OBJECTIVES

1. To analyse the profitability measures of selected Co-operative dairies of Gujarat
2. To analyse the liquidity measures of selected Co-operative dairies of Gujarat

5. SAMPLE SIZE

In this study 3 Co-operative dairies have been selected

1. Amul Dairy
2. Baroda Dairy
3. Panchamrut Dairy

6. DATA ANALYSIS

RETURN ON ASSETS			
YEAR	Amul Dairy	Baroda Dairy	Panchamrut Dairy
2018-19	1.481	0.183	0.742
2019-20	0.680	0.162	0.918
2020-21	1.157	0.347	0.929
2021-22	1.148	0.348	0.911
2022-23	1.073	-0.284	0.961

For Amul Dairy, the ROA values exhibit relative stability with moderate fluctuations. In 2018-19, Amul Dairy posted a strong ROA of 1.481, indicating highly efficient asset utilization during that year. However, the subsequent year (2019-20) saw a significant decline to 0.680, which may be attributed to increased operational costs, market volatility, or pandemic-related disruptions affecting profitability. The following years, 2020-21 and 2021-22, witnessed a recovery to 1.157 and 1.148 respectively, signaling effective strategic adjustments and better control over costs or improved revenue generation. By 2022-23, ROA slightly decreased to 1.073, which still reflects consistent and efficient performance, positioning Amul Dairy as the most stable and profitable among the three.

Baroda Dairy shows a very different trend, characterized by consistently low ROA values and even negative performance in the final year. In 2018-19, Baroda Dairy recorded an ROA of 0.183, which further dipped to 0.162 in 2019-20, reflecting weak profitability relative to its asset base. The performance improved in 2020-21 and 2021-22, where ROA rose to 0.347 and 0.348 respectively, possibly due to improved cost management or increased sales. However, in 2022-23, Baroda Dairy reported a negative ROA of -0.284, indicating a severe financial setback, where losses wiped out any earnings from assets. This could be due to increased operational expenses, declining sales, or external challenges like raw material price hikes, signaling urgent need for strategic intervention to restore financial stability.

Panchamrut Dairy, on the other hand, demonstrates a relatively consistent and improving trend across the five-year period. Starting at 0.742 in 2018-19, the ROA increased to 0.918 in 2019-20 and further to 0.929 in 2020-21, suggesting effective asset management and growing profitability during this phase. The slight decline to 0.911 in 2021-22 and then a rise to 0.961 in 2022-23 indicates that Panchamrut Dairy maintained a steady and balanced approach to operations, achieving moderate improvements despite industry challenges. Among the three dairies, Panchamrut displays the most consistent positive growth in ROA, which reflects sound operational practices and financial discipline.

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Overall, the analysis shows that Amul Dairy remains the leader in terms of ROA across all years, demonstrating strong asset utilization and profitability. Panchamrut Dairy exhibits steady improvement and stability, making it a well-managed player in the sector. Conversely, Baroda Dairy lags significantly, with its negative ROA in 2022-23 raising concerns about its sustainability and operational efficiency. These findings underscore the importance of cost control, revenue enhancement strategies, and effective asset management for maintaining financial health in the competitive dairy industry.

ASSET TURNOVER RATIO			
YEAR	**Amul Dairy**	**Baroda Dairy**	**Panchamrut Dairy**
2018-19	3.421	3.220	1.625
2019-20	2.692	2.032	2.143
2020-21	3.235	2.678	2.044
2021-22	3.248	2.648	1.936
2022-23	3.288	2.464	1.994

Amul Dairy demonstrates strong and relatively stable asset utilization throughout the period. Starting at 3.421 in 2018-19, the ratio declined to 2.692 in 2019-20, which might indicate reduced sales due to market challenges or the pandemic impact on distribution and demand. However, the subsequent years show a consistent recovery and stabilization, with 3.235 in 2020-21, 3.248 in 2021-22, and 3.288 in 2022-23. These figures indicate that Amul Dairy maintains a high level of operational efficiency, generating more than three times its asset value in revenue annually, which underscores its strong market position, brand equity, and effective utilization of resources.

Baroda Dairy follows a moderate efficiency trend compared to Amul Dairy. The asset turnover ratio was 3.220 in 2018-19, relatively close to Amul's performance, but experienced a steep decline to 2.032 in 2019-20. This sharp fall signals significant inefficiencies during that period, possibly due to demand contraction or excessive investment in assets without proportional revenue growth. The ratio improved to 2.678 in 2020-21 and slightly decreased to 2.648 in 2021-22, followed by a further drop to 2.464 in 2022-23. Although Baroda Dairy shows some recovery after the major dip, its declining trajectory in recent years suggests that the company needs to optimize its asset base and enhance sales productivity to prevent further erosion of operational efficiency.

Panchamrut Dairy exhibits the lowest asset turnover ratios among the three, indicating comparatively lower efficiency in utilizing its assets to generate revenue. In 2018-19, the ratio stood at 1.625, which is significantly lower than both Amul and Baroda. It improved to 2.143 in 2019-20, showing better utilization during that year, but then dropped slightly to 2.044 in 2020-21 and further to 1.936 in 2021-22, before rising marginally to 1.994 in 2022-23. Despite minor fluctuations, the overall pattern suggests that Panchamrut Dairy has not been able to achieve the same level of operational efficiency as its counterparts, possibly due to smaller scale operations, limited market reach, or higher capital intensity relative to its revenue.

Comparing all three, Amul Dairy clearly leads in asset utilization efficiency, maintaining consistently high ratios across all years, which reflects its robust sales network, large consumer base, and optimized use of infrastructure. Baroda Dairy demonstrates volatility, with its ratios falling sharply after 2018-19 and never returning to initial levels, highlighting potential structural inefficiencies. Panchamrut Dairy, while stable, consistently lags behind, suggesting that its asset deployment strategies require significant improvement to enhance productivity and profitability.

RETURN ON CAPITAL EMPLOYED			
YEAR	**Amul Dairy**	**Baroda Dairy**	**Panchamrut Dairy**
2018-19	9.978	6.409	8.765
2019-20	3.977	3.408	16.117
2020-21	7.230	5.040	13.311
2021-22	7.378	5.039	10.517
2022-23	9.118	5.112	10.060

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CURRENT RATIO			
YEAR	**Amul Dairy**	**Baroda Dairy**	**Panchamrut Dairy**
2018-19	1.167	1.903	1.117
2019-20	1.231	1.571	0.923
2020-21	1.124	1.554	1.067
2021-22	1.110	1.566	1.038
2022-23	0.904	1.689	1.069

For Amul Dairy, the current ratio starts at 1.167 in 2018-19, reflecting a comfortable liquidity position, though relatively close to the minimum benchmark of 1. In 2019-20, the ratio slightly improved to 1.231, suggesting marginal strengthening in its ability to cover short-term obligations. However, from 2020-21 onward, the ratio declined to 1.124 and further to 1.110 in 2021-22, indicating a gradual weakening of liquidity. The most concerning figure is in 2022-23, where the ratio dropped below 1 to 0.904, signaling that Amul Dairy may not have had enough current assets to cover its current liabilities during that year. This trend suggests that while Amul remains a strong brand with high profitability, its liquidity management might require immediate attention to avoid working capital constraints in the future.

Baroda Dairy exhibits a relatively strong liquidity position throughout the five-year period compared to the other two dairies. In 2018-19, the current ratio was 1.903, indicating a very comfortable liquidity buffer. Although the ratio declined to 1.571 in 2019-20 and further to 1.554 in 2020-21, these figures remain well above the benchmark of 1, showing that Baroda Dairy consistently maintained an adequate cushion of current assets over current liabilities. The ratio remained almost stable in 2021-22 at 1.566 and then slightly increased to 1.689 in 2022-23, suggesting an improvement in liquidity management in the latest year. This consistent performance reflects prudent working capital management and a conservative approach to maintaining solvency in the short term.

Panchamrut Dairy has shown mixed liquidity performance over the period. In 2018-19, the current ratio stood at 1.117, which was above 1 and thus satisfactory. However, in 2019-20, the ratio dropped sharply to 0.923, signaling a liquidity risk where current liabilities exceeded current assets. This indicates that the company may have faced working capital challenges during that year. The ratio improved to 1.067 in 2020-21 and 1.038 in 2021-22, suggesting some recovery in liquidity position. By 2022-23, the ratio further improved slightly to 1.069, but overall, Panchamrut's liquidity position remains modest, requiring careful monitoring to ensure that obligations can be met without financial stress.

In comparison, Baroda Dairy consistently demonstrates the strongest liquidity position, maintaining current ratios well above 1.5 throughout the period, which suggests a conservative and secure approach to short-term financial obligations. Amul Dairy, despite its strong operational and profitability indicators, shows a declining trend in liquidity, culminating in a sub-1 ratio in 2022-23, which is a red flag for financial management. Panchamrut Dairy, while not as risky as Amul in the final year, has displayed variability in its liquidity position and needs to stabilize its working capital policies to avoid slipping into short-term financial stress again.

QUICK RATIO			
YEAR	**Amul Dairy**	**Baroda Dairy**	**Panchamrut Dairy**
2018-19	0.101	0.531	0.629
2019-20	0.035	0.362	0.546
2020-21	0.124	0.396	0.571
2021-22	0.119	0.403	0.662
2022-23	0.108	0.496	0.755

For Amul Dairy, the quick ratio has remained significantly below 1 throughout the five-year period, indicating a heavy dependence on inventory and other non-liquid assets to meet its current obligations. In 2018-19, the quick ratio stood at 0.101, which is extremely low and signals inadequate immediate liquidity. The situation worsened in 2019-20 when the ratio dropped further to 0.035, implying a severe shortage of liquid assets relative to liabilities. Although the ratio improved to 0.124 in 2020-21 and slightly decreased to 0.119 in 2021-22, it still remained critically low. In 2022-23, the ratio slightly declined to 0.108, suggesting persistent liquidity constraints. This consistently low quick ratio indicates that Amul Dairy relies heavily on inventory for its working capital and may face challenges if quick cash is needed to settle immediate obligations. The trend reflects a high-risk liquidity position despite Amul's strong market presence.

Baroda Dairy demonstrates a comparatively stronger quick ratio performance than Amul Dairy but still falls below the ideal benchmark of 1 across all years. In 2018-19, the quick ratio was 0.531, which is relatively better, showing moderate liquidity. However, in 2019-20, it declined to 0.362, suggesting a reduction in quick assets or an increase in current liabilities. The ratio gradually improved in subsequent years, with 0.396 in 2020-21, 0.403 in 2021-22, and a notable increase to 0.496 in 2022-23. Although Baroda Dairy has shown an upward trend in the last two years, the ratio remains below 1, indicating continued reliance on inventory and other current assets for meeting obligations. Nevertheless, the steady improvement suggests that Baroda Dairy is adopting better liquidity management strategies and could move closer to a healthier position if this trend continues.

Panchamrut Dairy exhibits the strongest quick ratio performance among the three dairies during the study period. Starting with 0.629 in 2018-19, Panchamrut Dairy already had a relatively better liquidity position compared to Amul and Baroda Dairies. Although the ratio slightly declined to 0.546 in 2019-20, it improved consistently thereafter, reaching 0.571 in 2020-21, 0.662 in 2021-22, and 0.755 in 2022-23. This upward trend highlights Panchamrut's improving ability to meet its short-term obligations using quick assets. Despite remaining below the ideal benchmark of 1, the company's progressive improvement over the years indicates prudent financial management and a stronger liquidity cushion compared to its peers.

In comparison, Panchamrut Dairy is the best performer in terms of quick ratio, showing a consistent improvement and relatively better liquidity position, though still not ideal. Baroda Dairy ranks second, with moderate liquidity and a positive trend toward improvement in recent years. Amul Dairy, however, shows an alarmingly low quick ratio throughout the period, which is a major concern for its short-term solvency. The data suggests that Amul Dairy needs to enhance its cash and equivalent reserves or reduce reliance on inventory to strengthen its liquidity position.

7. CONCLUSION

The analysis of liquidity, profitability, and efficiency ratios for Amul Dairy, Baroda Dairy, and Panchamrut Dairy over the five-year period provides significant insights into their financial performance and operational strength. The findings indicate a mixed performance across different parameters, reflecting both strong and weak areas for each cooperative.

Starting with profitability indicators such as Return on Assets (ROA) and Return on Capital Employed (ROCE), Amul Dairy has shown consistent strength, maintaining relatively stable and higher profitability compared to Baroda Dairy. This demonstrates that Amul has been effective in utilizing its assets and capital base to generate earnings, which is in line with its strong brand equity and market presence. Baroda Dairy, however, exhibits the weakest profitability metrics across most years, suggesting inefficiencies in asset utilization and capital deployment. Panchamrut Dairy, on the other hand, shows notable fluctuations but maintains competitive profitability ratios, particularly in ROCE, which highlights its strong capital efficiency during certain years.

When analyzing asset turnover ratio, Amul Dairy outperforms the other two dairies, indicating superior efficiency in generating revenue from its asset base. This reflects the scale of operations and strong distribution network that Amul has developed over the years. Panchamrut Dairy and Baroda Dairy have lower asset turnover ratios, indicating either underutilization of assets or lower operational efficiency.

From a liquidity perspective, both current ratio and quick ratio reveal concerning trends. While Baroda Dairy demonstrates relatively better liquidity positions, particularly in the current ratio, Amul Dairy shows a declining trend, falling below the ideal benchmark in the latest years. This indicates increasing reliance on inventory and receivables for meeting short-term obligations, which poses a risk in case of unexpected financial stress. Panchamrut Dairy shows steady improvement in quick ratio and moderate current ratio levels, suggesting an effort toward better liquidity management.

Overall, the comparative analysis reveals that Amul Dairy dominates in profitability and operational efficiency but faces significant liquidity challenges, which could impact short-term solvency if not addressed. Baroda Dairy lags behind in both profitability and efficiency metrics, though it maintains relatively stable liquidity. Panchamrut Dairy occupies a middle ground, showing improving liquidity and decent profitability trends, with scope for enhancing asset utilization.

In conclusion, while all three dairies contribute significantly to Gujarat's dairy sector, they need to adopt tailored financial strategies to strengthen weak areas. Amul should focus on improving its quick liquidity position despite its robust profitability, Baroda Dairy must enhance operational efficiency and profitability through better cost control and asset management, and Panchamrut Dairy should continue its path of improving liquidity while maintaining profitability. These insights are crucial for stakeholders, including management, investors, and policymakers, to ensure sustainable growth and competitiveness in the dynamic dairy industry of Gujarat.

REFERENCES

1. Bhatia, H., & Shah, K. (2024). A comparative study on financial performance of selected dairy units in Gujarat and Punjab. International Journal of Research and Analytical Reviews, 11(1), 18–28.
2. Gauswami, M. K., & Dwivedi, V. J. (2022). A comparative study on profitability and liquidity of Rajkot Union & Bharuch Union. GAP GYAN: A Global Journal of Social Sciences, 5(3, Special Issue), 27–32.
3. Gayathri, V. (2025). A study on financial ratio analysis: Salem District Cooperative Milk Producers Union Limited, Salem. International Journal for Multidisciplinary Research, 7(3), 1–8.
4. Narchonai, R., & Jayanthan, D. (2025). A study of solvency position of Karaikal Cooperative Milk Producers Union. International Journal of Scientific Research in Engineering and Management, 9(5), 458–465.
5. Santhosha, K. M., Gaddi, G. M., & Gracy, C. P. (2020). Economic performance and constraints of Shivamogga–Haveri–Uttar Kannada Milk Union Ltd. (SHIMUL), Karnataka. Asian Journal of Dairy and Food Research, 39(4), 331–336.
6. Sulthana, M. N. (2024). Asset–liability management and profitability of Aavin. Advances in Social Science, Education and Humanities Research (Atlantis Press), 1–6.
7. Thakker, S., Patel, P., & Patel, H. (2021). A study on working capital management of Kaira District Cooperative Milk Producers Union Limited. International Journal of Creative Research Thoughts, 9(3), 2412–2417.
8. Yuvasri, S., & Chandra Mohan, T. (2024). A study on working capital management on Aavin's profitability. International Journal for Multidisciplinary Research, 6(6), 1–7.