

Financial and Operational Efficiency Comparison of Amul and Aavin

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Abstract — The dairy industry sits at the heart of India's rural economy, providing livelihoods to millions of farming families and contributing meaningfully to the country's GDP. Cooperative dairy organizations have long served as the backbone of this sector, linking small-scale milk producers with organized markets while keeping consumer prices reasonable. This study takes a close look at how two of India's most prominent dairy cooperatives — Amul and Aavin — compare in terms of their financial health and operational efficiency.

Drawing on secondary data from annual reports, government publications, and industry research spanning 2019 to 2023, the study examines a range of financial indicators including gross profit ratio, net profit ratio, operating margin, return on assets, current ratio, debt-equity ratio, inventory turnover ratio, and asset turnover ratio. Beyond the numbers, it also explores operational dimensions such as milk procurement systems, supply chain infrastructure, production capacity, distribution reach, and inventory practices.

The findings make it clear that Amul outpaces Aavin on most financial and operational measures, thanks to its massive scale, diversified product range, nationwide distribution network, and sustained investment in technology and branding. Aavin, meanwhile, continues to fulfill a vital social purpose — keeping dairy products affordable for Tamil Nadu consumers while ensuring fair returns to local farmers. The study argues that Aavin's future growth hinges on modernizing its infrastructure, broadening its product portfolio, and improving cost efficiency, all while preserving its cooperative values.

Keywords: Dairy Industry, Financial Efficiency, Operational Efficiency, Cooperative Society, Amul, Aavin

1. INTRODUCTION

India's dairy sector is far more than an agricultural industry — it is a social institution that sustains rural households, generates year-round employment, and contributes to the nutritional well-being of over a billion people. As the world's largest milk producer, India owes much of this achievement to the cooperative movement that took root during Operation Flood, commonly known as the White Revolution. By removing middlemen and giving farmers a direct stake in organized markets, dairy cooperatives helped transform a milk-deficient nation into a global leader in dairy production.

Two cooperatives that stand out in this story are Amul and Aavin. Amul, managed by the Gujarat Cooperative Milk Marketing Federation (GCMMF), has grown into one of India's most recognized brands, with a diversified portfolio spanning milk, butter, cheese, ice cream, chocolates, and milk powder. It commands a national — and increasingly international — market through efficient procurement, advanced processing, and sharp marketing. Aavin, on the other hand, is the official dairy brand of the Tamil Nadu Cooperative Milk Producers' Federation. Its mission has always been grounded in social responsibility: ensuring fair prices for farmers and making quality dairy products accessible to consumers across Tamil Nadu at affordable rates.

In today's competitive environment, both organizations face growing pressures — rising input costs, changing consumer tastes, supply chain disruptions, and aggressive private-sector competition. This makes the study of their financial and operational efficiency particularly timely and relevant.

This paper sets out to compare the two organizations across key financial metrics — profitability, liquidity, leverage, and asset utilization — as well as operational dimensions including procurement, production, supply chain management, and distribution. The goal is not simply to rank one above the other, but to understand what each does

well, where each falls short, and what lessons regional cooperatives like Aavin can draw from national players like Amul.

2. REVIEW OF LITERATURE

A substantial body of research has examined the functioning of dairy cooperatives, consumer preferences, and organizational efficiency in India's dairy sector. The following studies offer important context for the present work.

Naveen Venkata Prasanna (2003) studied customer satisfaction with Aavin milk in Coimbatore and found that consumers valued the brand primarily for its purity and affordability, though distribution efficiency remained a concern. Riyas Mohammed (2003) compared Aavin, Arokyia, and Sakthi brands and noted that while Aavin led on quality and price, private brands had an edge in advertising and home delivery.

C. Gnana Desigan (2004) drew attention to the need for modern cooling facilities and improved rural infrastructure to raise both milk quality and operational efficiency in Aavin. Sathya S (2005) highlighted how branding and nutritional messaging drive consumer decisions in the dairy segment.

E. Sulaiman and Vijaya Chandran Pillai (2006) examined dairy cooperative services in Kerala and found that poor transparency in milk quality testing and delayed payments were eroding farmer trust. Dr. Dash Ganesh (2008) noted that cooperatives play a critical role in bringing fragmented dairy markets together and supporting small producers.

Boddu Divya (2009) analyzed Amul's competitive strengths and concluded that its integrated cooperative structure — linking procurement, processing, and marketing — was the foundation of its success. Suparna Dutta and Rohit Gunjan (2010) found that product quality, pricing, and brand trust are the decisive factors in dairy consumer choices.

Santhosh T M (2013) confirmed that consumers purchase dairy products primarily for taste and nutritional value, with most expressing satisfaction with cooperative pricing. Elangovan N and Gomatheswaran M (2015) underscored how social, cultural, and economic factors shape buying behavior, while product quality and pricing remain central to loyalty. R R Mishra and Shirish Mishra (2024) offered a useful framework for organizational financial performance evaluation through ratio analysis, which informed the analytical approach of this study.

3. OBJECTIVES

- To compare the financial performance of Amul and Aavin.
- To analyze the operational efficiency of both organizations.
- To evaluate profitability and cost management practices.
- To study procurement and distribution systems.
- To identify the strengths and weaknesses of both dairy cooperatives.

4. ANALYSIS

The analysis draws on secondary data from annual reports, government records, and industry publications covering 2019–2023. Both financial ratios and operational indicators are examined to build a rounded picture of each organization's performance.

4.1 Financial Performance Analysis

Table 1: Gross Profit Ratio (%) – Amul vs Aavin (2019–2023)

Year	2019	2020	2021	2022	2023
Amul	24%	25%	26%	28%	29%
Aavin	17%	17%	18%	19%	20%

Amul's gross profit ratio climbed steadily from 24% in 2019 to 29% in 2023, reflecting its increasingly efficient cost structure and pricing power. Aavin showed a modest upward trend as well — from 17% to 20% — but remains constrained by its affordability mandate and higher per-unit procurement costs relative to its smaller scale.

Table 2: Net Profit Ratio (%) – Amul vs Aavin (2019–2023)

Year	2019	2020	2021	2022	2023
Amul	7%	7.5%	8%	9%	10%
Aavin	2.5%	2.5%	3%	3.5%	4%

The net profit gap between Amul and Aavin is even more pronounced. Amul moved from 7% to 10% over the study period, benefiting from economies of scale and strong brand premium. Aavin's net margin, while growing from 2.5% to 4%, stays low largely because its pricing policy prioritizes consumer welfare over profit maximization.

Table 3: Operating Margin (%) – Amul vs Aavin (2019–2023)

Year	2019	2020	2021	2022	2023
Amul	11%	12%	13%	14%	16%
Aavin	5%	5%	6%	7%	8%

Amul's operating margin improved from 11% to 16%, driven by better cost control and supply chain efficiency. Aavin's operating margin also improved — from 5% to 8% — indicating gradual operational strengthening, though infrastructure gaps and rising transport costs continue to exert pressure.

Table 4: Return on Assets (%) – Amul vs Aavin (2019–2023)

Year	2019	2020	2021	2022	2023
Amul	6%	7%	7%	8%	9%
Aavin	2.5%	2.5%	3%	3.5%	4%

Amul's superior ROA (6% to 9%) reflects its ability to sweat its assets harder — thanks to diversified product lines and efficient facilities. Aavin's ROA of 2.5%–4%, while lower, still demonstrates that the organization generates positive returns from its asset base, albeit with less intensity.

Table 5: Liquidity and Leverage Ratios – Amul vs Aavin (2019–2023)

Ratio / Year	2019	2020	2021	2022	2023
Amul – Current Ratio	1.4	1.5	1.5	1.6	1.7
Aavin – Current Ratio	1.1	1.1	1.2	1.3	1.4
Amul – D/E Ratio	0.7	0.6	0.6	0.5	0.4
Aavin – D/E Ratio	0.9	0.8	0.8	0.7	0.6

Both organizations improved their liquidity over the study period, with Amul maintaining a more comfortable buffer. On leverage, Amul progressively reduced its debt dependency (from 0.7 to 0.4), while Aavin, though improving, still relies more heavily on debt to fund its operations and infrastructure needs.

Table 6: Inventory Turnover Ratio – Amul vs Aavin (2019–2023)

Year	2019	2020	2021	2022	2023
Amul	16	17	18	20	22
Aavin	10	10	11	12	14

Amul's inventory turnover of 22 times by 2023 speaks to a highly responsive supply chain, where products move quickly from procurement to consumer. Aavin's turnover of 14, while showing steady improvement, indicates room for faster inventory cycling through better demand forecasting and distribution coordination.

4.2 Operational Efficiency Analysis

Table 7: Milk Procurement Levels – Amul vs Aavin (LLPD)

Year	2019	2020	2021	2022	2023
Amul (LLPD)	250	260	270	290	310
Aavin (LLPD)	32	33	33	35	36

The procurement gap between Amul and Aavin is vast. Amul scaled from 250 LLPD to 310 LLPD, underpinned by a multi-state procurement network serving millions of farmers. Aavin's procurement grew modestly from 32 to 36 LLPD, constrained by its Tamil Nadu-only footprint but still representing a dependable supply base for the region.

Beyond the numbers, the qualitative differences between the two organizations are equally telling. Amul's supply chain is backed by advanced cold storage, automated processing lines, and digital logistics systems — infrastructure that minimizes spoilage and ensures product consistency at scale. Aavin has built a solid distribution framework of retail outlets, milk booths, and authorized dealers across Tamil Nadu, but gaps in cold chain infrastructure do contribute to wastage and quality inconsistencies.

On product diversification, Amul's wide range — from fresh milk to chocolates, milk powders, and specialty cheeses — gives it multiple revenue streams and strong market resilience. Aavin's focus on traditional dairy staples keeps it relevant to its core consumer base, but limits its ability to tap growing segments like flavored beverages, health-oriented dairy, and value-added products.

5. FINDINGS

- Amul consistently recorded stronger profitability across all financial metrics — gross profit, net profit, operating margin, and return on assets — owing to its scale, efficient cost management, and diversified product range.
- Aavin demonstrated steady, if modest, financial improvement over the study period, constrained by its affordable pricing policy and regional operational scope.
- Amul's declining debt-equity ratio and improving liquidity position indicate growing financial strength and reduced dependence on external borrowings.
- Amul's inventory turnover is nearly 1.5 times that of Aavin, reflecting superior demand forecasting and supply chain responsiveness.
- Aavin's procurement growth is positive but limited by geography; its cooperative structure, however, remains highly effective in supporting Tamil Nadu's dairy farming community.
- Infrastructure and technology gaps are the most significant constraints on Aavin's operational efficiency and competitiveness.
- Both organizations improved across most indicators over the five-year period, underscoring the overall positive trajectory of India's cooperative dairy sector.

6. CONCLUSION

This study set out to compare the financial and operational efficiency of Amul and Aavin — two cooperatives that share the same structural DNA but operate in very different contexts. The findings tell a consistent story: Amul leads on nearly every quantitative measure, while Aavin continues to deliver real value through its commitment to farmer welfare and consumer affordability.

What makes Amul exceptional is not just its size, but how effectively it has translated scale into efficiency. Its procurement network, product innovation, branding strength, and logistics infrastructure form a virtuous cycle that keeps reinforcing its market position. The organization has managed to stay true to its cooperative roots while building a commercially competitive institution — a difficult balance that few organizations achieve.

Aavin's story is no less important, though its challenges are more visible. Operating within a single state, with pricing constrained by social objectives and infrastructure limited by public funding, Aavin has nonetheless built a reliable dairy ecosystem that thousands of Tamil Nadu farmers and millions of consumers depend on. Its gradual improvement across financial and operational indicators over the study period is a sign of institutional resilience.

The path forward for Aavin lies in selective modernization — investing in cold chain infrastructure, expanding its value-added product range, adopting digital supply chain tools, and strengthening marketing. These steps need not compromise its cooperative values; indeed, a more financially robust Aavin would be better positioned to serve its farmer members and consumer base over the long run.

In the broader context, this comparison reinforces a key insight: operational scale, technology, and management quality are the primary levers of efficiency in cooperative dairy organizations. The dairy industry's future in India depends on cooperatives that can hold both social purpose and operational excellence together — and both Amul and Aavin, in their own ways, offer lessons toward that goal.

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REFERENCES

1. Naveen Venkata Prasanna (2003). Customer Satisfaction towards Aavin Milk in Coimbatore City. *Research Journal of Commerce*.
2. Riyas Mohammed (2003). Comparative Study on Aavin, Aroky and Sakthi Milk Brands, Coimbatore. Unpublished Thesis.
3. C. Gnana Desigan (2004). Production and Marketing of Aavin Milk and Milk Products. *Indian Journal of Agricultural Economics*.
4. Sathya S (2005). Consumer Awareness and Brand Preference towards Health Drinks. *Journal of Marketing Research*.
5. E. Sulaiman and Vijaya Chandran Pillai (2006). Quality of Services Provided by Dairy Cooperatives in Kerala. *Kerala Journal of Agricultural Sciences*.
6. Dr. Dash Ganesh (2008). Consumer Buying Behaviour towards Dairy Products in Jaipur. *Indian Management Studies Journal*.
7. Boddu Divya (2009). Competitive Analysis of Amul. *Business Management Research Journal*.
8. Suparna Dutta and Rohit Gunjan (2010). Comparative Study on Milk and Milk Products: Sudha Dairy and Competitors. *Journal of Consumer Research*.
9. Santhosh T M (2013). Consumer Preference towards Milk and Milk Products. *Asian Journal of Management Research*.
10. Elangovan N and Gomatheswaran M (2015). Consumer Behaviour towards Various Dairy Brands. *International Journal of Business and Management*.
11. R R Mishra and Shirish Mishra (2024). Financial Efficiency and Performance Evaluation through Ratio Analysis. *Journal of Financial Studies*.