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SYNOPSIS REPORT FOR INDUSTRIAL RESEARCH PROJECT ON DAIRY INDUSTRY

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Synopsis of the Industry Research Project: The Indian Dairy Industry and Amul's Strategic Landscape

India's dairy industry is an integral part of the country's economy, accounting for around 4% of nationwide production and is the world's largest milk producer. It supports millions of small farmers and provides an important source of living. This report examines history, industry's most important actors, growth and regulatory environment.

Amul, an Indian whitening cooperative founded in 1946, oversaw the "white revolution" in India and transformed the milk sector with its own cooperative model. Amul's extensive product range, strong financial performance and ambitious growth plans highlight its market dominance. However, there are challenges to managing large-scale operations and adapting marketing for new product categories. This analysis examines the strengths of Amul, improvement areas, and strategies for continuous growth and leadership.

1. Overview of the Indian Dairy Industry

India's dairy industry stands as a cornerstone of its agribusiness, playing a vital role in both the national economy and the livelihoods of millions. It encompasses the entire spectrum from milk production to the creation of diverse dairy products.

Economic Importance and Overview

The dairy sector is one of India's most significant agricultural businesses, contributing four percent to the national economy. India holds the top position globally in milk production, having produced 188 million metric tons in 2019-2020. This sector is crucial for the economic stability of millions of small-scale farmers, who typically manage two to three animals and produce around five liters of milk daily. Approximately one-third of rural incomes are derived from dairying, underscoring its profound impact on economic growth and rural well-being.

Historical Development and Key Achievements

Dairy consumption in India has a long history, dating back to the Harappa Civilization (3300-1300 BCE). Ancient texts like the Rigveda (around 1700 BCE) mention various dairy products such as curd, butter, buttermilk, and ghee. While early production was constrained by socio-economic factors, local cottage industries began to emerge between the 16th and 20th centuries. The British popularization of tea further embedded milk into daily routines across the country.

A pivotal moment in the industry's history was the launch of 'Operation Flood,' also known as the 'White Revolution,' in 1970. This initiative dramatically transformed dairy production by integrating farmers nationwide, thereby boosting employment and improving nutrition. Despite its success in increasing production, recent growth efforts have brought to light concerns about sustainability, leading to issues like declining animal welfare and reduced milk output due to insufficient experience among some producers. Future strategies must therefore prioritize sustainable practices and animal welfare alongside continued growth.

Market Dynamics: Major Players, Share, and Growth

Amul is the dominant force in the Indian dairy market, holding a substantial 34% market share. Other key players include Kwaliti Limited (8%) and Mother Dairy (7%), along with various state cooperatives and private firms. Amul's significant market presence provides it with considerable advantages in areas such as pricing, distribution, and brand recognition.

In 2020, the Indian dairy market was valued at an impressive INR 11,357 billion. The IMARC Group forecasts robust growth, projecting a Compound Annual Growth Rate (CAGR) of 15.4% from 2021-2026. India has maintained its position as the leading global producer and consumer of dairy products since 1998, demonstrating consistent growth. Government initiatives and increasing participation from private and international entities are further supporting the development of this vital industry.

Table 1: Key Players in the Indian Dairy Industry and Their Market Share

Company Name	Corporate Office Location	Founding Year	Sector	Market Share
Amul	Anand, Gujarat	1946	Cooperative	34%
Kwality Limited	New Delhi	1992	Private	8%
Mother Dairy	Noida, India	1974	Subsidiary (NDDDB)	7%
Orissa State Cooperative Milk Producers Federation	Bhubaneswar, Orissa	1985	Cooperative	N/A
Andhra Pradesh Dairy Development Cooperative Federation Ltd	Hyderabad, Andhra Pradesh	1960	Private	N/A
Karnataka Co-operative Milk Federation	Bangalore, Karnataka	N/A	Private	N/A
Dynamix Dairy	Mumbai	1995	Private	N/A
AAVIN	Chennai, India	1952	State-owned	N/A
MILMA	Thiruvananthapuram, India	1980	Cooperative	N/A
Dudhsagar Dairy	Mehsana, Gujarat	1963	Cooperative	N/A

1.4 Government Regulations and Policies

The Indian dairy industry is governed by a comprehensive set of government sanitation laws aimed at guaranteeing product quality and safety. Historically, key regulations included the Prevention of Food Adulteration (PFA) Act and Codex standards, which established limits for contaminants in dairy products. The PFA Act also mandated the adherence to Bureau of Indian Standards (BIS) for specific products like milk powders. Local food authorities played a crucial role in monitoring quality, with a particular focus on preventing adulteration.

More recently, the Food Safety and Standards Act (FSSA) superseded the PFA Act, leading to the establishment of the Food Safety and Standards Authority (FSSA). This significant legislative shift centralized food safety regulations. The BIS continues its role in revising standards, encompassing hygiene and safety protocols, and manages a certification scheme for the ISI mark, which signifies product conformity to Indian standards. This evolving regulatory landscape necessitates continuous updates in compliance by dairy businesses and has the potential to drive consolidation within the industry.

2. Amul: A Detailed Company Profile

Amul, or Anand Milk Union Limited, is a successful Indian dairy cooperative.

2.1 History and Founding Principles

Amul: A Pioneer in India's Dairy Revolution

Amul, headquartered in Anand, Gujarat, was established in 1946. Its name, derived from the Sanskrit word 'Amulya,' signifies "priceless." The cooperative was founded by Tribhuvandas Patel, guided by Sardar Vallabhbhai Patel, with the primary aim of liberating farmers from exploitation by middlemen. Dr. Verghese Kurien, often hailed as the architect of India's White Revolution, joined Amul in 1949.

A significant early milestone occurred by June 1948, when the Kaira District Co-operative Milk Producers' Union Limited (KDCMPUL) began pasteurizing milk for the 'Bombay Milk Scheme'.¹ Amul's inception marked the beginning of India's transformative White Revolution, ultimately propelling the nation to become the world's largest milk producer. Today, Amul is managed by the Gujarat Co-operative Milk Marketing Federation Ltd. (GCMMF), and is collectively owned by 3.6 million milk producers. The remarkable success of this cooperative model stands as a testament to its potential for fostering economic development and social upliftment, cultivating strong farmer loyalty and a distinct competitive advantage.

Extensive Product Portfolio

Amul is recognized as India's largest food product brand and a significant dairy exporter, holding a prestigious 'Trading House' certification. Its diverse and extensive product range is a result of a strategic horizontal diversification approach, which minimizes reliance on single categories, maximizes value extraction from milk, and enhances market resilience and penetration.

Amul's comprehensive product portfolio includes:

- Milk & Fresh Dairy: Amul Milk, Dahi, Fresh Cream, Paneer, Amul Sour Cream
- Spreads & Fats: Bread Spreads (Butter), Ghee, Amul Peanut Spread

- Cheese: Various types of Cheese, Pizza Cheese
- Beverages: A wide range of beverages, including Amul PRO and Milkshakes (e.g., Tru brand)
- Frozen Desserts: Ice Cream
- Powders & Condensed Milk: Milk Powders, Mithai Mate
- Confectionery: Chocolates
- Traditional Indian Sweets: Mithai Range, Panchamrit
- Bakery & Snacks: Bakery Products (Cookies, Shortbreads), Amul Puffles
- Other: Roti Softener, Amul Cattle Feed, and Amul Recipes

2.3 Diverse Client Base

Amul extends its reach beyond individual consumers, serving a diverse business-to-business (B2B) clientele that includes multinational corporations and numerous Indian companies.

Amul's Diverse B2B Client Portfolio

Amul's client base encompasses a wide array of industries, providing significant revenue streams, enhanced stability, and the benefit of economies of scale, thereby bolstering Amul's strategic importance in the market.

Its B2B clients span the following sectors:

- Manufacturing: This includes companies in Automobile, Building Products, Food processing, Granite Extraction, Hi-tech Industrial equipment, Mobile phone parts, and Textiles.
- Services: Amul caters to businesses involved in Agro informatics and marketing, Banking/Non-Banking Finance, Clearing and forwarding, Civil Construction, Logistics, and Travel & Tour agents.
- Trading & Others: This category primarily includes Wholesale and retail trading businesses.
- This extensive B2B presence is a testament to Amul's strategic diversification and its crucial role across various industrial and service sectors.

2.4 Organizational Structure and Cooperative Culture

Amul: A Model of Cooperative Success and Market Leadership

Amul functions as a pioneering dairy cooperative, centrally managed by the Gujarat Co-operative Milk Marketing Federation Ltd. (GCMMF). It is collectively owned by 2.6 million milk producers in Gujarat, embodying the "Amul Pattern"—a widely recognized model for rural development that was instrumental in driving India's White Revolution. GCMMF's core objectives are to ensure fair returns for farmers while providing high-quality products to consumers.

Three-Tier Cooperative Structure

Amul's success is deeply rooted in its distinctive three-tier cooperative structure:

- Village Level: This foundational tier consists of village cooperative societies of milk producers, managed by democratically elected committees.
- District Level: At this level, district cooperatives are responsible for processing the collected milk and distributing it locally. Any surplus milk is then channeled to the state cooperative.
- State Level: GCMMF operates at the state level, overseeing national and international marketing efforts for all Amul products.

This integrated structure seamlessly connects milk production at the grassroots level with market demand. Amul's vast workforce includes 2.36 million primary milk producers, 35,000 rural workmen, 12,000 dairy plant workers, 750 marketing professionals, 10,500 distribution salesmen, and 600,000 retail salesmen. GCMMF envisions evolving into a leading marketing organization for food and dairy products, with plans for extensive IT-integrated networks and international expansion. This cooperative structure serves as a powerful competitive advantage, fostering a strong sense of ownership and loyalty among producers, ensuring a stable supply chain, and significantly enhancing the brand's image.

2.6 Financial Performance and Market Standing

GCMMF demonstrated robust financial performance, reporting a 17% increase in revenue to Rs 38,550 crore in FY 2019-20. Despite the challenges posed by COVID-19, turnover grew by 2% to Rs 39,200 crore in the subsequent year. Branded consumer products experienced healthy growth of 8.5-9%, though ice cream sales saw a significant 35% decline due to lockdown measures. The HoReCA (Hotel, Restaurant, and Catering) segment was severely impacted, while household consumption remained strong.

Amul currently sells an impressive 150 lakh liters of milk daily and boasts a processing capacity of 360 lakh liters per day. Milk prices increased by Rs 2 per liter from July 1, 2020, in response to rising input costs. A key aspect of GCMMF's policy is to pass approximately 80 paise of every rupee generated from consumers directly to producers, ensuring remunerative prices and incentivizing increased production. Amul's sales turnover exceeded

392 billion Indian rupees in FY 2021, showcasing consistent growth since 2011. This resilience, driven by strong household penetration and fair producer pricing, exemplifies a strategic balance between social responsibility and business sustainability.

Table 3: Amul's Financial Performance Snapshot (2019-2021)

Financial Year	Total Turnover (INR Crore)	Growth Rate (%)	Key Product Segment Performance
2019-20	38,550	17%	Branded consumer products: +8.5-9%; Ice cream: -35% (due to lockdown)
2020-21	39,200	2%	Overall growth slowed due to COVID-19 impact on HoReCA and commodity business; Household consumption remained strong
2021-22 (Projected)	50,000 (Target)	Higher double-digit growth expected	Focus on high-margin products and new plant investments

2.6 Future Strategies and Growth Initiatives

GCMMF is poised for significant expansion, with plans to launch 40-60 new products within the next two years, targeting a substantial Rs 50,000 crore turnover by 2021. The strategic focus for new product development will be on high-margin categories such as yogurts, cookies, shortbreads, fresh mithai, and various milk-based beverages. Amul intends to execute a nationwide launch of its butter cookies and introduce new flavors for its popular Tru brand. This strategic shift towards value-added products is designed to boost profitability and align with evolving consumer preferences.

In terms of infrastructure, Amul plans to invest a substantial Rs 2,500-3,000 crore over five years for the establishment of new processing plants and robust sourcing infrastructure. At least seven new plants are slated for development in key dairy states, which are crucial for handling short-shelf-life products efficiently. The cooperative aims to increase its daily milk collection from 23 million to 25 million liters. Furthermore, Amul has successfully expanded its global footprint, entering markets in the USA, Nepal, South Africa, Kenya, Bhutan, and Australia, and has forged strategic partnerships with international entities like Wal-Mart and Glaxo.

2.7 Key Achievements and Awards

Amul has garnered numerous national and international accolades, recognizing its excellence in dairy development, production, food safety, and environmental stewardship. These awards underscore Amul's commitment to operational excellence, continuous improvement, and a strong dedication to quality and sustainability, significantly enhancing its brand reputation and fostering consumer trust.

Notable awards include:

- National Productivity Council Productivity Awards: Consistently recognized from 1985-86 to 1998-99 for achieving the best or second-best productivity performance in dairy development and processing.
- Indian Merchants' Chamber Bombay 1988 Award: Honored for Outstanding Performance in R&D of Food Processing Industries.
- Industrial Good House Keeping Contest: Awarded by Gujarat State (1984) and Baroda Productivity Council (1997-98) for commendable performance in good housekeeping.
- Indian Co-operative Centenary Celebration: Shakari Vikas Ratna Award – 2004: Recognized for its significant contribution to the Cooperative Movement in Gujarat.
- National Energy Conservation Award 2009: Acknowledged for efforts in Energy Conservation in the Dairy Sector.
- CARE Awards – Healthcare Category 2013: Received for Amul's impactful Total Sanitation Campaign.
- CII National Award for Food Safety 2013: Awarded for Outstanding Performance in the Dairy Sector Manufacturing.
- APEDA Export Award 2011-12: Recognized for outstanding contribution to dairy product exports.
- Golden Peacock Eco-Innovation Award 2016: Celebrated for its innovative "Bio-CNG Generation & Bottling Plant from Dairy Effluent".
- Dairy Excellence Award 2015-16 National Level: Honored for 'Management Excellence' by Dairy Cooperatives.

3. Strategic Analysis of Amul

A strategic analysis using SWOT and McKinsey 7S frameworks provides insight into Amul's competitive standing.

3.1 SWOT Analysis: Strengths, Weaknesses, Opportunities, and Threats

Amul SWOT Analysis

This analysis examines Amul's internal strengths and weaknesses, alongside external opportunities and threats, providing a comprehensive overview of its market position and strategic considerations.

Strengths

Amul possesses several formidable strengths that underpin its market leadership and sustained success. These include a dominant market share in the ice cream segment and exceptionally strong brand equity, famously epitomized by the iconic "Amul girl." The cooperative maintains excellent quality

management, resulting in very few consumer complaints, and operates a robust distribution network that effectively reaches both urban and rural areas across India. Amul boasts a deep and diverse product portfolio, supported by a strong supply chain characterized by positive vendor relationships. Its instrumental role in India's White Revolution further solidifies its historical and strategic importance. Moreover, Amul's strong rural presence provides a distinct and significant competitive advantage.

Weaknesses

Despite its strengths, Amul faces several notable weaknesses. The sheer scale of its operations leads to high operational costs, making the maintenance of healthy profit margins a continuous challenge. The cooperative frequently experiences severe supply shortages, particularly during peak summer months, which can impact availability and consumer satisfaction. Amul's ventures into the chocolate market have struggled, indicating a need for more effective strategies in product line diversification beyond its core dairy offerings. While scale is a strength, it also contributes directly to the aforementioned cost and supply challenges, necessitating ongoing optimization efforts.

Opportunities

Significant opportunities exist for Amul to further enhance its growth and market presence. Exporting products presents a substantial opportunity for exponential turnover growth, leveraging its established brand and quality. A strategic re-evaluation of its approach to the chocolate market, potentially through the establishment of separate Strategic Business Units (SBUs) with focused marketing efforts, could significantly improve performance in new ventures. Furthermore, Amul's traditional marketing approach may be hindering the success of newer products, suggesting a critical need for re-evaluation and the adoption of more targeted marketing strategies to resonate with contemporary consumer preferences.

Threats

Amul confronts notable threats, primarily from intensifying competition. The ice cream segment, in particular, faces significant competitive pressure from numerous local and international players. Brands such as Kwality Walls, Naturals, London Dairy, Havmor, Arun Ice Cream, Vadilal, and Ramani are actively vying for market share, posing a direct challenge to Amul's dominance in this category.

Table 4: Summary of Amul's SWOT Analysis

Category	Description
Strengths	High market share in ice cream; Excellent brand equity; Strong quality management; Robust urban and rural distribution; Diverse product portfolio; Strong supply chain; Significant rural presence.
Weaknesses	High operational costs, impacting margins; Seasonal supply shortages; Underperformance in chocolate market expansion.
Opportunities	International export expansion; Strategic re-focus on chocolate market with differentiated marketing/SBUs.
Threats	Increasing competition in the ice cream segment from numerous local and international brands.

3.2 McKinsey 7S Analysis: Hard and Soft Elements

Amul: A McKinsey 7S Model Analysis

The McKinsey 7S model, which assesses organizational performance by aligning seven interconnected elements, provides a comprehensive framework for understanding Amul's operational success and future challenges.

Hard Elements

Strategy: Amul's strategy is clearly defined, competitive, and demonstrates flexibility. Key strategic initiatives include plans to launch **40-60 new products** in high-margin categories such as yogurts and expanded Tru brand flavors. The cooperative aimed for a **Rs 50,000 crore turnover by 2021** and committed a significant **Rs 2,500-3,000 crore investment** in new plants and sourcing infrastructure. This focus on value-added products and infrastructure development indicates a competitive and forward-looking direction.

Structure: Amul operates with a systematic and well-defined **three-tier cooperative structure**. This includes village-level cooperative societies, district-level cooperatives responsible for processing and local distribution, and the state-level GCMMF managing national and international marketing. This "Amul Pattern" effectively facilitates information flow and clearly delineates responsibilities, serving as a unique and highly successful model for rural development.

Systems: Amul's operational systems are robust, encompassing effective controls, monitoring, and evaluation processes. **Financial management** is a critical component, focused on profit maximization through detailed analysis, informed decision-making, strategic planning, and meticulous control. The cooperative's strong distribution network and excellent quality management further underscore the robustness and efficiency of its operating systems.

Soft Elements

- **Shared Values:** Amul's core values are deeply embedded in its cooperative model, prioritizing remunerative returns for farmers and the delivery of quality products to consumers. Its mission explicitly emphasizes marketing excellence, quality, and value creation through its extensive cooperative networking.
- **Style:** The leadership style at Amul is characterized by a strong emphasis on cooperation and coordination across its three-tier structure. This collaborative approach has been instrumental in the success and widespread impact of the White Revolution.
- **Staff:** Amul commands a vast and diverse workforce, which is a testament to its scale and reach. This includes an estimated 2.36 million primary milk producers, 35,000 rural workmen, 12,000 dairy plant workers, 750 marketing professionals, 10,500 distribution salesmen, and 600,000 retail salesmen.
- **Skills:** Amul's consistent track record in quality management and its successful expansion initiatives imply highly effective processes for developing and maintaining the necessary skills across its diverse workforce. This ensures that the organization possesses the capabilities required for both current operations and future growth.

Interconnectedness and Future Challenges

The success of Amul is largely attributed to the intricate interconnectedness of its hard and soft elements. Its formal, structured cooperative model is powerfully reinforced by a deeply ingrained cooperative culture, which fosters a strong sense of ownership and loyalty among its producers. For future growth, a key challenge for Amul will be the effective scaling of its soft elements—including its distinctive cooperative culture, leadership capabilities, and the development of specialized skills for new product categories—in parallel with its investments in hard infrastructure.

Table 5: Amul's McKinsey 7S Elements Overview

Element Category	Element	Application to Amul
Hard Elements	Strategy	Clear goals for new products, turnover, and investment in expansion; focus on high-margin categories and brand extension.
	Structure	Well-defined three-tier cooperative model (village, district, state/GCMMF) enabling rural development and efficient operations.
	Systems	Robust financial management, strong distribution network, and effective quality control systems supporting vast operations.
Soft Elements	Shared Values	Deeply rooted cooperative culture focused on farmer welfare and consumer quality; mission emphasizes excellence and value for money.
	Style	Leadership fosters cooperation and coordination across the cooperative tiers, contributing to the success of the "White Revolution."
	Staff	Extensive workforce across production, processing, marketing, and distribution, reflecting massive human capital management.
	Skills	Implied strong skill development and maintenance processes, crucial for consistent quality and successful market expansion.

4. Key Findings and Strategic Recommendations

4.1 Core Findings from the Research

India's dairy industry stands as a cornerstone of its agri-business and a substantial contributor to the national economy, maintaining its position as the world leader in milk production. Millions of small-scale farmers rely on dairying as a primary source of income, underscoring its critical role in rural livelihoods.

A significant insight into the sector's dynamics is the finding that only approximately 25% of the marketable surplus milk is currently distributed through formal channels. This implies that a vast majority of milk transactions occur within informal networks, representing a substantial untapped market for organized players such as Amul.

This presents a major growth opportunity for formalization within the dairy sector. To capitalize on this, concerted efforts and investments will be required in two key areas:

Infrastructure Development: Expanding and modernizing the infrastructure for milk collection, processing, and distribution is essential to absorb the informal supply into formal channels.

Consumer Education: Educating consumers about the benefits of purchasing milk and dairy products from formal, regulated channels (e.g., quality assurance, hygiene, food safety) will be crucial to shifting demand.

By formalizing a larger share of the marketable milk surplus, organized players can enhance food safety standards, ensure better quality control, and ultimately contribute more significantly to the national economy while providing more stable and remunerative prices for farmers.

4.2 Actionable Suggestions for Business Enhancement

To further strengthen its market position and capitalize on growth opportunities, Amul should strategically focus on the following key areas:

Marketing and Branding Enhancement

Amul should implement a more extensive and aggressive marketing strategy, utilizing modern advertisement techniques to amplify its brand message. A critical aspect of this involves adopting more attractive and innovative primary packaging. Leveraging its already strong brand equity and reputation for quality, these efforts will enable Amul to stand out more effectively in an increasingly competitive market landscape. This will help capture greater consumer attention and reinforce brand loyalty.

Sales and Distribution Channels Modernization

To adapt to evolving consumer behaviors and expand accessibility, Amul should prioritize digital transformation and the establishment of Direct-to-Consumer (D2C) channels. This includes setting up online selling platforms and telephone ordering systems. Furthermore, engaging in direct customer contact will facilitate valuable feedback collection and foster stronger, more personal relationships with consumers. This move will enhance convenience for customers and provide Amul with direct insights into market preferences.

Quality Assurance and Supply Chain Optimization

Maintaining its high standards, Amul must consistently assure customers of uncompromising quality and hygiene across its entire product range. A crucial operational focus should be on ensuring that products reach consumers at the same high quality as they are produced, minimizing any degradation during transit or storage. This necessitates better supply chain integration and the adoption of advanced technology to monitor and control product conditions. Additionally, improving the services provided by middlemen within the distribution network will directly contribute to increased consumer satisfaction and a more seamless experience.

5. Conclusion

Amul's identity is inextricably linked to the cultural and economic fabric of India, providing a unique foundation for its continued growth. The cooperative has substantial opportunities to expand its market presence, particularly within the low-priced segment and other emerging product categories.

A key demographic for future growth lies in attracting young adults and children, who are often more receptive to new products that align with their evolving expectations. This necessitates a strategic focus on targeted product development and marketing efforts specifically designed to appeal to these consumer groups.

To ensure sustained leadership and capitalize on these opportunities, continuous research and internal assessment are paramount. These processes are crucial for effectively identifying existing weaknesses and formulating strategies to increase market share.

By strategically leveraging its inherent strengths, diligently addressing its identified weaknesses, and proactively capitalizing on emerging opportunities, Amul can not only maintain its dominant leadership but also continue its profound legacy in India's dynamic dairy sector.