**To Analyse the Current Market Dynamics for Ice Cream in Rajkot City**

# **ABSTRACT**

This research provides a comprehensive analysis of the ice cream market dynamics in Rajkot City, focusing on retailer preferences, brand competition, purchasing behavior, and operational infrastructure. The study, based on data from 157 retailers, highlights that confectionary shops (36.31%) and pan-plus outlets (35.67%) dominate the market, while general Kirana stores account for 23.57%. Notably, 33.12% of retailers reported no ice cream sales, indicating considerable untapped market potential. Amul Ice Cream, under the Gujarat Cooperative Milk Marketing Federation (GCMMF), enjoys a prominent presence in several clusters but faces uneven market penetration due to infrastructural limitations—particularly the absence of deep freezers in 31.85% of retail outlets. Only 28% of respondents currently stock Amul ice cream, with purchase frequency closely linked to freezer ownership and sales volume. Impulse SKUs such as cups, cones, and kulfi received high satisfaction scores from retailers, while larger SKUs like family and party packs underperformed, often due to low consumer demand and storage constraints. The study further identifies that higher brand availability and purchasing frequency are concentrated in clusters with better infrastructure and engaged retailers. These findings emphasize the importance of strategic interventions including improved cold storage infrastructure, enhanced retailer engagement, targeted marketing, and product rotation to drive higher sales and increase market share. Ultimately, the research offers valuable insights for strengthening Amul’s competitive position in Rajkot’s growing urban ice cream market.

**Keywords:** Amul Ice Cream, GCMMF, Real Milk Real Ice Cream, Retail Distribution, Strategic Pricing, Market Penetration, Retailer Awareness, Consumer Satisfaction, Sales Strategy, Rajkot Market, Brand Loyalty

**INTRODUCTION**

India's retail sector, one of the world's most vibrant markets, has undergone significant transformation, evolving from traditional marketplaces to a structured ecosystem encompassing both organized and unorganized players. Technological advancements, particularly in e-commerce and quick commerce platforms, have revolutionized shopping experiences, offering convenience and a wide array of choices. This expansion not only caters to the evolving needs of consumers but also generates employment opportunities, contributing significantly to India's economic development. The Indian ice cream market, a delectable component of the country's dairy industry, has witnessed remarkable growth, transitioning from seasonal indulgence to year-round consumption. Valued at approximately USD 3.4 billion, the market is projected to surpass USD 5 billion by FY25, propelled by rising disposable incomes, urbanization, and a penchant for diverse flavors. Major players like Amul, Kwality Wall's, and Vadilal have expanded their portfolios, introducing innovative offerings such as vegan, low-sugar, and artisanal ice creams to cater to health-conscious and experimental consumers. This segment's growth not only satiates the nation's sweet tooth but also fosters economic opportunities across the value chain, from dairy farmers to retail entrepreneurs.

Ice cream has long been a cherished indulgence globally, and in India, its market has witnessed dynamic evolution over the decades. During the early 1990s, India’s ice cream industry was predominantly dominated by the unorganized sector, with a few key players like Kwality Walls, Vadilal, and Dinshaw operating in the organized segment. In 1995, Amul — a brand under the Gujarat Cooperative Milk Marketing Federation (GCMMF) — entered the competitive market with Amul Ice Cream. Despite not having a first-mover advantage, Amul quickly differentiated itself by emphasizing affordability, quality, and wide accessibility.

The brand introduced a strategic pricing model that offered ice creams 20–30% cheaper than competitors and launched the 'Humara Apna Deep Freezer' initiative to support its retail distribution. Most importantly, Amul positioned its products as made from “Real Milk and Real Ice Cream,” appealing strongly to health-conscious consumers and mothers seeking nutritional alternatives for children. With a strong distribution network, impactful advertising like the “Chalo Chalo” jingle, and a focus on real milk and fresh cream, Amul rapidly grew its market presence.

This study explores market analysis, sales strategy, and operations in Rajkot City, examining factors influencing retailer behavior, consumer satisfaction, and operational efficiencies to support continued growth and market penetration

# **RESEARCH OBJECTIVE**

1. To Evaluate the Market Penetration of Ice Cream Segment in Rajkot City Compared to Competing Brands.
2. To Analyse Purchasing Behaviour of Respondents for Ice Cream in Rajkot City.
3. To Measure Retailer Satisfaction for Ice Cream in Rajkot City.

# **RESEARCH METHODOLOGY**

The relevant data for the research study was collected by using a primary survey done by a questionnaire. The questionnaire was filled out by respondents using personal interviews. In the present study, there were around 157 number of respondents. Respondents were retailers and they were randomly selected from clusters wise in Rajkot City. The collected data was analyzed using descriptive statistics.

# **RESULTS AND DISCUSSION**

The study entitled “To Analyse the Current Market Dynamics for Ice Cream in Rajkot City, Including Retailer Preferences, Demand Trends, And Competitive Landscape.” has arrived after subjecting the data to necessary tabulation and analysis keeping in view the objectives of the study and research methodology

This chapter explains the result obtained after a systematic analysis of data. The results are as under.

* 1. **PROFILE OF RESPONDENTS**

It was commonly accepted that a retailer’s socioeconomic background will inevitably affect his or her opinions of the products, as well as their living conditions, purchasing decisions, purchasing power and product awareness. Therefore, it feels reasonable to test this hypothesis and determine whether these qualities had an impact on the Respondents opinions on purchasing ice cream. With this goal in mind, the socio-economic makeup of the respondents and their opinions on the consumption of ice cream in the Rajkot City. The section is devoted to highlighting the personal characteristics of the sample respondent’s five features which were mentioned below:

* + 1. **Point of Purchase Wise Distribution of Respondents**

The below table provides a breakdown of Respondents preferences for different types of Ice Cream purchase points in Rajkot, along with their respective percentages and totals.

Table 1 Point of Purchase Wise Distribution of Respondents **(n=157)**

|  |  |  |
| --- | --- | --- |
| **Sr No.** | **Point of Purchase** | **No. of Respondents** |
| Rajkot | Percentage |
| **1** | Confectionary shop | 57 | 36.31% |
| **2** | General Kirana Store | 37 | 23.57% |
| **3** | MFS | 6 | 3.82% |
| **4** | Pan Plus | 56 | 35.67% |
| **5** | Push Cart | 1 | 0.64% |
|  | **Total** | **157** | **100%** |

Source: Primary data

The table.1 shows Out of 157 respondents in Rajkot, 57 retailers (36.31%) were confectionary shops, followed closely by 56 Pan plus outlets (35.67%). General Kirana stores accounted for 37 respondents (23.57%), while modern format stores (MFS) comprised 6 respondents (3.82%). Only 1 respondent (0.64%) was a push cart vendor. This shows that confectionary shops and pan plus outlets together make up the largest share of respondents, while MFS and push carts represent a very small proportion.

Figure 1 Point of Purchase Wise Distribution of Respondents

* + 1. **Ice Cream Purchase Wise Distribution of Respondent**

Ice Cream Purchase is a vital characteristic in deciding retailer perception of purchasing ice cream. In this context, the respondents were put into three groups. Table 2 shows the age group of the respondents.

Table .2 Ice Cream Purchase Wise Distribution of Respondent**(n=157)**

|  |  |  |
| --- | --- | --- |
| **Sr No.** | **Ice Cream Purchase** | **No. of Respondents** |
| Rajkot | Percentage |
| **1** | Yes | 105 | 66.88% |
| **2** | No | 48 | 30.57% |
| **3** | Before | 4 | 2.55% |
|  | **Total** | **157** | **100%** |

Source: Primary data

Out of 157 respondents in Rajkot, 105 respondents (66.88%) currently purchase ice cream, while 48 respondents (30.57%) do not purchase ice cream. Additionally, 4 respondents (2.55%) reported that they used to purchase ice cream previously but have stopped. This indicates that the majority of respondents are active ice cream purchasers.

* + 1. **Monthly Purchase Wise Distribution Respondents**

Table.3 Ice Cream Monthly Sales Wise Distribution Respondents **(n=157)**

|  |  |  |
| --- | --- | --- |
| **Sr No.** | **Ice Cream Monthly Sales** | **No. of Respondents** |
| Rajkot | Percentage |
| **1** | Up to 50000  | 17 | 10.83% |
| **2** | 30000-49999 | 20 | 12.74% |
| **3** | 20000-29999 | 7 | 4.46% |
| **4** | 10000-19999 | 38 | 24.20% |
| **5** | Below 10000 | 23 | 14.65% |
| **6** | No Sales Ice Cream | 52 | 33.12% |
|  | **Total** | **157** | **100%** |

Source: Primary data (A1-< ₹10000, A2-₹10000 – ₹20000, A3-₹20001 - ₹30000, A4- ₹30001 - ₹50000, A5- ₹30001 - ₹50000, A6 -₹50000 <)

The table 3 exhibits Out of 157 respondents in Rajkot, 52 respondents (33.12%) reported no sales of ice cream. Among those who sell ice cream, 38 respondents (24.20%) have monthly sales between ₹10,000 to ₹19,999, while 23 respondents (14.65%) have sales below ₹10,000. Additionally, 20 respondents (12.74%) reported monthly sales ranging from ₹30,000 to ₹49,999, and 17 respondents (10.83%) had sales up to ₹50,000. Only 7 respondents (4.46%) recorded sales between ₹20,000 to ₹29,999. This shows a varied distribution of monthly ice cream sales among the respondents.

* + 1. **Ice Cream Brands Availability Wise Distribution Respondents**

Table 4 Ice Cream Brands Availability Wise Distribution Respondents **(n=157)**

|  |  |  |
| --- | --- | --- |
| **Sr No.** | **Ice Cream Brands Available** | **No. of Respondents** |
| Rajkot | Percentage |
| **1** | 0 | 52 | 33.12% |
| **2** | 1 | 78 | 49.68% |
| **3** | 2 | 20 | 12.74% |
| **4** | 3 | 5 | 3.18% |
| **5** | 4 | 2 | 1.27% |
|  | **Total** | **157** | **100%** |

Source: Primary data

The table 4. presents Number of Ice Cream Brand wise distribution of respondents in Rajkot. Out of 157 respondents in Rajkot, 78 respondents (49.68%) had availability of one ice cream brand, while 52 respondents (33.12%) did not have any ice cream brand available. Additionally, 20 respondents (12.74%) reported availability of two brands, 5 respondents (3.18%) had three brands, and only 2 respondents (1.27%) had four brands available. This indicates that nearly half of the respondents stock a single brand of ice cream, while multi-brand availability is relatively low.

* + 1. **Deep Freezer Availability Wise Distribution Respondents**

The table 5 indicates the deep freezer availability wise distribution of respondents in Rajkot City.

Table .5 Deep Freezer Availability Wise Distribution Respondents **(n=157)**

|  |  |  |
| --- | --- | --- |
| **Sr No.** | **Deep Freezer Available** | **No. of Respondents** |
| Rajkot | Percentage |
| **1** | 0 | 50 | 31.85% |
| **2** | 1 | 74 | 47.13% |
| **3** | 2 | 25 | 15.92% |
| **4** | 3 | 7 | 4.46% |
| **5** | More then 5 | 1 | 0.64% |
|  | **Total** | **157** | **100%** |

Source: Primary data

The table 5 presents Deep Freezer Availability Wise Distribution Respondents in Rajkot. Out of 157 respondents in Rajkot, 74 respondents (47.13%) had one deep freezer available, while 50 respondents (31.85%) did not have any deep freezer. Additionally, 25 respondents (15.92%) had two deep freezers, 7 respondents (4.46%) had three deep freezers, and only 1 respondent (0.64%) reported having more than five deep freezers. This shows that nearly half of the respondents operate with a single deep freezer, while multiple deep freezer ownership is relatively uncommon.

* 1. **OBJECTIVE 1: TO EVALUATE THE MARKET PENETRATION OF ICE CREAM SEGMENT IN RAJKOT CITY COMPARED TO COMPETING BRANDS**

This section delves into evaluating the market penetration of the ice cream segment in Rajkot City by comparing Amul with competing brands. Through a series of meticulously crafted questions, the study assessed area-wise market penetration, brand availability, shop category distribution, and deep freezer accessibility. The aim was to gauge retailers' awareness of different ice cream brands, their stocking behavior, and infrastructure readiness. By analyzing retailer responses across various city zones, the study identified both the strengths of Amul’s presence and the availability of competing brands, while also highlighting gaps in infrastructure and visibility that can be addressed through focused marketing and distribution strategies.

* + 1. **Area Wise Market Penetration**

The below table provides a location of respondents’ preferences for ice cream in Rajkot, along with their respective percentages and totals.

Table .6 Area Wise Market Penetration **(n=157)**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr No.** | **Area** |  | **No. of Respondents** |
| Total | Penetration  | Percentage |
| **1** | Cluster 1 | 28 | 18 | 64% |
| **2** | Cluster 2 | 25 | 11 | 44% |
| **3** | Cluster 3 | 23 | 14 | 61% |
| **4** | Cluster 4 | 15 | 14 | 93% |
| **5** | Cluster 5 | 18 | 11 | 61% |
| **6** | Cluster 6 | 18 | 14 | 78% |
| **7** | Cluster 7 | 16 | 10 | 63% |
| **8** | Cluster 8 | 14 | 13 | 93% |
|  | **Total** | **157** | **105** | **67%** |

Source: Primary source

1. Cluster 1
	1. Arya Nagar
	2. Rohidaspara
	3. Parsana Nagar
	4. Bhagvatipara
2. Cluster 2
	1. Jaganath
	2. Sadar
3. Cluster 3
	1. Dharam Nagar
	2. Gandhigram
	3. Raiyagam Road
4. Cluster 4
	1. Kotecha Nagar
	2. Subhash Nagar
5. Cluster 5
	1. Prahlad Nagar
	2. Vidhya Nagar
6. Cluster 6
	1. Bhakti Nagar
	2. Jangleshwar
7. Cluster 7
	1. Bharat Nagar
	2. Kotharia
8. Cluster 8
	1. Nana Mawa
	2. Chandresh Nagar

The data in Table.7 illustrates the penetration of ice cream among respondents in Rajkot city. Out of 157 respondents across eight clusters in Rajkot, Cluster 4 and Cluster 8 reported the highest market penetration at 93% each, with 14 out of 15 and 13 out of 14 respondents, respectively, stocking ice cream. Cluster 6 showed a penetration of 78% (14 out of 18), followed by Cluster 1 at 64% (18 out of 28), Cluster 7 at 63% (10 out of 16), and Cluster 3 and Cluster 5 both at 61%. Cluster 2 had the lowest penetration at 44% (11 out of 25). Overall, the total market penetration across all clusters was 67%, with 105 out of 157 respondents stocking ice cream.

* + 1. **Area Wise Ice Cream Brand Availability**

The below table shows area wise ice cream brand availability by respondents in eight clusters at Rajkot city.

Table 7 Area Wise Ice Cream Brand Availability **(n=157)**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr No.** | Area | TotalRespondents | **No. of Brand** |
| Available |
| **1** | Cluster 1 | 28 | 7 |
| **2** | Cluster 2 | 25 | 5 |
| **3** | Cluster 3 | 23 | 6 |
| **4** | Cluster 4 | 15 | 7 |
| **5** | Cluster 5 | 18 | 9 |
| **6** | Cluster 6 | 18 | 8 |
| **7** | Cluster 7 | 16 | 6 |
| **8** | Cluster 8 | 14 | 6 |
|  | **Total** | **157** | **14** |

Source: Primary source

1. Cluster 1
	1. Arya Nagar
	2. Rohidaspara
	3. Parsana Nagar
	4. Bhagvatipara
2. Cluster 2
	1. Jaganath
	2. Sadar
3. Cluster 3
	1. Dharam Nagar
	2. Gandhigram
	3. Raiyagam Road
4. Cluster 4
	1. Kotecha Nagar
	2. Subhash Nagar
5. Cluster 5
	1. Prahlad Nagar
	2. Vidhya Nagar
6. Cluster 6
	1. Bhakti Nagar
	2. Jangleshwar
7. Cluster 7
	1. Bharat Nagar
	2. Kotharia
8. Cluster 8
	1. Nana Mawa
	2. Chandresh Nagar

The data in Table 8 illustrates the brand availability of ice cream among respondents in Rajkot city. Out of 157 respondents across eight clusters in Rajkot, Cluster 5 reported the highest ice cream brand availability with 9 brands, followed by Cluster 6 with 8 brands and Cluster 1 and Cluster 4 each with 7 brands. Clusters 3, 7, and 8 each had 6 brands available, while Cluster 2 had the lowest brand availability with 5 brands. In total, 14 different ice cream brands were available across all clusters surveyed.

* + 1. **Area Wise Shop Category in Rajkot**

This table provides an area wise shop category in Rajkot city.

Table 8 Area Wise Shop Category in Rajkot **(n=157)**

|  |  |  |
| --- | --- | --- |
| **Sr No.** | **Area** | **No. of Respondents** |
| **Total** | **A1** | **A2** | **A3** | **A4** | **A5** | **A6** |
| **1** | Cluster 1 | 28 | 3 | 4 | 2 | 6 | 3 | 10 |
| **2** | Cluster 2 | 25 | 4 | 1 | 0 | 2 | 4 | 14 |
| **3** | Cluster 3 | 23 | 2 | 1 | 2 | 7 | 2 | 9 |
| **4** | Cluster 4 | 15 | 2 | 4 | 2 | 2 | 4 | 1 |
| **5** | Cluster 5 | 18 | 3 | 1 | 0 | 5 | 2 | 7 |
| **6** | Cluster 6 | 18 | 1 | 5 | 1 | 5 | 2 | 4 |
| **7** | Cluster 7 | 16 | 0 | 3 | 0 | 5 | 2 | 6 |
| **8** | Cluster 8 | 14 | 2 | 1 | 0 | 6 | 4 | 1 |
|  | **Total** | **157** | **17** | **20** | **7** | **38** | **23** | **52** |

Source: Primary source (A1-< ₹10000, A2-₹10000 – ₹20000, A3-₹20001 - ₹30000, A4- ₹30001 - ₹50000, A5- ₹30001 - ₹50000, A6 -₹50000 <)

1. Cluster 1
	1. Arya Nagar
	2. Rohidaspara
	3. Parsana Nagar
	4. Bhagvatipara
2. Cluster 2
	1. Jaganath
	2. Sadar
3. Cluster 3
	1. Dharam Nagar
	2. Gandhigram
	3. Raiyagam Road
4. Cluster 4
	1. Kotecha Nagar
	2. Subhash Nagar
5. Cluster 5
	1. Prahlad Nagar
	2. Vidhya Nagar
6. Cluster 6
	1. Bhakti Nagar
	2. Jangleshwar
7. Cluster 7
	1. Bharat Nagar
	2. Kotharia
8. Cluster 8
	1. Nana Mawa
	2. Chandresh Nagar

The table 9 presents the Area Wise Shop Category in Rajkot. Out of 157 respondents across eight clusters in Rajkot, the highest number of respondents fell under the “No Sales Ice Cream” category (A6) with 52 shops, followed by 38 shops in the ₹10,000–₹19,999 sales category (A4), and 23 shops in the “Below ₹10,000” category (A5). There were 20 shops in the ₹30,000–₹49,999 range (A2), 17 shops in the “Up to ₹50,000” category (A1), and 7 shops in the ₹20,000–₹29,999 range (A3). Cluster-wise, Cluster 1 had the highest number of A6 shops (10), while Cluster 2 also had a high count in A6 (14). Cluster 4 and Cluster 8 had the fewest shops without ice cream sales (1 each).

* + 1. **Area Wise Deep Freezer Availability**

The below table provides an area wise deep freezer availability point of purchase in Rajkot, along with their respective percentages and totals.

Table 9 Area Wise Deep Freezer Availability **(n=157)**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr No.** | **Area** |  | **No. of Deep Freezer** |
| **Total** | **0** | **1** | **2** | **3** | **5<** |
| **1** | Cluster 1 | 28 | 10 | 8 | 8 | 1 | 1 |
| **2** | Cluster 2 | 25 | 14 | 9 | 2 | 0 | 0 |
| **3** | Cluster 3 | 23 | 9 | 9 | 3 | 2 | 0 |
| **4** | Cluster 4 | 15 | 1 | 11 | 2 | 1 | 0 |
| **5** | Cluster 5 | 18 | 7 | 6 | 4 | 1 | 0 |
| **6** | Cluster 6 | 18 | 2 | 11 | 3 | 2 | 0 |
| **7** | Cluster 7 | 16 | 6 | 9 | 1 | 0 | 0 |
| **8** | Cluster 8 | 14 | 1 | 11 | 2 | 0 | 0 |
|  | **Total** | **157** | **50** | **74** | **25** | **7** | **1** |

Source: Primary source

1. Cluster 1
	1. Arya Nagar
	2. Rohidaspara
	3. Parsana Nagar
	4. Bhagvatipara
2. Cluster 2
	1. Jaganath
	2. Sadar
3. Cluster 3
	1. Dharam Nagar
	2. Gandhigram
	3. Raiyagam Road
4. Cluster 4
	1. Kotecha Nagar
	2. Subhash Nagar
5. Cluster 5
	1. Prahlad Nagar
	2. Vidhya Nagar
6. Cluster 6
	1. Bhakti Nagar
	2. Jangleshwar
7. Cluster 7
	1. Bharat Nagar
	2. Kotharia
8. Cluster 8
	1. Nana Mawa
	2. Chandresh Nagar

The analysis of deep freezer availability across 157 retailers segmented by clusters reveals that freezer penetration varies significantly by area. Out of the total respondents, 50 retailers (31.85%) did not have any deep freezer, indicating a key infrastructural gap. Cluster 2 had the highest number of retailers without a freezer (14 out of 25), followed by Cluster 3 (9), and Cluster 1 (10), suggesting these areas may require targeted support or investment to enhance cold chain infrastructure. On the other hand, Cluster 4 and Cluster 8 showed strong freezer availability, with only one retailer each lacking a freezer. A majority of retailers (74 out of 157, or 47.13%) had one deep freezer, while a smaller proportion had two (25 retailers) or more. Only 1 retailer across all clusters reported having more than five freezers. These findings indicate that while a significant number of retailers are equipped to store ice cream products, there remains considerable scope for improving cold storage capacity, particularly in areas where freezer ownership is low, to facilitate better stocking and support higher sales potential.

* 1. **OBJECTIVE 2: TO ANALYZE PURCHASING BEHAVIOUR OF RESPONDENTS FOR AMUL ICE CREAM IN RAJKOT CITY**

This section focuses on analyzing the purchasing behavior of respondents for Amul ice cream in Rajkot City. Key factors examined include the number of respondents who regularly purchase ice cream, their frequency of purchase, reasons for not buying ice cream, and their estimated monthly purchase volume. The insights gathered help in understanding retailers buying patterns, seasonal or behavioral fluctuations, and barriers to purchase. By evaluating these aspects, the study identifies opportunities for increasing retailer engagement, addressing deterrents, and tailoring promotional efforts to boost Amul ice cream sales in the local market.

* + 1. **Number of Respondents Who Purchased Ice Cream**

The below table presents the number of respondents who purchased ice cream.

Table 10 Number of Respondents Who Purchased Amul Ice Cream **(n=105)**

|  |  |  |
| --- | --- | --- |
| **Sr No.** | **Purchased Amul Ice Cream** | **No. of Respondents** |
| Rajkot | Percentage |
| **1** | Yes | 29 | 28% |
| **2** | No | 76 | 72% |
|  | **Total** | **105** | **100** |

Source: Primary source

The Table 15 shows that out of 157 respondents, only 28% have purchased Amul ice cream, while a significant 72% have not made a purchase. The low purchase rate suggests that there might be barriers to adoption or a lack of product appeal to most surveyed retailers.

* + 1. **Frequency of Buying Ice Cream**

The below table shows the frequency of Buying Ice Cream in Rajkot City, with total and percentages.

Table 11 Frequency of Buying Ice Cream **(n=105)**

|  |  |  |
| --- | --- | --- |
| **Sr No.** | **Frequency** | **No. of Respondents** |
| Rajkot | % |
| **1** | Daily | 28 | 27% |
| **2** | Twice a week | 34 | 32% |
| **3** | Weekly | 29 | 28% |
| **4** | More than a week | 14 | 13% |
| **5** | No Purchase | 0 | 0% |
|  | **Total** | **157** | **100** |

Source: Primary source

Out of 105 respondents who purchase Amul ice cream in Rajkot, 34 respondents (32%) buy it twice a week, 29 respondents (28%) buy weekly, and 28 respondents (27%) purchase it daily. Additionally, 14 respondents (13%) buy ice cream at intervals longer than a week. No respondents reported not purchasing Amul ice cream. This shows that the majority of buyers purchase Amul ice cream at least once or twice a week.

The below table shows the frequency of Buying Amul Ice Cream in Rajkot City, with total and percentages.

Table .12 Monthly Purchase wise Frequency of Buying Amul Ice Cream **(n=105)**

|  |  |  |
| --- | --- | --- |
| **Sr No.** | **Frequency** | **No. of Respondents** |
| **Total** | **A1** | **A2** | **A3** | **A4** | **A5** |
| **1** | Daily | **28** | 13 | 6 | 3 | 6 | 0 |
| **2** | Twice a week | **34** | 3 | 9 | 1 | 17 | 4 |
| **3** | Weekly | **29** | 1 | 3 | 2 | 13 | 10 |
| **4** | More than a week | **14** | 0 | 2 | 1 | 2 | 9 |
|  | **Total** | **105** | **17** | **20** | **7** | **38** | **23** |

Source: Primary source (A1-< ₹10000, A2-₹10000 – ₹20000, A3-₹20001 - ₹30000, A4- ₹30001 - ₹50000, A5- ₹30001 - ₹50000, A6 -₹50000 <)

Out of 105 respondents purchasing Amul ice cream in Rajkot, 28 respondents buy daily, with the highest number (13) from the “Up to ₹50,000” sales category (A1). For those buying twice a week (34 respondents), most were from the ₹10,000–₹19,999 sales category (A4) with 17 respondents, followed by 9 respondents in ₹30,000–₹49,999 (A2). Among 29 weekly buyers, 13 were from A4 and 10 from “Below ₹10,000” (A5). For the 14 respondents buying more than once a week, 9 were from A5. This shows that higher sales categories tend to purchase more frequently, while lower sales categories are concentrated in less frequent purchases.

* + 1. **Reason for Not Buying Ice Cream**

The below table presents the number of respondents who purchased ice cream.

Table 13 Number of Respondents Who Purchased Ice Cream **(n=157)**

|  |  |  |
| --- | --- | --- |
| **Sr No.** | **Purchased Ice Cream** | **No. of Respondents** |
| Rajkot | Percentage |
| **1** | Yes | 29 | 28% |
| **2** | No | 76 | 72% |
|  | **Total** | **105** | **100** |

Source: Primary source

The Table 15 shows that out of 157 respondents, only 28% have purchased ice cream, while a significant 72% have not made a purchase. The low purchase rate suggests that there might be barriers to adoption or a lack of product appeal to most surveyed retailers.

* + 1. **Monthly Purchase Ice Cream**

The below table presents the number of respondents who purchased ice cream.

Table 14 Deep Freezers Wise Purchased Ice Cream **(n=105)**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr No.** | **Ice Cream Monthly Sales** | **Total** | **No. of Deep Freezer** |
| **1** | **2** | **3** | **5** |
| **1** | ₹50000 < | **17** | 5 | 8 | 3 | 1 |
| **2** | ₹30001 - ₹50000 | **20** | 12 | 6 | 2 | 0 |
| **3** | ₹20001 - ₹30000 | **7** | 4 | 2 | 1 | 0 |
| **4** | ₹10000 – ₹20000 | **38** | 30 | 8 | 0 | 0 |
| **5** | < ₹10000 | **23** | 21 | 1 | 1 | 0 |
|  | **Total** | **105** | **74** | **25** | **7** | **1** |

Source: Primary source

The data illustrates the relationship between the number of deep freezers and the monthly purchase volume of ice cream among 105 retailers. A majority of the respondents (74) operated with one deep freezer, and these were distributed across all sales categories. Notably, in the ₹10,000–₹20,000 range, 30 out of 38 retailers used only one freezer, indicating this to be the most common setup for moderate sales volumes. Retailers with two freezers (25 in total) showed greater representation in higher sales categories, especially in the ₹50,000+ and ₹30,001–₹50,000 brackets, suggesting that freezer capacity supports higher sales. Among those with three freezers, most had sales above ₹50,000. The only retailer with more than five freezers was in the highest sales category (>₹50,000), reinforcing the link between infrastructure and purchase volume.

* 1. **OBJECTIVE 3: TO MEASURE RETAILER SATISFACTION FOR ICE CREAM IN RAJKOT CITY**

This section aims to measure retailer satisfaction for ice cream in Rajkot City by analyzing key indicators such as product ratings given by respondents, monthly ice cream purchases based on freezer availability, and cluster-wise purchasing patterns. By examining how retailers rate various ice cream products, along with how storage infrastructure like freezers influences purchase volumes, the study provides valuable insights into satisfaction levels and operational capacity. Additionally, analyzing cluster-wise purchase data helps identify geographic trends and performance variations, enabling more targeted support and engagement strategies to enhance retailer satisfaction and overall sales efficiency.

* + 1. **Respondents Ice Cream Products Rating**

This table shows the distribution of Respondents satisfaction levels with the price of Amul Ice Cream, including their corresponding scores in Anand and Vidyanagar. The Likert scale averages were calculated for each region.

Table 15 Respondents (Cup SKUs) Rate on Sales Basis**(n=105)**

|  |  |  |
| --- | --- | --- |
| **Sr No.** | **Frequency****(Likert score multiplier)** | **No. of Respondents** |
| Rajkot | Score (fx) |
| **1** | 1 - No Sale | 1 | 1 |
| **2** | 2 - Very Low Sale | 0 | 0 |
| **3** | 3 - Avg Sale | 2 | 6 |
| **4** | 4 - Good Sale | 14 | 56 |
| **5** | 5 - Very Good Sale | 88 | 440 |
|  | **Total** | **105** | **503** |
|  | **Likert Scale** | **4.79 ± 0.56** |

Source: Primary source

Out of 105 respondents rating cup SKUs on a sales basis in Rajkot, the majority—14 respondents—rated their sales as “Good Sale” (score 4), contributing a score of 56. Additionally, 2 respondents rated sales as “Average Sale” (score 3) with a score of 6, while 1 respondent indicated “No Sale” (score 1) with a score of 1. No respondents rated sales as “Very Low Sale” (score 2), and none rated it as “Very Good Sale” (score 5). The total score was 503, resulting in a high Likert scale score of 4.79, reflecting an overall positive perception of cup SKU sales among the respondents.

Table 16 Respondents (Cone SKUs ) Rate on Sales Basis(n=105)

|  |  |  |
| --- | --- | --- |
| **Sr No.** | **Frequency****(Likert score multiplier)** | **No. of Respondents** |
| Rajkot | Score (fx) |
| **1** | 1 - No Sale | 1 | 1 |
| **2** | 2 - Very Low Sale | 2 | 4 |
| **3** | 3 - Avg Sale | 2 | 6 |
| **4** | 4 - Good Sale | 30 | 120 |
| **5** | 5 - Very Good Sale | 70 | 350 |
|  | **Total** | **105** | **481** |
|  | **Likert Scale** | **4.58 ± 0.71** |

Source: Primary source

Out of 105 respondents in Rajkot rating cone SKUs on a sales basis, 70 respondents (66.67%) rated sales as “Very Good Sale” with a score of 350, and 30 respondents (28.57%) rated it as “Good Sale” with a score of 120. A small number of respondents rated sales lower: 2 respondents each marked “Average Sale” and “Very Low Sale,” while 1 respondent marked “No Sale.” The total score was 481, resulting in a high Likert scale score of 4.58, indicating that overall, respondents perceive cone SKUs as selling very well.

Table 17 Respondents (Stick/ Kulfi SKUs) Rate on Sales Basis**(n=105)**

|  |  |  |
| --- | --- | --- |
| **Sr No.** | **Frequency****(Likert score multiplier)** | **No. of Respondents** |
| Rajkot | Score (fx) |
| **1** | 1 - No Sale | 1 | 1 |
| **2** | 2 - Very Low Sale | 0 | 0 |
| **3** | 3 - Avg Sale | 2 | 6 |
| **4** | 4 - Good Sale | 14 | 56 |
| **5** | 5 - Very Good Sale | 88 | 440 |
|  | **Total** | **105** | **503** |
|  | **Likert Scale** | **4.79 ± 0.56** |

Source: Primary source

Out of 105 respondents in Rajkot rating Stick/Kulfi SKUs on a sales basis, the majority—88 respondents (83.81%)—rated sales as “Very Good Sale,” contributing a score of 440. Additionally, 14 respondents (13.33%) rated sales as “Good Sale” with a score of 56. Only 2 respondents (1.90%) rated sales as “Average Sale,” while 1 respondent reported “No Sale.” No respondents rated sales as “Very Low Sale.” The total score was 503, resulting in a Likert scale score of 4.79, indicating a very strong perception of sales performance for Stick/Kulfi SKUs.

Table.18 Respondents FP/CP/ PP SKUs Rate on Sales Basis**(n=105)**

|  |  |  |
| --- | --- | --- |
| **Sr No.** | **Frequency****(Likert score multiplier)** | **No. of Respondents** |
| Rajkot | Score (fx) |
| **1** | 1 - No Sale | 2 | 2 |
| **2** | 2 - Very Low Sale | 27 | 54 |
| **3** | 3 - Avg Sale | 23 | 69 |
| **4** | 4 - Good Sale | 32 | 128 |
| **5** | 5 - Very Good Sale | 21 | 105 |
|  | **Total** | **105** | **358** |
|  | **Likert Scale** | **3.41 ± 1.13** |

Source: Primary source (FP – Family Pack, CP- Combo Pack, PP – Party Pack)

Out of 105 respondents in Rajkot rating FP/CP/PP SKUs on a sales basis, 32 respondents (30.48%) rated sales as “Good Sale” with a score of 128, followed by 23 respondents (21.90%) who rated sales as “Average Sale” with a score of 69. Additionally, 27 respondents (25.71%) rated sales as “Very Low Sale,” contributing a score of 54, while 21 respondents (20%) rated sales as “Very Good Sale” with a score of 105. Only 2 respondents (1.90%) reported “No Sale.” The total score was 358, resulting in a Likert scale score of 3.40, indicating a moderate sales performance perception for FP/CP/PP SKUs.

Overall, based on the analysis of all four datasets using the Likert Scale method, the overall retailer satisfaction with ice cream sales in Rajkot reveals important trends. In two of the cases, the mean satisfaction scores were notably high—**4.79 ± 0.56** and **4.58 ± 0.71**—indicating strong and consistent satisfaction levels among retailers, with most rating sales as "Good" to "Very Good." However, the most recent dataset showed a significantly lower mean of **3.41 ± 1.13**, highlighting a broader variation in retailer experiences and indicating moderate satisfaction, with some reporting average or low sales. This suggests that while Amul and ice cream sales generally perform well in many areas, there are pockets where performance is inconsistent, possibly due to differences in freezer availability, shop type, or brand competition. These insights underline the need for targeted interventions in underperforming clusters to ensure uniform market penetration and retailer satisfaction across Rajkot.

* + 1. **Respondents Freezers Wise Ice Cream Monthly Purchase**

This table shows the distribution of Respondents satisfaction levels with the Freezers Wise Ice Cream Monthly Purchase in Rajkot.

Table 19 Freezers Wise Ice Cream Monthly Purchase **(n=105)**

|  |  |  |
| --- | --- | --- |
| **Sr No.** | **Frequency** | **No. of Freezers** |
| 1 | 2 | 3 | 5< | **Total** |
| **1** | Daily | 10 | 13 | 4 | 1 | 28 |
| **2** | Twice a week | 25 | 7 | 2 | 0 | 34 |
| **3** | Weekly | 26 | 2 | 1 | 0 | 29 |
| **4** | More than a week | 11 | 3 | 0 | 0 | 14 |
|  | **Total** | **72** | **25** | **7** | **1** | **105** |

Source: Primary source

The analysis of freezer ownership and corresponding ice cream purchase frequency among 105 retailers in Rajkot reveals a clear link between freezer availability and purchasing patterns. Retailers with **one freezer** constituted the majority (72 out of 105) and showed the most diverse purchasing behavior, including 10 purchasing daily, 25 twice a week, and 26 weekly. Those with **two freezers** (25 retailers) had a slightly higher daily purchase ratio (13 retailers), suggesting a tendency toward more frequent restocking. Interestingly, daily purchases were most concentrated among retailers with more freezers, including 4 with three freezers and 1 with more than five freezers. As the number of freezers increased, the likelihood of more frequent purchases also increased, indicating that storage capacity plays a key role in sales volume and inventory turnover. This highlights the importance of encouraging freezer infrastructure upgrades among retailers to potentially drive higher sales volumes through more frequent stock replenishment.

* + 1. **Respondents Cluster Wise Ice Cream Monthly Purchase**

This table shows the distribution of Respondents Cluster Wise Ice Cream Monthly Purchase, including their corresponding scores in Rajkot.

Table 20 Respondents Cluster Wise Ice Cream Monthly Purchase **(n=105)**

|  |  |  |
| --- | --- | --- |
| **Sr No.** | **Frequency** | **Cluster No.** |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | **Total** |
| **1** | Daily | 8 | 2 | 4 | 3 | 5 | 3 | 1 | 2 | **28** |
| **2** | Twice a week | 2 | 4 | 7 | 2 | 4 | 6 | 5 | 4 | **34** |
| **3** | Weekly | 6 | 4 | 1 | 5 | 2 | 3 | 4 | 4 | **29** |
| **4** | More than a week | 2 | 1 | 2 | 4 | 0 | 2 | 0 | 3 | **14** |
|  | **Total** | **18** | **11** | **14** | **14** | **11** | **14** | **10** | **13** | **105** |

Source: Primary source

The table shows the cluster-wise distribution of respondents in Rajkot based on their frequency of monthly ice cream purchases. Among the 105 respondents, Cluster 1 recorded the highest number of daily purchases (8 respondents), followed by Cluster 3 with 4 respondents and Cluster 5 with 5 respondents. Twice-a-week purchases were most reported in Cluster 3 (7 respondents) and Cluster 6 (6 respondents). Weekly purchases were highest in Cluster 4 (5 respondents) and Cluster 1 (6 respondents), while “More than a week” purchases were relatively low across all clusters, with the highest being 4 respondents in Cluster 4. Overall, daily and twice-a-week purchases were more common in Clusters 1, 3, and 6, indicating stronger purchase frequency in these areas.

# **SUMMARY OF RESULTS AND INTERPRETATION**

* 1. **TO ANALYSE THE CURRENT MARKET DYNAMICS FOR ICE CREAM IN RAJKOT CITY, INCLUDING RETAILER PREFERENCES, DEMAND TRENDS, AND COMPETITIVE LANDSCAPE**

Major findings:

* Confectionary shops (36.31%) and pan plus outlets (35.67%) are the dominant retail points for ice cream sales in Rajkot, together making up over 70% of the sample.
* General Kirana stores account for 23.57%, while modern format stores (3.82%) and push carts (0.64%) have minimal presence.
* 66.88% of respondents currently sell ice cream, while 30.57% do not, and 2.55% had previously stopped, indicating moderate market penetration.
* 33.12% of retailers reported no ice cream sales, highlighting untapped potential in the market.
* The highest concentration of monthly sales lies between ₹10,000–₹19,999 (24.20%), followed by lower segments below ₹10,000 (14.65%).
* Nearly 50% of retailers stock only one brand of ice cream, showing limited brand diversity at many outlets.
* 33.12% of respondents do not stock any ice cream brand, indicating major gaps in product availability.
* 47.13% of retailers have one deep freezer, making it the most common storage setup among ice cream sellers.
* However, 31.85% of respondents have no deep freezer at all, posing a significant barrier to storing and selling ice cream effectively.
	1. **Objective 1: To Evaluate the Market Penetration of The Ice Cream Segment in Rajkot City Compared to Competing Brands**
* Major findings:
* The study analyzed 157 retailers, with the majority being confectionary and pan-plus shops.
* Ice cream penetration was found to be **67% overall**, with highest penetration in Cluster 4 and 8 (93% each).
* 14 brands were identified in the market, with Cluster 5 showing highest brand variety.
* Infrastructure gaps were evident—32% had no deep freezer, especially in Cluster 2.
* Amul was widely available but faced stiff competition and inconsistent penetration in some areas.
* Amul has a strong presence in certain clusters, but infrastructural issues (like freezer unavailability) and uneven brand availability suggest a need for targeted interventions, especially in low-penetration areas like Cluster 2.
	1. **Objective 2: To Analyze Purchasing Behaviour of Respondents for Amul Ice Cream in Rajkot City**

Major findings:

* Only 28% of retailers were purchasing Amul ice cream, indicating substantial untapped potential.
* Among buyers, 32% purchased twice a week, 27% daily, and 28% weekly.
* Frequent purchasing was positively correlated with freezer ownership.
* Retailers with higher sales volumes tended to purchase more frequently.
* Barriers included limited awareness, low demand, and storage constraints.
* Purchasing behavior reflects both opportunity and constraint—retailers with adequate storage and better sales performance engage more actively with Amul products, pointing to the importance of addressing operational barriers and enhancing retailer support.
	1. **Objective 3: To Measure Retailer Satisfaction for Amul Ice Cream in Rajkot City**

Major findings:

* Product category performance was assessed using Likert scale ratings.
	+ Cup and Kulfi SKUs scored 4.79 (Very Good).
	+ Cone SKUs scored 4.58 (Good to Very Good).
	+ Family Pack/Party Pack SKUs scored 3.40 (Average).
* Freezer availability strongly influenced monthly purchase behavior.
* Clusters 1, 3, and 6 had higher frequency of purchases, indicating more engaged retailers.
* Retailer satisfaction is high for impulse SKUs like cups, cones, and kulfi, while larger SKUs like FP/CP/PP underperform, possibly due to lower consumer demand or storage limitations. Targeted support, stock rotation, and demand creation are essential to balance product performance.

# **CONCLUSION**

The study reveals significant insights into the ice cream market dynamics in Rajkot City. Confectionary and pan-plus shops dominate retail sales, yet around one-third of retailers do not sell ice cream, indicating untapped market potential. Amul enjoys a strong presence in select clusters but faces competition and infrastructural challenges, notably the lack of deep freezers in 32% of outlets. Only 28% of retailers currently purchase Amul ice cream, highlighting an opportunity for deeper market penetration through enhanced awareness and infrastructure support. Purchasing frequency is positively linked to storage capacity and sales volume. Retailer satisfaction is notably high for impulse SKUs like cups, cones, and kulfi, while family and party packs underperform, likely due to storage and demand constraints. Targeted marketing, better freezer access, and retailer engagement are essential to strengthen Amul's position. Addressing operational barriers can unlock higher penetration and sales, ultimately boosting brand performance in the Rajkot ice cream market

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