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# A STUDY OF URBAN DAIRY CONSUMERS IN GUJARAT STATE

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**Abstract:**

*The GCMMF has recently launched as many as 26 new products from Amul's portfolio. A few examples include the Amul Whipping Cream and Amul Greek frozen yoghurt. Products like Amul long-life UHT Milk, Amul Cream in long-life UHT packaging, entire value-added milk beverages range, Amul fresh milk pouches, etc. have been growing at impressive double digit rate. An Amul fresh milk pouch has also been recently launched in Punjab, which is another major milestone for our organization. Amul Cheese range rules the dominant share of Indian cheese market. The present study was conducted to evaluate the status of dairy consumers in urban areas in Gujarat state. The study covered all districts of the state and information was collected by using questionnaire. After analysing the collected data it could be concluded that the strengths of dairy consumers in urban areas were - Young and literate consumers, increasing incomes and changing lifestyles of consumers. However, some problematic issues were - Less awareness about quality aspects, nutritional and health benefits of dairy products and many consumers in the urban area still prefer loose milk.*

**Key Words:** Milk Retailer, Dairy Supply Chain, Dairy Distribution Channel & Dairy Consumers

## 1. Introduction:

### Indian Dairy Sector:

The Indian Dairy cooperatives structure has a huge contribution in raising the milk production in the country upto approximately 146 million tonnes in the year 2014-15 from a meagre milk production 17 million tonnes in the year 1951. The per capita availability of milk in the country has increased to 340 g /day (GCMMF Annual Report 2015-16). Further, milk is the largest agricultural crop in India with market value exceeding Rs 4 lakh crore per annum and the milk group contributes the highest to the total output of our agricultural sector, surpassing the output value of wheat, rice and oilseeds.

### The Product Range of GCMMF:

| Product Category | Product Variants / Flavours |
|---|---|
| Breadspreads | Amul Butter, Amul Lite, Delicious Table Margarine |
| Cheese Range | Amul Pasteurized Processed Cheddar Cheese, Amul Processed Cheese Spread, Amul Pizza (Mozarella) Cheese, Amul Emmental Cheese, Amul Gouda Cheese, AmulMalaiPaneer (cottage cheese), Utterly Delicious Pizza |
| Fresh Milk | Amul Gold Full Cream Milk 6% fat, Amul Shakti Standardised Milk 4.5% Fat, Amul Taaza Toned Milk 3% fat, Amul Slim & Trim, Amul Cow Milk |
| UHT Milk Range | Amul Gold 4.5% fat Milk, Amul Shakti 3% fat Milk, Amul Taaza 1.5% fat Milk, Amul Lite Slim-n-Trim Milk, Amul Fresh Cream |
| Milk Powders | Amul Full Cream Milk Powder, Amulya Dairy Whitener, Sagar Skimmed Milk Powder, Amulspray Infant Milk Food, Sagar Tea and Coffee Whitener |
| Milk Drink | Amul Kool Flavoured Milk, Amul Kool Cafe, AmulKoolKoko, Amul Kool Millk Shaake, AmulKool Chocolate Milk, Nutramul Energy Drink |

| | |
|---|---|
| Health Drink | Stamina Instant Energy Drink |
| Brown Beverage | Nutramul Malted Milk Food |
| Curd Products | Amul Masti Dahi (fresh curd), AmulMasti Spiced Butter Milk, Amul Lassee, AmulFlaavyo Yoghurt |
| Ghee | Amul Pure Ghee, Sagar Pure Ghee |
| Sweetened Condensed Milk | AmulMithaimate |
| Mithaee Range (Ethnic Sweets) | Amul Shrikhand, Amul Mithaee Gulabjamuns, Amul Basundi, Avsar Ladoos |
| Ice-Cream | Sundae Range, Sugarfree and Probiotic |
| Chocolate & Confectionery | Amul Milk Chocolate, Amul Fruit & Nut Chocolate, Amul Chocozoo, AmulBindass, Amul Fundoo |

## 2. Methodology:

The study was be spread over the entire state and primary data was collected by way of a Questionnaire. The study covered all 26 Districts of Gujarat state, 227 talukas and further, three villages were selected from each taluka. Urban consumers were selected from Taluka headquarters.

## 3. Results and Findings:

### (a). Profile of Selected Respondents:

| S.No | Age (Year) | N | Percentage |
|---|---|---|---|
| 1 | 18 – 30 | 46 | 38% |
| 2 | 31 – 40 | 30 | 25% |
| 3 | 41 – 50 | 26 | 22% |
| 4 | 51 - 60 | 14 | 12% |
| 5 | > 60 | 4 | 3% |
| | Total | 120 | 100% |

Around 63% of respondents urban consumers are having age between 18 to 40 years.

### (b). Gender Wise Profile of Selected Respondents:

| S.No. | Gender | N | Percentage |
|---|---|---|---|
| 1 | Male | 105 | 88% |
| 2 | Female | 15 | 13% |
| | Total | 120 | 100% |

Almost 88% of selected respondents are male.

### (c). Family Size Wise profile of Selected Respondents:

| S.No | Family Member | N | Percentage |
|---|---|---|---|
| 1 | Adult | 373 | 64% |
| 2 | Children | 212 | 36% |
| | Total | 585 | 100% |

Out of 120 families 64% people are adults.

### (d). Monthly Income Profile of Selected Respondents:

| S.No | Monthly Income | N | Percentage |
|---|---|---|---|
| 1 | < 10,000 | 24 | 20% |
| 2 | 10,000 - 20,000 | 34 | 28% |
| 3 | 20,001 - 40,000 | 40 | 33% |
| 4 | 40,001 - 1,00,000 | 18 | 15% |
| 5 | Above 1,00,000 | 4 | 3% |
| | Total | 120 | 100% |

Around 76% of selected urban consumers' family income is between 10,000 to 1,00,000Rs per month.

### (e). Purchase Behaviour of Selected Respondents:

| S.No | Milk (Lit.) | N | Percentage |
|---|---|---|---|
| 1 | < 1 | 2 | 2% |
| 2 | 1 – 2 | 87 | 73% |
| 3 | 2.1 - 4.0 | 27 | 23% |
| 4 | 4.1 - 5.0 | 2 | 2% |
| 5 | Above 5.0 | 2 | 2% |
| | Total | 120 | 100% |

Almost 98% selected respondents are consuming milk in the range of 1 liter to 5 liters.

**(f). Type of Milk Purchased by Selected Respondents:**

| S.No | Type of Milk | N | Percentage |
|---|---|---|---|
| 1 | Packed | 43 | 36% |
| 2 | Loose | 77 | 64% |
| | Total | 120 | 100% |

Almost 64% of respondents are using loose milk for their daily purpose.

**(g). Packed Milk Customers (Reason for Buying):**

| Statement No | Statement | 1st Rank | 2nd Rank | 3rd Rank | Points | Rank |
|---|---|---|---|---|---|---|
| 1 | Assured quality according to standards. | 11 | 7 | 9 | 56 | 1 |
| 2 | Convenient packaging (easy to carry) | 4 | 7 | 6 | 32 | |
| 3 | Price | 5 | 5 | 5 | 30 | |
| 4 | Easy availability | 5 | 7 | 4 | 33 | 3 |
| 5 | Higher shelf life | 3 | 5 | 5 | 24 | |
| 6 | Assurance of no adulteration | 5 | 9 | 7 | 40 | 2 |
| 7 | It is pasteurized | 7 | 1 | 6 | 29 | |
| 8 | Taste and odor. | 3 | 2 | 1 | 14 | |
| 9 | Other | 0 | 0 | 0 | | |
| | Total | 43 | 43 | 43 | | |

The top three reasons for buying packed milk were: Assured quality according to standards, Assurance of no adulteration and easy availability, respectively.

**(h). Loose Milk Customers (Reason for Buying):**

| Statement No | Statement | 1st Rank | 2nd Rank | 3rd Rank | Points | Rank |
|---|---|---|---|---|---|---|
| 1 | Home delivery | 41 | 20 | 15 | 178 | 1 |
| 2 | Own milch animal | 0 | 0 | 0 | 0 | |
| 3 | Formation of cream on boiling | 0 | 3 | 4 | 10 | |
| 4 | Perceived better quality | 13 | 28 | 15 | 110 | 2 |
| 5 | Purchase of milk on credit | 5 | 12 | 16 | 55 | |
| 6 | Lower price | 13 | 5 | 17 | 66 | 3 |
| 7 | Long term and old relationship/ acquaintance with loose milk suppliers. | 5 | 9 | 10 | 43 | |
| 8 | Other | 0 | 0 | 0 | 0 | |
| | Total | 77 | 77 | 77 | | |

The top three reasons for buying loose milk were: Home delivery, Perceived better quality and Lower price respectively.

**(i). Loose Milk Customers (Reason for Not Buying Packed Milk):**

| Statement No | Statement | 1st Rank | 2nd Rank | 3rd Rank | Points | Rank |
|---|---|---|---|---|---|---|
| 1 | Non Availability of pouch milk in area | 25 | 8 | 13 | 104 | 1 |
| 2 | Irregular supply of pouch milk due to closing of Centre. | 7 | 12 | 5 | 50 | |
| 3 | Higher price | 16 | 11 | 8 | 78 | 3 |
| 4 | Perceived lower quality of pouch milk as compared to loose milk (for eg. Formation of cream). | 12 | 20 | 13 | 89 | 2 |
| 5 | No flexibility in payment | 7 | 10 | 16 | 57 | |

| | | | | | | |
|---|---|---|---|---|---|---|
| | (i.e. cash purchases only) | | | | | |
| 6 | Absence of home delivery | 4 | 13 | 12 | 50 | |
| 7 | Frequent out of stock of desired milk pouch. | 6 | 3 | 10 | 34 | |
| | Total | 77 | 77 | 77 | | |

The top three reasons for not buying packed milk are non-availability of pouch milk in area, perceived lower quality of pouch milk as compared to loose milk and higher price, respectively.

**(j). Frequency of Purchasing Packed Milk:**

| S.No | Purchasing Time | N | Percentage |
|---|---|---|---|
| 1 | Morning | 21 | 49% |
| 2 | Evening | 10 | 23% |
| 3 | Both Time | 12 | 28% |
| | Total | 43 | 100% |

Only 23% of packed milk respondents purchase milk in evening compared to 49% of same respondents purchasing it in the morning and 28% same respondents purchasing it both times.

**(k). Frequency of Purchasing Loose Milk:**

| S.No | Purchasing Time | N | Percentage |
|---|---|---|---|
| 1 | Morning | 20 | 26% |
| 2 | Evening | 20 | 26% |
| 3 | Both Time | 37 | 48% |
| | Total | 77 | 100% |

Around 26% of the loose milk respondents are purchasing milk in morning as well as in evening and 48% of the same respondents purchase it both times.

**(l). Type of Packed Milk (Variant Wise):**

| S.No | Milk Variants | N | Percentage |
|---|---|---|---|
| 1 | Gold (6%) FAT | 30 | 39% |
| 2 | Shakti (4.5%) FAT | 33 | 43% |
| 3 | Taaza (3%) FAT | 9 | 12% |
| 4 | Amul Slim &Trim (1.5%) FAT | 1 | 1% |
| 5 | Other | 4 | 5% |
| | Total | 77 | 100% |

Almost 82% of selected loose milk respondents are buying the milk in variants like Gold (6% - FAT) and Shakti (4.5% - FAT).

**(m). Perception about Amul Milk and Milk Products:**

| S.No | Perception | N | Percentage |
|---|---|---|---|
| 1 | Very good | 22 | 51% |
| 2 | Good | 12 | 28% |
| 3 | Medium | 8 | 19% |
| 4 | Bad | 1 | 2% |
| 5 | Very Bad | 0 | 0% |
| | Total | 43 | 100% |

Around 79% of selected packed milk respondents rate the Milk and milk products above good products.

**(n). Most Preferred Buying Place (Milk):**

| S.No | Products | Amul APO | Any Other Retail Outlet | Mall | Local Vendor/ Dudhiya |
|---|---|---|---|---|---|
| 1 | Fresh Milk | 13 | 26 | 4 | 77 |
| 2 | Butter | 13 | 23 | 1 | 5 |
| 3 | Ghee | 13 | 20 | 10 | 21 |
| 4 | Curd Products | 14 | 23 | 2 | 13 |
| 5 | Ice-cream | 19 | 23 | 1 | 15 |
| 6 | Cheese | 3 | 15 | 0 | 0 |

| | | | | | |
|---|---|---|---|---|---|
| 7 | Paneer | 2 | 2 | 0 | 2 |
| 8 | AmulShrikhand | 20 | 15 | 0 | 4 |

The most preferred buying place for selected respondents are Local vendor / dudhiya or other retail outlets.

**4. Conclusion:**

From the above analysis it can be concluded that the strengths of dairy consumers in Urban areas were Young and literate consumers, increasing incomes and changing lifestyles of consumers.However, some problematic issues were - Less awareness about quality aspects, nutritional and health benefits of dairy products and many consumers in the urban area still prefer loose milk.

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**6. References:**

1. http://www.amul.com/
2. http://www.nddb.coop/