



Research Paper

Consumer Dynamics in the Packaged Spice Market: Behavioural Patterns and Constraints in Gondal City, Gujarat

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Abstract: This study explores consumer buying behaviour and perceived constraints toward packaged spices in Gondal City, Rajkot district, Gujarat. Using primary data collected from 225 respondents through a structured questionnaire, the analysis employed descriptive statistics and Garrett ranking to examine purchase patterns, preferences, and constraints. Results show that all respondents are regular users of packaged spices, with 67.1% purchasing them monthly. Moderate pack sizes, particularly 250 g (31.1%) and 200 g (28.9%), are most preferred, underscoring convenience-oriented choices. Supermarkets (53.3%) and retailers (22.2%) remain dominant purchasing channels, while online stores (19.6%) are gaining relevance. Retailers (34.2%) and social media platforms (24.9%) emerge as the most influential drivers of purchase decisions. Garrett ranking highlights taste, quality, and price as the foremost determinants of brand

preference, whereas package size is the least influential. Key consumer-perceived constraints include concerns over non-biodegradable packaging and additives or preservatives in spices. The study suggests managerial implications such as targeted promotions at the beginning of the month, stronger supermarket presence, retailer-focused strategies, digital marketing campaigns, adoption of biodegradable packaging, and expansion of organic spice lines. These findings emphasize the dual importance of intrinsic product attributes and sustainability factors in shaping consumer behaviour and loyalty within India's packaged spice market.

Keywords: Consumer Behaviour, Packaged Spices, Brand Preference, Garrett Ranking, Consumer-perceived constraints; Sustainable packaging in food products; Health and food safety concerns

Introduction:

India, widely known as the “*Land of Spices*”, is the world’s largest producer, consumer, and exporter of spices, contributing significantly to global trade (World Spice Organisation, 2023). Spices are deeply embedded in Indian cuisine, health practices, and cultural traditions. However, rapid urbanization, rising disposable incomes, and heightened awareness of food safety and hygiene have shifted consumer preferences from loose, unbranded spices to packaged and branded alternatives (Mintel, 2025). Packaged spices are increasingly preferred due to their perceived quality, safety, convenience, and brand assurance (Dalmia and Goel, 2023). Consumer behaviour toward packaged food products has been widely studied in different contexts. For instance, factors such as cultural, social, personal, and psychological variables were found to significantly influence purchase decisions in both convenience stores and food categories (Abdu and Purwanto, 2013; Suroto *et. al.*, 2013; Uma and Ali, 2013; Ganapathi, 2015). These findings suggest that similar dynamics may also apply to the packaged spice segment, where attributes such as taste, price, and brand image play a critical role. Alongside positive drivers, consumers also perceive several constraints while purchasing packaged spices. Concerns over adulteration, heavy metal contamination, and microbial safety have been highlighted in recent studies across Asia and beyond (Sattar *et. al.*, 2019; Hore *et. al.*, 2019; Mohiuddin, 2020; İslamoğlu *et. al.*, 2021). For example, surveys in Bangladesh reported high consumer suspicion of adulterated spice powders and their health impacts (Sattar *et. al.*, 2019), while research in Iran and Turkey revealed contamination risks in both packaged and unpackaged spices (Lida *et. al.*, 2017; İslamoğlu *et. al.*,

2021). Such issues create barriers in consumer trust and influence purchasing decisions.

This study is conducted in Gondal City of Rajkot district, Gujarat, adopts a descriptive research design and applies statistical tools such as percentage analysis, the Likert scale, and Garrett ranking. By analysing socio-economic characteristics, purchase patterns and perceived barriers, the study contributes to a nuanced understanding of consumer decision-making in the packaged spice market. Importantly, it integrates insights from consumer behaviour theories and food safety research to highlight both marketing and policy implications for the packaged spice industry.

The key objectives of the study are:

- (i) To study the purchasing behaviour of consumers towards packaged spices
- (ii) To understand the constraints as perceived by the consumers towards packaged spices

Materials and Methods:

The present study was undertaken in Gondal city, Rajkot district of Gujarat, covering nine municipal wards. A multi-stage sampling technique was adopted to ensure adequate representation, and a total of 225 consumers, comprising 25 respondents from each ward, were selected as the sample. Primary data were collected using a structured interview schedule that captured information on socio-economic characteristics, purchasing behaviour, and perceived constraints of consumers toward packaged spices. Secondary data were obtained from journals, company records, government publications, and credible online sources to complement the primary findings. For the purpose of analysis, descriptive and inferential statistical tools were employed. Percentage and tabular analyses were used to summarise consumer

responses. The Likert scale was applied to assess consumer attitudes as well as to evaluate the major constraints faced by consumers.

Results and Discussion:

1. Frequency of purchase of Packaged spices:

The analysis of consumer behaviour revealed that all respondents (100%) were regular users of packaged spices, reflecting the widespread penetration of these products in the study area.

Table: 1. Frequency of purchase of Packaged spices

| Frequency of purchase of Packaged spices | Frequency | Percentage (%) |
|--|------------|----------------|
| Occasionally | 7 | 3.1 |
| Weekly | 15 | 6.7 |
| Fortnightly | 52 | 23.1 |
| Monthly | 151 | 67.1 |
| Total | 225 | 100 |

With respect to purchasing frequency, Table 1 shows that a majority of consumers (67.1%) purchase packaged spices on a monthly basis, followed by 23.1% who reported fortnightly purchases, 6.7% on a weekly basis, and only 3.1% who purchase occasionally. This

distribution highlights that packaged spices are embedded in routine household consumption, with monthly purchasing emerging as the dominant pattern among consumers.

2. Preferred quantity of purchase of Packaged spices:

Table: 2. Preferred quantity of purchase of Packaged spices

| Preferred quantity of purchase of Packaged spices | Frequency | Percentage (%) |
|---|------------|----------------|
| 100 g | 27 | 12.0 |
| 200g | 65 | 28.9 |
| 250g | 70 | 31.1 |
| 500g | 40 | 17.8 |
| 1kg | 23 | 10.2 |
| Total | 225 | 100 |

In terms of quantity purchased, Table 2 shows that 250 g packs were the most preferred size (31.1%), followed closely by 200 g packs (28.9%). Larger packs such as 500 g

accounted for 17.8%, whereas smaller packs of 100 g represented 12%, and 1 kg packs constituted only 10.2% of purchases. This pattern indicates that consumers

predominantly favour moderate-sized convenience, storage feasibility, and packages, reflecting a balance between affordability.

3. Preferred place of purchase of packaged of spices

Table: 3. Preferred place of purchase of packaged of spices

| Preferred place of purchase of packaged of spices | Frequency | Percentage (%) |
|---|------------|----------------|
| Departmental store | 11 | 4.9 |
| Retailers | 50 | 22.2 |
| Supermarket | 120 | 53.3 |
| Online Stores | 44 | 19.6 |
| Total | 225 | 100 |

Regarding the place of purchase, Table 3 shows that supermarkets emerged as the dominant retail outlet, preferred by 53.3% of consumers. This was followed by local retailers (22.2%), online stores (19.6%), and departmental stores (4.9%). The distribution

underscores the increasing prominence of organized retail and e-commerce platforms in the packaged spice market, while also indicating that traditional retailers continue to maintain a significant role in consumer purchasing behaviour.

4. Media influence on purchase packaged spices:

Table: 4. Media influence on purchase packaged spices

| Media influence on purchase packagedspices | Frequency | Percentage (%) |
|---|------------|----------------|
| TV | 22 | 9.8 |
| Retailers | 77 | 34.2 |
| Friends/Relatives | 41 | 18.2 |
| Newspapers/Magazine/Pamphlets | 29 | 12.9 |
| Social Media (Google ads, YouTube ads, instagram ads, flipkart sale, amazon sale etc) | 56 | 24.9 |
| Total | 225 | 100 |

Analysis of media influence revealed that Table 4 shows retailers exerted the strongest impact on consumer purchasing decisions (34.2%), followed by social media platforms such as Google Ads, YouTube, and Instagram (24.9%). Friends and relatives accounted for 18.2% of influence, while print media-including newspapers, magazines, and

pamphlets-contributed 12.9%. Television emerged as the least influential medium, with only 9.8% of responses. These findings highlight the critical role of retail interactions, interpersonal communication, and digital platforms in shaping consumer behaviour towards packaged spices.

5. Factors influencing purchase of packaged spices

Table: 5. Factors influencing purchase of packaged spices

| SN | Parameters | Highly dis-satisfid (1) | Dis-satisfid (2) | Neutral (3) | Satisfid (4) | Highly Satisfied (5) | Total | CS | Mean | Rank |
|----|------------------------|-------------------------|------------------|-------------|--------------|----------------------|-------|------|------|------|
| 1 | Price | 3 | 12 | 32 | 24 | 154 | 225 | 989 | 4.40 | 3 |
| 2 | Quality | 6 | 6 | 24 | 26 | 163 | 225 | 1009 | 4.48 | 2 |
| 3 | Taste | 1 | 2 | 27 | 25 | 170 | 225 | 1036 | 4.60 | 1 |
| 4 | Size of Packages | 15 | 150 | 52 | 5 | 3 | 225 | 506 | 2.25 | 9 |
| 5 | Packaging | 25 | 65 | 75 | 37 | 23 | 225 | 643 | 2.86 | 6 |
| 6 | Availability | 27 | 133 | 34 | 16 | 15 | 225 | 534 | 2.37 | 8 |
| 7 | Promotional Activities | 16 | 35 | 42 | 38 | 94 | 225 | 834 | 3.71 | 5 |
| 8 | Brand Loyalty | 26 | 12 | 30 | 37 | 120 | 225 | 888 | 3.95 | 4 |
| 9 | Shelf Life | 45 | 68 | 38 | 50 | 24 | 225 | 615 | 2.73 | 7 |

The analysis of factors influencing the purchase of packaged spices, as presented in Table 5, revealed that taste was the most significant determinant, achieving the highest mean score of 4.60. Quality (mean score 4.48) and price (mean score 4.40) followed closely, emphasizing the dominant role of intrinsic product attributes in guiding consumer choices. Brand loyalty (mean score 3.95) and promotional activities (mean score 3.71) ranked fourth and fifth, indicating that while marketing efforts and attachment to particular brands exert influence, they are less decisive than sensory and value-based considerations. Packaging

was placed sixth with a mean score of 2.86, while shelf life (2.73) and availability (2.37) exerted relatively minor influence. The size of packages received the lowest score (2.25), suggesting that although convenient packaging is appreciated, it is far less important than core product qualities. Overall, the findings suggest that consumers in Gondal prioritize taste, quality, and price in their purchasing behaviour, whereas external or supplementary attributes play a more limited role.

6. To understand the constraints as perceived by the consumers towards packaged spices:

Table: 6. constraints as perceived by the consumers towards packaged spices

| S,N. | Statements | Strongly Disagree (1) | Disagree (2) | Neutral (3) | Agree (4) | Strongly agree (5) | Total | CS | Mean | Rank |
|------|---|-----------------------|--------------|-------------|-----------|--------------------|-------|-----|------|------|
| 1 | Packaged spices are expensive compared to loose spices. | 22 | 36 | 48 | 75 | 44 | 225 | 758 | 3.37 | 3 |
| 2 | I find it challenging to trust the quality of packaged spices. | 3 | 42 | 50 | 85 | 45 | 225 | 802 | 3.56 | 1 |
| 3 | Limited variety of spices is available in packaged form. | 23 | 57 | 56 | 54 | 35 | 225 | 696 | 3.09 | 6 |
| 4 | Packaging of spices often leads to excessive waste which are non-biodegradable. | 23 | 37 | 58 | 69 | 38 | 225 | 737 | 3.28 | 4 |
| 5 | I prefer the aroma and freshness of loose spices over packaged | 10 | 54 | 68 | 56 | 37 | 225 | 731 | 3.25 | 5 |
| 6 | I am concerned about added preservatives in packaged spices. | 7 | 48 | 59 | 68 | 43 | 225 | 767 | 3.41 | 2 |
| 7 | Availability of my preferred spice brands is limited in stores. | 28 | 98 | 47 | 28 | 24 | 225 | 597 | 2.65 | 8 |
| 8 | Packaged spices lack authenticity in taste. | 34 | 86 | 46 | 30 | 29 | 225 | 609 | 2.71 | 7 |

Conclusion:

The study highlights that packaged spices have become an integral component of household consumption in Gondal, with all respondents being regular users and a majority purchasing them on a monthly basis. Consumer preferences are shaped primarily by taste, quality, and price, while supermarkets and retailers serve as the dominant purchase channels. Retailers and social media emerged as significant influencers in shaping buying behaviour, underscoring the importance of both interpersonal and digital interactions in the decision-making process. At the same time, consumers expressed notable concerns regarding product quality assurance, the presence of preservatives, higher costs relative to loose spices, and environmental issues arising from non-biodegradable packaging. These insights reveal that while demand for packaged spices remains strong, addressing health, authenticity, and sustainability concerns is crucial for enhancing consumer trust and long-term brand loyalty in this market.

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