# TRENDS AND DETERMINANTS OF DURABLE GOODS PURCHASE IN KERALA: A BEHAVIOURAL PERSPECTIVE

BY

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## Abstract

*The exploration of consumer behaviour, although widely recognised as a formal discipline in recent decades, has its conceptual origins in classical economic thought, notably in Adam Smith's The Wealth of Nations (1776). It involves examining the choices individuals and households make regarding the use of their limited resources, such as time, money, and effort, for purchasing and using goods and services. This area of study seeks to understand not only what consumers buy but also the reasons, timing, location, method, and frequency of their purchases. Consumer behaviour is a multidisciplinary field, integrating knowledge from psychology, sociology, anthropology, economics, and social psychology to better comprehend decision-making processes. Businesses increasingly rely on insights from consumer behaviour to divide markets into segments, develop targeted strategies, and evaluate marketing effectiveness. The expansion of this field has been influenced by factors such as rapid technological advancements, shorter product life cycles, a high rate of product failure, increasing consumer awareness, and the growing role of non-profit and service sectors in adopting marketing practices. Moreover, the rise of digital tools and data analytics has further enriched behavioural research. This study focuses on understanding the consumer behaviour associated with durable goods in Kerala, aiming to reveal regional patterns, preferences, and the socio-economic variables that influence purchasing decisions. The research findings are expected to offer valuable contributions for both academic analysis and practical marketing applications.*

*Keywords: consumer behaviour, durable goods, purchase decisions, market segmentation, socio-economic factors, consumer preferences*

## Introduction

The Indian consumer durables industry is typically categorised into two broad segments: consumer electronics, which includes products such as televisions, set-top boxes, and audio systems, and home appliances or white goods, such as refrigerators, washing machines, air conditioners, microwave ovens, and vacuum cleaners. In recent years, the consumer electronics sector in India has shown consistent double-digit growth, driven by factors such as increasing product awareness, competitive pricing, product innovation, and rising disposable incomes (CEAMA, 2014). Urban markets have witnessed a decreasing replacement cycle for consumer durable goods, contributing to sustained demand. Meanwhile, rural markets are emerging as significant demand hubs due to relatively low penetration levels and growing usage of consumer appliances. The Indian consumer electronics landscape is marked by rapid technological evolution, frequent product launches, volatile pricing,

and intense market competition. The demand for electric kitchen appliances is steadily rising due to a combination of factors: improved living standards, a growing middle-class population, and an increase in nuclear families. The growing participation of women in the workforce, rising income levels, and the widespread availability of appliances in modern retail outlets, including supermarkets, convenience stores, and hypermarkets, have further bolstered the market. Additionally, the convenience of online shopping platforms has significantly contributed to the increase in sales of electric kitchen appliances. It is projected that by 2025, India will rank among the top five consumer durables markets globally.

Home appliances such as washing machines have increasingly become essential household items due to rising living standards. Urbanisation, shifting consumer lifestyles, and increased purchasing power have fuelled the growth of this market, which was previously constrained by high costs. Globally, the washing machine market is projected to reach USD 42.16 billion by 2025 (Research and Markets, 2016). The growing preference for personalised and innovative products is also leading to substantial investment in research and development within the industry.

## Revenue Trends in the Consumer Durables Sector

- In 2015, the revenue generated by India's consumer durables industry stood at approximately US$ 9.7 billion, which rose to US$ 12.5 billion in the financial year 2015–16.

- The market is projected to expand at a Compound Annual Growth Rate (CAGR) of 13% between FY2005 and FY2020.

- Urban consumers account for nearly two-thirds of the industry's total revenue, with the remaining one-third contributed by the rural population.

## Statement of the Problem

The consumer durables market in India, including Kerala, is experiencing rapid growth alongside evolving and diverse consumer preferences. Understanding consumer behaviour, especially in relation to demographic influences and the stages of the purchase process, is critical for marketers aiming to design effective strategies. While consumers may exhibit interest in a product, various psychological, social, and situational factors can affect their actual buying decisions. This study seeks to examine the key factors influencing consumer behaviour towards durable goods in Kerala, focusing on pre-purchase, purchase, and post-purchase stages, with a comparative view of electronic goods and white goods.

## Objectives of the Study

1. To examine the influence of demographic factors on consumer

behaviour towards durable goods in Kerala.

2. To analyse consumer behaviour across the purchase cycle, covering pre-purchase, purchase, and post-purchase stages.

3. To understand the key factors shaping consumer decision-making in the context of durable goods.

## Hypothesis

1. Cultural, social, personal, economic, and psychological factors have no significant effect on consumer behaviour toward durable goods.

2. Pre-purchase and post-purchase behaviours have no significant effect on the purchase decision of consumers with regard to durable goods.

## Research Methodology

The study adopts a combination of random and non-probability sampling techniques. While random sampling was employed to select specific wards and panchayat for data collection, the selection of individual households within those areas was carried out using non-probability sampling. The primary unit of analysis for the study is a household that uses consumer durable goods. The sampling frame comprises the total number of households in Kerala that own or use durable goods.

## Sample size

The sample size for the study was determined through power analysis based on a pilot survey, which indicated that a minimum of 320 respondents would be adequate (MacCallum, Browne & Sugawara, 1996). To enhance reliability, a total of 624 household consumers of durable goods were selected from three districts in Kerala, Thiruvananthapuram, Ernakulam, and Kozhikode, representing the southern, central, and northern regions of the state, respectively. These districts were chosen due to their high concentration of households and the presence of urban and rural administrative divisions.

### Table 1. Districts and Total Number of Households in Kerala (Zone-wise)

| District (Zone-wise) | Male Head (in Lakhs) | Female Head (in Lakhs) | Total (in Lakhs) |
|---|---|---|---|
| Thiruvananthapuram | 6.31 | 2.05 | 8.36 |
| Kollam | 4.95 | 1.74 | 6.69 |
| Pathanamthitta | 2.41 | 0.81 | 3.22 |
| Alappuzha | 4.06 | 1.29 | 5.35 |
| Kottayam | 4.13 | 0.73 | 4.86 |
| **Total – South Zone** | 21.86 | 6.62 | 28.48 |

| Idukki | 2.43 | 0.35 | 2.78 |
|---|---|---|---|
| Ernakulam | 6.89 | 1.23 | 8.12 |
| Thrissur | 5.52 | 2.06 | 7.58 |
| Palakkad | 4.64 | 1.73 | 6.37 |
| Malappuram | 5.36 | 2.57 | 7.93 |
| **Total – Central Zone** | 24.84 | 7.94 | 32.78 |
| Kozhikode | 4.92 | 2.04 | 6.96 |
| Wayanad | 1.52 | 0.38 | 1.90 |
| Kannur | 3.56 | 1.98 | 5.54 |
| Kasaragod | 1.88 | 0.85 | 2.73 |
| **Total – North Zone** | 11.88 | 5.25 | 17.13 |
| Grand Total (All Zones) | 58.58 | 19.81 | 78.39 |

*Source: Office of the Registrar General and Census Commissioner, India, Ministry of Home affairs (2011 Census).*

**Table 2. Rural and Urban Household Distribution in Kerala**

| Area | Male (in Lakhs) | Female (in Lakhs) | Total (in Lakhs) |
|---|---|---|---|
| Rural | 31.26 | 10.16 | 41.42 |
| Urban | 27.32 | 9.65 | 36.97 |
| Total | 58.58 | 19.81 | 78.39 |

*Source: Office of the Registrar General and Census Commissioner, India, Ministry of Home affairs (2011 Census).*

A total of 624 questionnaires were distributed across three districts of Kerala, Thiruvananthapuram, Ernakulam, and Kozhikode, in proportion to the number of households in each zone. After removing 59 incomplete responses, 565 valid samples were considered for analysis. In Thiruvananthapuram, 193 responses were analysed, with samples drawn from the Corporation, Municipality, and Grama Panchayat areas. Similarly, Ernakulam yielded 234 valid responses, also covering all three administrative levels. From Kozhikode, 138 complete responses were collected. The sampling process involved simple random sampling for selecting wards and administrative units, while households were chosen using non-probability sampling methods.

**Table 3. Number of Households Selected for the Study**

| Category | Tvm | Ekm | Kzkd | Total |
|---|---|---|---|---|
| Corporations | 75 | 77 | 66 | 218 |
| Municipalities | 24 | 54 | 24 | 102 |
| Grama Panchayat | 126 | 126 | 52 | 304 |
| **Total** | **225** | **257** | **142** | **624** |

## Results

The study analysed the general profile and influencing factors of consumer behaviour for durable goods across three zones in Kerala, South, Central, and North. Data from 565 valid respondents showed that female consumers (66.4%) dominate durable goods purchase decisions, reflecting their rising role in household buying. The majority of respondents were aged between 40–50 years (40.5%), married (93.6%), and belonged to nuclear families (74%) with a typical family size of 4 to 6 members (71.3%). Most were salaried individuals (62.3%) with postgraduate education (38.6%). Ownership of durable goods was high 96.3% for white goods, with over 50% using them for up to 10 years, indicating a replacement cycle around the decade mark.

The analysis using Structural Equation Modelling (SEM) and Confirmatory Factor Analysis (CFA) identified personal, psychological, and social factors as the most significant influences on consumer behaviour, while cultural and economic factors showed less impact. ANOVA and Z-tests revealed significant differences in consumer behaviour based on age, span of marital life, and qualification, especially for electronic goods. Notably, consumers aged below 20 showed significantly different purchasing attitudes than older age groups. For white goods, significant variations were noted across age and marital span, with a strong influence from personal and psychological motivators.

**Table 4. Gender and Zone-wise Distribution of Respondents**

| Variable | Category | Frequency | Percentage (%) |
|---|---|---|---|
| Gender | Male | 190 | 33.6% |
| | Female | 375 | 66.4% |
| Zone | South | 193 | 34.2% |
| | Central | 234 | 41.4% |
| | North | 138 | 24.4% |

**Table 5. Ranking of Significant Factors Influencing Consumer Behaviour**

| Factor | Regression Coefficient (Electronic Goods) | Regression Coefficient (White Goods) | Rank |
|---|---|---|---|
| Personal Factors | 0.681 | 0.599 | 1 |
| Psychological Factors | 0.474 | 0.497 | 2 |
| Social Factors | 0.436 | 0.468 | 3 |
| Cultural Factors | 0.143 | 0.121 | Not Significant |
| Economic Factors | 0.335 | 0.321 | Not Significant |

**Purchase Behaviour of Consumers in Kerala**

The study on pre-purchase behaviour of consumers toward durable goods in Kerala reveals that both positive motivators and negative deterrents strongly influence purchase decisions, with distinct differences observed between electronic goods and white goods. On the one hand, several deterrents were found to hinder purchases. For electronic goods, lack of access, unawareness of benefits, and lack of trust were the major barriers. For white goods, uncertainty of fulfilment, no value for money, and confusing alternatives were key concerns. Demographic variables such as age, income, marital span, and education level were found to significantly influence pre-purchase attitudes and behaviours. The study confirms that pre-purchase decision-making is multifaceted, combining personal motives, social influences, and information-driven evaluation processes.

**Table 6. Key Factors Influencing Pre-Purchase Behaviour (Motivators and Deterrents)**

| Phase | Factor | Category | Regression Coefficient | Rank |
|---|---|---|---|---|
| **Motivators** | Brand Recognition | Electronic Goods | 0.762 | 1 |
| | Special Offers | Electronic Goods | 0.594 | 2 |
| | Love for Shopping | Electronic Goods | 0.528 | 3 |
| | Advertisements | White Goods | 0.849 | 1 |
| | Internet | White Goods | 0.792 | 2 |
| | Comfort | White Goods | 0.483 | 3 |
| **Deterrents** | No Access | Electronic Goods | 0.815 | 1 |
| | Uncertainty of Fulfilment | White Goods | 0.687 | 2 |
| | Unawareness of Benefits | Electronic Goods | 0.678 | 3 |
| | No Value for Money | White Goods | 0.595 | 4 |
| | Lack of Trust | Electronic Goods | 0.553 | 5 |

**Table 7. Post-Purchase Satisfaction Drivers and Behavioural Responses**

| Segment | Factor / Outcome | Category / Influence Source | Metric / Strength | Rank / Interpretation |
|---|---|---|---|---|
| **Satisfaction Drivers** | Perceived Quality | Electronic Goods | Regression: 0.712 | 1 – Most significant for electronics |
| | Value for Money | Electronic Goods | Regression: 0.648 | 2 |
| | Brand Performance | Electronic Goods | Regression: 0.582 | 3 |
| | After-Sales Service | White Goods | Regression: 0.723 | 1 – Most significant for white goods |
| | Durability | White Goods | Regression: 0.695 | 2 |
| | Delivery Experience | White Goods | Regression: 0.584 | 3 |
| **Behavioural Outcomes** | Brand Loyalty | Post-Purchase Satisfaction | Correlation: r = 0.79 | Strong – Encourages repeat purchases |
| | Word-of-Mouth Promotion | Perceived Value | Correlation: r = 0.65 | Moderate – Leads to product referrals |
| | Future Purchase Intent | After-Sales Experience | Correlation: r = 0.71 | Strong – Boosts brand preference |
| | Brand Switching | Post-Purchase Dissonance | Correlation: r = −0.62 | Moderate – Negative experience triggers switching |

**Findings**

1. Demographic factors significantly influence consumer behaviour, as variables like age, income, and education shape preferences and purchasing patterns.

2. Consumer behaviour differs between electronic goods and white goods, with distinct motivations and decision-making processes observed for each category.

3. Personal and psychological factors are the strongest drivers, as consumers tend to prioritise comfort, lifestyle fit, and emotional satisfaction over other considerations.

4. Post-purchase experience plays a key role in shaping brand loyalty, where satisfaction leads to repeat purchases and dissatisfaction increases brand switching.

5. Pre-purchase barriers reduce purchase intent, with limited product awareness, trust issues, and accessibility acting as major deterrents.

6. Information sources heavily influence buying decisions, as advertisements, digital platforms, and peer recommendations guide consumer choices.

## Conclusion

The study explores the evolving consumer behaviour in Kerala's durable goods sector, shaped by rising incomes, changing lifestyles, and increasing awareness. By analysing behavioural patterns across the pre-purchase, purchase, and post-purchase stages for both electronic and white goods, it reveals that personal, psychological, and social factors have a stronger influence on consumer decisions than economic or cultural aspects. While electronic goods buyers value brand image and special offers, white goods consumers prioritise advertisements, comfort, and after-sales support. Deterrents such as lack of access, low awareness, and uncertainty affect purchase intentions, whereas post-purchase satisfaction is driven by product performance and service quality, influencing loyalty and repeat purchases. The study also finds that demographic traits like age, education, and income significantly segment consumer behaviour, highlighting the need for marketers to adopt product and region-specific strategies to effectively engage distinct consumer groups.

## Suggestions

1. Marketing strategies should be customised to suit specific demographic segments such as age, income, and education.

2. Strengthening after-sales service can significantly improve customer satisfaction and encourage repeat purchases.

3. Efforts must be made to improve product accessibility and consumer awareness, especially in rural areas.

4. Both digital platforms and traditional media should be effectively utilised to influence consumer decisions.

5. Brands should focus on delivering value and emotional appeal to enhance consumer trust and loyalty.

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