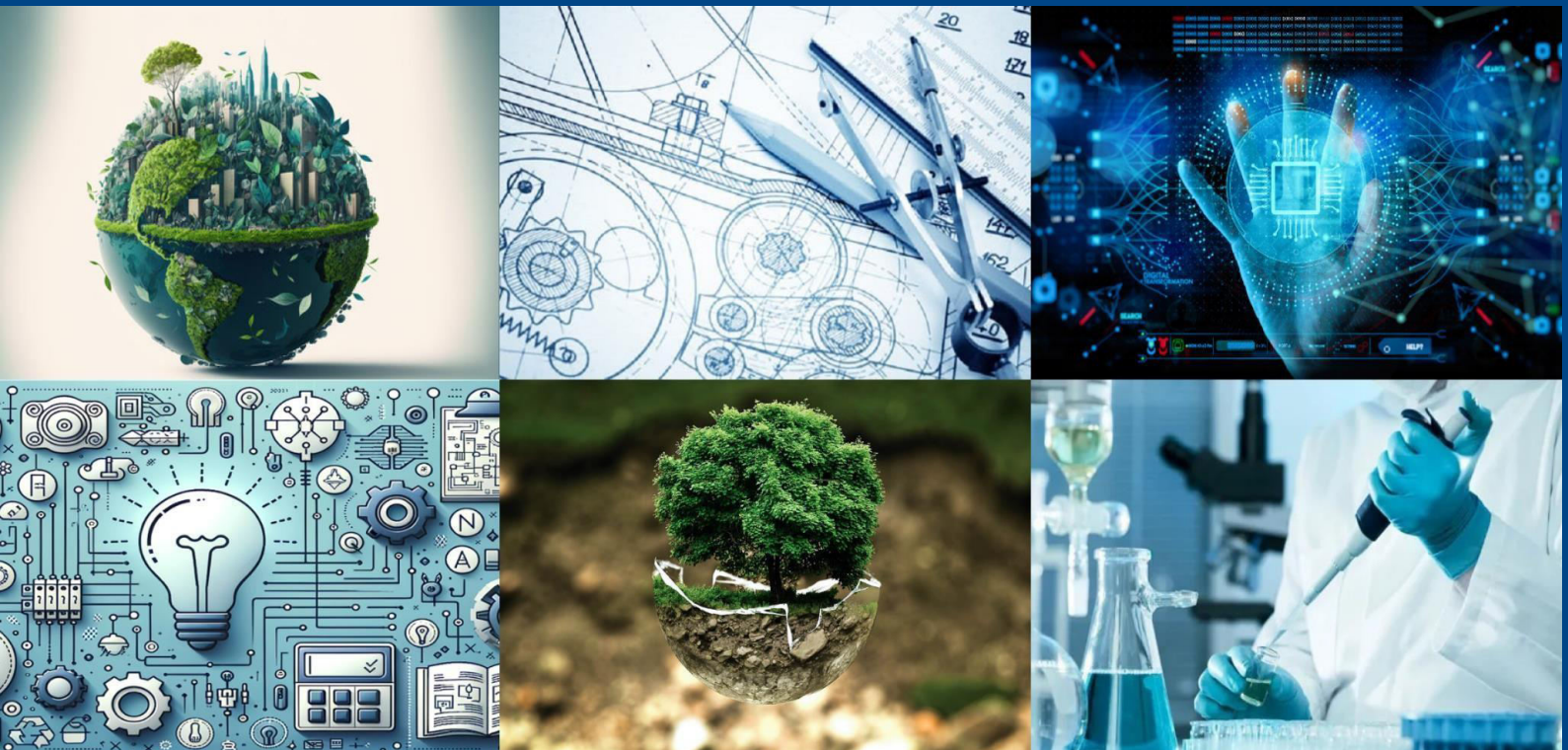




International Journal of Multidisciplinary Research in Science, Engineering and Technology

(A Monthly, Peer Reviewed, Refereed, Scholarly Indexed, Open Access Journal)



Impact Factor: 8.206

Volume 8, Issue 9, September 2025



International Journal of Multidisciplinary Research in Science, Engineering and Technology (IJMRSET)

(A Monthly, Peer Reviewed, Refereed, Scholarly Indexed, Open Access Journal)

Customer Preference Analysis of Mahalinga Industrial Co-Operative Tea Factory, Ooty

Dr. Vennila Gopal, R. Akshaya

Associate Professor (Department of Commerce), Dr. N.G.P Arts and Science College, Coimbatore, India

Student of M.Com (Department of Commerce), Dr. N.G.P Arts and Science College, Coimbatore, India

ABSTRACT: The Mahalinga Industrial Co-Operative Tea Factory Limited, established in March 1965 and beginning production in May 1967, functions as a cooperative micro-enterprise processing and blending tea—including instant tea. Tea drinkers in Tamil Nadu exhibit complex preferences: although Nilgiri and Ooty teas boast distinctive floral, earthy, and smooth profiles (positioned between Darjeeling and Assam in body and aroma), much of their high-grade produce is exported or sold in bulk, with lower-grade CTC dusts dominating the domestic market. Consequently, while local consumers appreciate direct-from-factory loose leaf quality when available, mass consumption patterns favor branded CTC powders due to affordability, familiarity, and ease of use.

KEYWORDS: Mahalinga Industrial Co-Operative Tea Factory, Ooty, Nilgiri tea, customer preferences, direct-from-factory tea preferences, direct-from-factory tea.

I. INTRODUCTION

India is a major Tea producing country in the world, the most popular drink in the world after water, is cultivated in over 36 countries in the world. India is the second largest producer of tea. The tea industry occupies a significant position in the history of the development of Indian economy in terms of its contribution in exports, income and employment. Tea is the country's primary beverage with almost 85% of total households in the country contributing tea. The tea sector of India serves as major livelihood opportunities for its countrymen; therefore, the role of tea industry is significant. India is one of the largest tea producers in the world, although over 70 percent of its tea is consumed within India itself.

A number of renowned teas, such as Assam and Darjeeling, also grow exclusively in India. The Indian tea industry has grown to own many global tea brands and has evolved into one of the most technologically equipped tea industries in the world. Tea production, certification, exportation, and all other facets of the tea trade in India is controlled by the tea board of India. As of 2013 the consumption of green tea in India was growing by over 50% a year.

1.1 STATEMENT OF THE PROBLEM

Mahalinga Industrial Cooperative Tea Factory faces challenges in understanding and aligning its product offerings with evolving customer preferences in a highly competitive tea market. Despite the factory's long-standing reputation, there is limited insight into customer expectations regarding taste, quality, packaging, and pricing. This lack of understanding hinders the factory's ability to adapt to changing consumer behavior, retain market share, and expand its customer base. Moreover, the absence of a structured approach to analyzing customer preferences creates a gap in identifying potential product innovations and enhancing customer satisfaction. Addressing this issue is critical for improving customer loyalty, optimizing product offerings, and maintaining the factory's competitive edge in the tea industry.

1.2 OBJECTIVES OF THE STUDY

1. To find the socio-economic background of the selected respondents
2. To assess the Customer preference of Mahalinga industrial cooperative factory, Ooty.
3. To analyse the consumer perception of the tea.

1.3 SCOPE OF THE STUDY

The scope of this study focuses on analyzing customer preferences for tea products manufactured by Mahalinga Industrial Cooperative Tea Factory. The study will cover different demographic segments such as age, gender, income



International Journal of Multidisciplinary Research in Science, Engineering and Technology (IJMRSET)

(A Monthly, Peer Reviewed, Refereed, Scholarly Indexed, Open Access Journal)

level, and occupation to identify key target markets. Additionally, it will explore consumer purchasing behavior, including frequency of tea consumption, brand loyalty, and switching patterns. The research will also assess the effectiveness of existing marketing and distribution strategies, identifying preferred sales channels such as retail stores, supermarkets, online platforms, and direct factory sales.

1.4 LIMITATIONS OF THE STUDY

1. The duration of the study is too short to make an in-depth study on the chosen topic.
2. The opinion of the respondents may be subjective in nature.
3. Due to time constraints the sample has been limited to 150 respondents.
4. The research area is confined to Nilgiri district only. So, it may not be universally applicable.

II. REVIEW OF PREVIOUS STUDIES

Akshaya K, Ashok KR, Malarkodi M and Vasanthi (2021) “A study on purchase behaviour of tea among the consumers in Nilgiris district” This paper is to examine the variables affecting tea purchases in the Nilgiris district. To find out the major factors influencing the customers purchasing behaviour of tea in Nilgiris district To determine the factors impacting tea consumers' purchasing decisions, factor analysis was performed on the data gathered from 120 respondents. The survey was conducted from the residents of rural and urban parts of the Nilgiris district and was designed to be a descriptive research to know the factors that affect the decision making of tea purchase.

Mohan and Sara (2018) conducted a comparative analysis of the tea export value chains in Sri Lanka, Nepal, and Kenya, aimed at analyzing the policy influences on up gradation of tea value chains. The study found that Kenya, emphasized on productivity and high-quality bulk export, but Sri Lanka encouraged competitiveness in value added packaged products.

Kumareswaran Thangaraj, V. K. D. K. A. S. (2018) This study delves into the dynamics of tea export in India, analyzing the factors that have influenced India's position in the global tea market. The paper evaluates export trends, major export destinations, the role of Indian tea in the international market, and the challenges faced by the Indian tea industry in maintaining its competitive edge.

Talukdar, U., & Hazarika, C. (2017) This research explores India's production and export of value-added tea and assesses its global competitiveness. The paper examines how processed and premium tea products such as flavored, organic, herbal, and specialty teas perform in the international market compared to bulk tea exports. The study emphasizes the importance of innovation and branding in improving India's standing in the global tea industry.

III. RESEARCH METHODOLOGY

Research Design - Descriptive research design.

Source of Data - Primary data & Secondary data.

Sampling Technique – Convenient sampling technique.

Sampling Size - 120 respondents.

Area of the Study - Tea factory, Ooty.

Tools for Analysis

The research paper involved certain tools like

- Simple percentage analysis.
- Chi-square.
- Correlation analysis.
- Rank analysis.
- Weighted average method.



International Journal of Multidisciplinary Research in Science, Engineering and Technology (IJMRSET)

(A Monthly, Peer Reviewed, Refereed, Scholarly Indexed, Open Access Journal)

IV. DATA ANALYSIS & INTERPRETATION

4.1 SIMPLE PERCENTAGE

Simple percentage analysis is one of the basic statistical tools which is widely used in the analysis and interpretation of primary data. It deals with the number of respondents response to a particular question in percentage arrived from the total population selected for the study.

The simple percentage can be calculated by using the formula,

$$\text{Simple percentage} = \frac{\text{Actual respondents}}{\text{Total number of respondents}} \times 100$$

TABLE 4.1: SOCIO-ECONOMIC BACKGROUND OF THE RESPONDENTS

Socio-Economic Variables			%	Socio-Economic Variables			%
Gender	Male		38.8	Age (in years)	Below 20		14.04
	Female		61.2		20-30		27.27
Occupation	Public sector		9.09		30-40		9.91
	Private employee		24.79		Above 40		5.7
	Self employed		19	Marital status	Married		68.8
	Dependent		9.09		Unmarried		31.4
Educational qualification	Secondary		11.57	Monthly Income (in Rs.)	Below 30000		21.48
	Higher secondary		16.52		30000 to 45000		10.74
	Under graduate		46.28		45000 to 60000		15.70
	Post graduate		33.88		85000 above		32.23
Designation	Manager		65.28	Background of the respondents	Rural		66.9
	Business person		15.70		Urban		30.6
	Accountant		9.91		Tribal		2.5
	Healthcare		3.3	Community	Forward Community		7.43
Religion	Hindu		92.6		Scheduled Caste		6.61
	Muslim		1.7		Scheduled Tribe		15.7
	Christian		5.8				

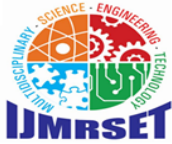
Source: Primary data, 2025

Findings revealed that about 61.2% of respondents were Female, 27% were between the age of 20-30, 24.79% worked as Private employee, 68.8% were married, 46.28% have completed under graduation, 32.23% earned Rs.85,000 above , 66.9% were from rural area, 65.28% worked as manager, 15.7% belonged to Scheduled Tribe Community and 92.6% of the respondents followed Hinduism.

4.2 CHI- SQUARE TEST

A chi- square test, also written as χ^2 test is any test statistical hypothesis test where the sampling distribution of the test statistic is squared distribution when the null hypothesis is true, without other qualification, chi- square test is often used as short for Pearson's chi-square test.

The chi- square test is used to determine whether is a significant relationship between the expected frequencies and the observed frequencies is one or more categories.



International Journal of Multidisciplinary Research in Science, Engineering and Technology (IJMRSET)

(A Monthly, Peer Reviewed, Refereed, Scholarly Indexed, Open Access Journal)

TABLE 4.2
**ASSOCIATION BETWEEN MONTHLY FAMILY INCOME AND BUDGET CONSCIOUS TOWARDS
PURCHASE OF TEA: CHI-SQUARE**

H_0 = There is no association between Monthly family income and opinion on Budget conscious

H_1 = There is a association between Monthly family income and opinion on Budget conscious

VARIABLES	CHI-SQUARE VALUE	DEGEERS FREEDOM	OF P- VALUE	INFERENCE
Income & Budget conscious	24.246 ^a	16	0.83	ACCEPCTED

Source; Calculated Data,2025

Table 4.2 shows that chi-square test was conducted to examine the relationship between income level and budget consciousness. The chi-square value of 24.246 with 16 degrees of freedom resulted in a p-value of 0.83. Since the p-value is significantly higher than the standard threshold of 0.05, we fail to reject the null hypothesis. This indicates that there is no statistically significant association between income level and budget consciousness

4.3 RANK ANALYSIS

Rank analysis is a statistical method used to compare and evaluate data by ranking values instead of using their absolute numbers. It helps in reducing the impact of outliers and it is widely used in fields like economics, psychology and decision-making process.

TABLE 4.3
FACTORS THAT INFLUENCE THE PURCHASE OF MAHALINGA TEA: AVERAGE SCORE RANKING

INFLUENCE FACTOR	TOTAL SCORE	MEAN SCORE	RANK
Taste and flavour	442	3.65	1
Price	465	3.84	3
Quality	486	4.02	6
Colour	462	3.82	2
Brand Reputation	481	3.97	4
Packaging	484	4.00	5
Health benefits	484	4.00	5
Availability	502	4.15	8
To explore new brand	498	4.12	7
Media promotions	495	4.95	9

Source: Primary Data, 2025

Table 4.3 shows that availability '4.15', exploring new brands '4.12', and quality '4.02' are the top factors influencing consumer choices. Health benefits '4.00' and packaging '4.00' also play a significant role. Brand reputation '3.97' and price '3.84' have moderate influence, while taste and flavor '3.65' ranks first but has a lower mean score. Media promotions rank the lowest, indicating they have the least impact on purchasing decisions. Overall, consumers prioritize accessibility, quality, and trying new products over marketing efforts.



International Journal of Multidisciplinary Research in Science, Engineering and Technology (IJMRSET)

(A Monthly, Peer Reviewed, Refereed, Scholarly Indexed, Open Access Journal)

4.4 WEIGHTED AVERAGE METHOD

A weighted average is a calculation that takes into account the varying degree of importance of the numbers in a data set. In calculating a weighted average, each number in the data set is multiplied by predetermined weight before the final calculation.

TABLE 4.4
OPINION ON MAHALINGA TEA: WEIGHTED AVERAGE METHOD

Statement	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree	Total	Mean
Best quality	53 265	30 120	21 63	14 42	3 3	121 493	53 4.07
Reasonable price	23 115	56 224	26 78	13 39	3 3	121 459	23 3.79
Good aroma and taste	36 180	55 220	6 18	23 69	1 1	121 488	36 4.03
Good colour	17 85	71 284	22 66	4 12	7 7	121 454	17 3.75
Good packaging	31 155	56 224	21 63	11 33	2 2	121 477	31 3.94
Good availability	17 85	63 252	22 66	12 36	7 7	121 446	17 3.68
More varieties	30 150	48 192	31 93	9 27	3 3	121 465	30 3.84

Source: Primary Data, 2025

Table 4.4 shows that consumer perceptions of various attributes related to tea quality and value. Best quality 'Mean: 4.07' and good aroma and taste 'Mean: 4.03' received the highest ratings, indicating strong consumer satisfaction in these areas. Good packaging 'Mean: 3.94' and more varieties 'Mean: 3.84' were also well-rated, suggesting that packaging and product diversity are important factors for consumers. Reasonable pricing 'Mean: 3.79' and good color 'Mean: 3.75' show moderate satisfaction, indicating that while pricing is a consideration, it may not be the primary concern. Good availability 'Mean: 3.68' received the lowest score, suggesting that accessibility and distribution may need improvement. Overall, the findings highlight that consumers prioritize quality, taste, and packaging, but businesses should also focus on enhancing availability and variety while maintaining reasonable pricing.

4.5 CORRELATION

Correlation is a statistical measure that expresses the extent to which two variables are linearly related (meaning them together a constant rate). It's a common tool for describing simple relationships without making a statement about cause and effect.

TABLE 4.5
ASSOCIATION BETWEEN RURAL, URBAN, TRIBAL BACKGROUND AND OPINION ON MAHALINGA TEA: CORRELATION

Variable	B1	B2	B3	B4	B5	B6	B7	B8
B1	1							
B2	-.065	1						
B3	-.135	.085	1					



International Journal of Multidisciplinary Research in Science, Engineering and Technology (IJMRSET)

(A Monthly, Peer Reviewed, Refereed, Scholarly Indexed, Open Access Journal)

B4	-.038	.278**	.306**	1				
B5	-.020	.074	.217*	.200*	1			
B6	.004	.388**	.232*	.642**	.391**	1		
B7	.023	.231*	.198*	.202*	.405**	.221*	1	
B8	-.115	.227*	.207*	.589**	.302**	.532**	.117	1

Source: Primary Data, 2025

* Correlation is significant at the 0.01 level

**Correlation is significant at the 0.05 level

H₀= There is no association between rural,urban,tribal background and opinion on mahalinga tea.

H₁= There is a association between rural,urban,tribal background and opinion on mahalinga tea.

Correlation results reveal that,

There is weak correlation between rural,urban, tribal and best quality.

There is weak correlation between Good colour and opinion on reasonable price.

There is moderate correlation between rural ,urban, tribal background and best quality. There is weak correlation between more varieties and best quality.

There is weak correlation between more varieties and best quality.

There is weak correlation between good colour and good aroma and taste.

There is moderate correlation between good aroma and taste and reasonable price. There is weak correlation between good colour and reasonable price.

There is weak correlation between good packaging and reasonable price. There is weak correlation between good availability and reasonable price.

There is weak correlation between more varieties and reasonable price. There is weak correlation between good colour and good aroma and taste.

There is moderate correlation between good packaging and good aroma and taste. There is weak correlation between good availability and good aroma and taste.

There is moderate correlation between more varieties and good aroma and taste. There is moderate correlation between Good availability and Good colour.

There is moderate correlation between Good availability and Good colour. There is moderate correlation between More varieties and Good colour.

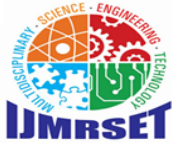
There is weak correlation between Good availability and Good packaging. There is moderate correlation between more varieties and Good packaging. There is weak correlation between More varieties and Good availability.

V. FINDINGS

- Most respondents are young, unmarried, and well-educated, indicating in customer preference of tea.
- Average score ranking Overall consumers prioritize accessibility, quality, and trying new products over marketing efforts.
- Weighted average ranking Overall, the findings highlight that consumers prioritize quality, taste, and packaging, but businesses should also focus on enhancing availability and variety while maintaining reasonable pricing.
- Chi-Square reveals that there is assooiation between monthly family income and budget conscious towards purchase of tea.
- Correlation reveals that there is assooiation between background of the respondents rural,urban,trible and opinion on mahalinga tea.

VI. SUGGESTIONS

- Expand brand visibility through social media, influencer marketing, and online campaigns.
- Ensure easy availability of products in local, national, and online markets to improve accessibility.
- Conduct regular surveys, focus groups, and direct interactions to understand evolving customer needs.



International Journal of Multidisciplinary Research in Science, Engineering and Technology (IJMRSET)

(A Monthly, Peer Reviewed, Refereed, Scholarly Indexed, Open Access Journal)

➤ Study competitors' pricing, branding, and marketing strategies to identify areas for improvement and differentiation.

VII. CONCLUSION

The study highlights the importance of understanding consumer socio-economic backgrounds, preferences, and expectations in shaping the success of Mahalinga Industrial Cooperative Tea Factory, Ooty. The lack of structured customer insights limits the factory's ability to align its offerings with evolving market demands in a highly competitive tea industry. Addressing this issue requires a data-driven approach to product development, pricing, branding, and marketing strategies to enhance customer satisfaction and loyalty. By implementing targeted improvements in taste, quality, packaging, and promotional efforts, the factory can strengthen its market position, retain existing customers, and expand its consumer base. Adapting to changing consumer behaviors and investing in product innovation will be essential for the factory's long-term growth and sustainability.

REFERENCES

1. Akshaya, K., Ashok, K. R., Malarkodi, M., & Vasanthi, R. (2021). A Study on Purchase Behaviour of Tea Among the Consumers in Nilgiris District. *The Pharma Innovation Journal*, 10(10s), 282-285.
2. Sembakalakshmi, S. J., & Jayan, R. S. R. (2023). A Study on Consumer Satisfaction Towards Green Tea in Coimbatore City. *International Journal of Novel Research and Development*, 8(4), f163-f168.
3. Mohan and Sara (2018), "Value Chain Upgrading for Competitiveness and Sustainability: A Comparative Study of Tea Value Chains in Kenya, Sri Lanka and Nepal", (Geneva: International Centre for Trade and Sustainable Development).
4. Kumareswaran Thangaraj, V. K. D. K. A. S. (2018). Dynamics of Tea Export in India. *International Journal of Current Microbiology and Applied Sciences*, 7(08), 4143–4146. <https://doi.org/10.20546/ijcmas.2018.708.432>
5. Talukdar, U., & Hazarika, C. (2017). Production and Export of Value-added tea in India and its Global Competitiveness. *Economic Affairs*, 62(4), 705. <https://doi.org/10.5958/0976-4666.2017.00086.9>
6. Lei, Lei, 2017. "Effects of standards on tea exports from developing countries: comparison of China and Sri Lanka," IDE Discussion Papers 642, Institute of Developing Economies, Japan External Trade Organization (JETRO).
7. Hemaratne, Sangeeta Khorana, Thanos Verousis & Nicholas Perdakis (2010), Perceptions of Export Problems in EU-India Trade: Evidence from Small and Medium Firms.

WEBSITES

<https://www.ijnrd.org/papers/IJNRD2304593.pdf>

<https://eprajournals.com/IJES/article/8572/download>



INTERNATIONAL
STANDARD
SERIAL
NUMBER
INDIA



INTERNATIONAL JOURNAL OF MULTIDISCIPLINARY RESEARCH IN SCIENCE, ENGINEERING AND TECHNOLOGY

| Mobile No: +91-6381907438 | Whatsapp: +91-6381907438 | ijmrset@gmail.com |

www.ijmrset.com