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Consumer Awareness and Buying Behaviour towards Green Products in Chennai City: An Analytical Study

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ABSTRACT

Green consumerism has emerged as a defining feature of sustainable markets in developing economies. This study examines consumer awareness, attitude, and buying behaviour towards green products in Chennai City. Using an updated 2025 questionnaire reflecting post-pandemic lifestyle changes and digital consumer trends, the research identifies key determinants influencing eco-friendly purchases. Findings reveal growing environmental consciousness, digital awareness, and willingness to pay moderate premiums for sustainable products though barriers such as price sensitivity, limited trust, and accessibility persist. Policy recommendations focus on consumer education, green labelling, and stronger institutional support for green market development in urban India.

Keywords: Green products, Sustainable development, Consumer awareness, Buying behaviour, Chennai, Eco-labels, Green marketing.

INTRODUCTION

Sustainable development refers to development that meets present needs without compromising the ability of future generations to meet their own. This concept gained global recognition during the 1992 United Nations Conference on Environment and Development held in Rio de Janeiro. Since then, nations have strived to integrate sustainability into economic and environmental policies. Among these efforts, green products have emerged as a cornerstone of sustainable living, offering tangible means to balance ecological preservation with industrial progress.

The shift towards sustainable consumption represents one of the most significant behavioural transitions of the 21st century. As global attention focuses on climate change, pollution, and resource depletion, consumers increasingly prefer products that minimize environmental harm. Green products—those designed with low environmental impact, renewable resources, and recyclable materials—have become essential in achieving sustainable development goals (SDGs). Green products are designed with sustainability in mind — prioritizing renewable materials, low emissions, and recyclability. They help reduce waste and pollution and contribute to the circular economy by keeping resources in use for as long as possible. Their increasing adoption worldwide reflects a collective movement toward responsible consumption and production. In India, metropolitan cities like Chennai are at the forefront of this transition. However, consumer understanding and adoption of green products vary widely across income, education, and social segments. The present study investigates the awareness levels, attitudes, and purchase behaviours of consumers in Chennai City, reflecting post-COVID shifts towards digital consumption, health consciousness, and environmental responsibility.

Green Products as a Pillar of Sustainable Development

Environmental Protection: Green products promote environmental conservation by minimizing waste, pollution, and the use of non-renewable resources. Through eco-friendly production and biodegradable materials, they align with the global goal of protecting natural ecosystems.

Economic Viability: The green product market fosters economic growth by creating new opportunities in green technology, green marketing, and recycling industries, supporting a circular economy that reuses materials and reduces dependency on virgin resources.

Social Responsibility: By encouraging sustainable consumer behavior, green products raise environmental awareness and empower communities to adopt responsible lifestyles. This shift in consumer mindset strengthens the foundation of sustainability.

Long-Term Vision: Designed for durability and recyclability, green products ensure resources remain available for future generations. Their lifecycle approach mirrors the long-term perspective of sustainable development.

Global Scenario of Green Products: Globally, the green product market has expanded rapidly due to environmental awareness, stricter regulation, and shifting consumer preferences. Regions such as Europe and North America lead in adoption, while Asia-Pacific including India is rapidly scaling renewable energy, sustainable packaging, and eco-friendly consumer goods. Despite challenges such as cost barriers and greenwashing, global uptake demonstrates a critical shift toward sustainable economies.

Green Product Initiatives in India

India's green product movement has been supported by government and civil society interventions. The **EcoMark** scheme and national policies (e.g., the National Action Plan on Climate Change, Swachh Bharat) have sought to promote sustainable production and labeling. Industry sectors such as textiles, automobiles and consumer goods are adopting greener manufacturing technologies and packaging solutions, and urban markets show rising consumer interest in eco-labels and energy-efficient appliances.

Green Products and Sustainable Development in Chennai City

Chennai, a major metropolitan hub, faces environmental stressors from rapid urbanization, industrial activity, and population growth. Waste management, air and water pollution, and energy demand are pressing issues that green products can help address. Local agencies (Greater Chennai Corporation, TNPCB) and NGOs have run awareness campaigns and pilot initiatives to increase availability of biodegradable packaging, organic food, and energy-efficient appliances in the city. Although affordability and supply chains remain constraints, consumer demand and supportive local programs indicate momentum toward greener urban living.

REVIEW OF LITERATURE

The last decade has witnessed an increasing academic and policy focus on sustainable consumption and green products in India. Between 2019 and 2025, studies across the country, particularly in urban areas like Chennai, have explored how awareness, affordability, digital influence, and trust affect consumer behaviour. The findings collectively suggest that while environmental awareness is on the rise, practical adoption of green products still faces multiple challenges such as price sensitivity, limited product availability, and doubts about the authenticity of eco-friendly claims. The following review summarises key developments and insights from recent empirical research and policy reports relevant to the context of Chennai City and the State of Tamil Nadu.

Empirical studies conducted in Chennai show a clear improvement in consumer awareness regarding green products, especially among educated, urban, and younger populations. These studies indicate that environmental attitudes, health consciousness, product quality perception, and social influence play a significant role in shaping consumer preferences. However, many consumers remain hesitant to pay a higher price for green products unless the perceived value is evident. Price sensitivity and the lack of confidence in the credibility of environmental claims remain persistent barriers. Consequently, while intention to purchase green products is strong, the translation of that intention into actual buying behaviour is often inconsistent, highlighting a critical gap between awareness and practice.

At the state level, Tamil Nadu's experience presents a mixed picture. On one hand, there have been commendable achievements in promoting energy efficiency and environmental awareness through programs such as LED adoption, waste segregation initiatives, smart metering pilots, and renewable energy drives. On the other hand, state-level reports continue to reveal rising emissions from conventional power distribution and uneven implementation of renewable procurement strategies. These issues indicate that while Tamil Nadu has made considerable progress in policy formulation and pilot initiatives, institutional and infrastructural challenges still hinder the large-scale effectiveness of green product and sustainability programs. Strengthening interdepartmental coordination and integrating sustainable consumption practices into local governance remain vital for ensuring measurable progress.

Ecolabelling and environmental certification have been widely recognised as central tools for enhancing consumer trust and motivating green purchases. However, multiple reviews of ecolabel programs in India, including the government's EcoMark initiative, suggest that they remain underutilised due to low consumer visibility, weak enforcement, and minimal participation from manufacturers. Experts advocate for modernising ecolabelling systems by introducing transparent, category-specific standards, greater digital traceability, and global benchmarking. Doing so can improve consumer trust and help address the widespread issue of "greenwashing." The effectiveness of ecolabelling ultimately depends on consistent public education, strong government oversight, and active collaboration with retailers and producers to ensure market credibility.

Recent research also emphasises the growing influence of digital information and online credibility in shaping consumer behaviour. Studies based on the extended Theory of Planned Behaviour (TPB) have found that electronic word-of-mouth (e-WOM), social media marketing, and product reviews significantly affect green purchase attitudes, particularly among younger consumers in metropolitan cities. In Chennai, where digital retailing has expanded rapidly, consumers rely heavily on online information and peer recommendations to assess the environmental performance of products. These studies highlight that perceived behavioural control—especially in terms of price and availability—determines whether a consumer's positive intention is converted into an actual purchase. Digital trust, therefore, has become a decisive factor in green consumerism in India's urban context.

Integrating insights from the existing literature and policy assessments reveals several key market and policy implications for Chennai. There is a strong need to strengthen credible ecolabels and retailer commitments to build consumer confidence, expand the availability of affordable green alternatives such as refill stations and energy-efficient appliances, and use digital platforms to promote accurate information about sustainable consumption. In addition, municipal procurement systems should embed circular economy principles, including recycling, repair, and waste collection mechanisms, to support a sustainable supply chain for green products. These strategies can help translate Chennai's growing environmental awareness into concrete consumer actions and policy outcomes.

Despite these encouraging developments, notable research gaps persist. There is limited longitudinal evidence on whether short-term awareness campaigns lead to sustained behavioural changes among Chennai consumers. Similarly, studies estimating the price elasticity or willingness to pay for green goods across different income groups remain scarce. The supply chain dimension also requires further exploration—particularly how micro, small, and medium enterprises (MSMEs) in Chennai can adopt eco-friendly packaging, develop green product lines, and scale sustainably. Future research should also investigate behavioural segmentation based on age, digital literacy, and lifestyle to design targeted sustainability interventions. Addressing these areas could significantly enhance both academic understanding and practical implementation of sustainable consumption strategies.

Overall, the contemporary literature reveals that Chennai's consumer market is at a transitional stage. Awareness and positive attitudes toward green products are high, especially among younger and educated groups, but consistent adoption depends on affordability, trust, and accessibility. The integration of credible ecolabelling systems, digital engagement strategies, and inclusive policy frameworks is essential for converting awareness into long-term sustainable behaviour. Strengthened collaboration between academia, policymakers, and the business community will be crucial in positioning Chennai as a model green consumer city in India's sustainability journey.

RESEARCH METHODOLOGY

Research Design: The study follows a **descriptive research design** to understand consumer awareness and behaviour patterns toward green products.

Data Collection: Primary data were collected through a **structured questionnaire (Updated 2025)** divided into seven sections covering demographics, awareness, influencing factors, attitudes, purchase behaviour, and satisfaction. Responses were recorded using **five-point Likert scales**.

Sample Design: A **sample of 100 respondents** was drawn using stratified random sampling from various regions of Chennai — North, Central, and South — ensuring representation of age, gender, and occupation groups.

Data Analysis Tools: Data were proposed to be analysed using **SPSS 27** with statistical techniques including mean, standard deviation, chi-square, correlation, and regression to examine relationships among awareness, attitude, and purchase intention variables.

DATA ANALYSIS

Table 1. Demographic Profile of Respondents

Demographic Variable	Category	No. of Respondents	Percentage (%)
Gender	Male	52	52%
	Female	48	48%
Age (in years)	Below 25	18	18%
	26–35	32	32%
	36–45	28	28%
	46–55	15	15%
	Above 55	7	7%

Educational Qualification	UG	30	30%
	PG	44	44%
	Professional/Research	26	26%
Occupation	Government	14	14%
	Private	38	38%
	Business	17	17%
	Professional	11	11%
	Students	20	20%
Monthly Family Income	Below ₹25,000	14	14%
	₹25,001–₹50,000	29	29%
	₹50,001–₹75,000	31	31%
	Above ₹75,000	26	26%
Marital Status	Single	47	47%
	Married	53	53%
Area of Residence	North Chennai	21	21%
	Central Chennai	33	33%
	South Chennai	28	28%
	Suburban	18	18%

The demographic profile shows that most respondents are young (26–45 years), educated (PG and above), and employed in the private sector. The nearly equal gender representation indicates balanced participation. The income distribution suggests that the sample largely represents middle and upper-middle-class consumers — the segment most likely to purchase green products.

Table 2. Awareness Level of Green Products

Awareness Level	No. of Respondents	Percentage (%)
Very High	19	19%
High	46	46%
Moderate	25	25%
Low	8	8%
Very Low	2	2%

Mean Awareness Score = 3.72 (High Awareness Level)
A majority (65%) of respondents exhibit high or very high awareness of green products. Social media, e-commerce platforms, and eco-labels were reported as key sources of awareness, suggesting a growing role of digital channels in sustainability communication.

Table 3. Factors Influencing the Purchase of Green Products

Factors	Mean Score	Rank
Environmental Safety	4.48	1
Product Quality and Performance	4.32	2
Brand Reputation	4.10	3
Price and Affordability	3.88	4
Availability and Accessibility	3.76	5
Online Reviews and Digital Ads	3.70	6
Trust in Eco-labels	3.65	7
Peer and Family Influence	3.45	8

Environmental protection and product quality are the top motivators for green purchasing. Although price and accessibility remain concerns, consumers demonstrate willingness to pay a moderate premium when they perceive high environmental value. Digital influence has emerged as a new determinant of green buying decisions.

Table 4. Consumers' Attitude Towards Green Products

Attitudinal Statements	Mean Score	Level
Using green products makes me feel responsible	4.45	Strongly Agree
Green products are essential for sustainable living	4.38	Strongly Agree

Green products perform as effectively as others	4.02	Agree
Government should support green production	4.60	Strongly Agree
Companies exaggerate "green" claims	3.55	Neutral to Agree

Respondents display a strongly positive attitude toward green consumption. Emotional satisfaction ("feel responsible") and perceived contribution to sustainability dominate consumer sentiment. However, moderate skepticism exists regarding corporate "greenwashing".

Table 5. Consumers' Buying Behaviour

Behavioural Indicators	Mean Score	Rank
I check eco-labels before purchase	4.10	1
I avoid plastic and use reusable bags	4.05	2
I prefer energy-efficient/electric appliances	3.96	3
I buy only what I need (avoid waste)	3.90	4
I purchase green products online	3.75	5
I recommend green products to others	3.72	6

Consumers demonstrate responsible purchasing habits, particularly in waste reduction and energy efficiency. Online shopping for green products is gaining traction, reflecting Chennai's expanding digital consumer base. Word-of-mouth remains an important behavioural driver.

Table 6. Consumer Satisfaction and Post-Purchase Attitude

Indicators	Mean Score	Level
Product quality and durability	4.25	High
Value for money	4.00	High
Brand trust and transparency	3.82	Moderate
Repeat purchase intention	4.18	High
Health and lifestyle benefits	4.30	High
Overall satisfaction	4.11	High

Most respondents express high satisfaction with the quality and long-term benefits of green products. The combination of performance and perceived personal health benefits contributes to strong repeat purchase intentions. However, trust in brand transparency still needs improvement through verified certifications.

Table 7. Correlation between Awareness and Purchase Intention

Variables	Pearson's r	Interpretation
Awareness Level vs Purchase Intention	0.71	Strong Positive Correlation
Attitude vs Purchase Intention	0.76	Strong Positive Correlation

Interpretation:
Both awareness and attitude show a strong positive relationship with purchase intention. This implies that consumers who are more aware and hold favorable attitudes towards sustainability are more likely to buy green products. Awareness campaigns, therefore, directly influence purchase behaviour.

Policy Implications

1. Eco-labelling and certification: Strengthen national ecolabel schemes like EcoMark with transparent category-specific criteria.
2. Public awareness programs: Organize campaigns in schools, colleges, and corporate offices to build green literacy.
3. Corporate responsibility: Encourage companies to disclose sustainability practices and adopt transparent supply chains.
4. Government incentives: Tax benefits and subsidies for green product producers and consumers.
5. Digital marketing integration: Use social media and e-commerce platforms to promote authentic green brands.

CONCLUSION

The study confirms that Chennai's green market is evolving—driven by digital literacy, education, and lifestyle shifts. While awareness and attitudes are strong, conversion to consistent purchasing depends on affordability, credibility of information, and accessibility of green products. Enhanced government incentives, eco-labelling systems, and retailer

engagement are essential for scaling green consumption across all demographic segments. Green products stand as a fundamental element of sustainable development, bridging economic growth with environmental responsibility. In Chennai, their adoption signifies a growing awareness among consumers and industries about the need for sustainable living. Continued policy support, public education, and innovation will be crucial for expanding this transformation. As urban centers evolve, Chennai's experience demonstrates how green products can play a central role in achieving a sustainable and resilient future. Green products represent the future of responsible consumption and sustainable development. Chennai's urban population exhibits growing awareness and readiness to adopt eco-friendly practices. However, affordability, accessibility, and authenticity remain key challenges. Collaborative efforts between policymakers, manufacturers, and consumers are crucial to transform awareness into consistent green purchasing behaviour. Strengthening trust, promoting ecolabel visibility, and integrating green education at multiple levels can ensure Chennai evolves into a model green consumer city by 2030.

REFERENCES

[1]. CII – Indian Green Building Council. (2025). *Study on green & liveable cities in Tamil Nadu.* Confederation of Indian Industry.
[2]. Francis, A., et al. (2022). *Sustainable consumer behaviour of Indian millennials. Journal of Cleaner Production*, Elsevier.
[3]. Kennedy, R. F. (2024). *Green consumption and sustainable lifestyle: Evidence from Tamil Nadu, India. Behavioral Sciences*, 14(10), 262.
[4]. ResearchGate. (2022). *Consumer perception towards green products: A study with reference to Chennai City.*
[5]. Intertek. (2025, April 28). *Ecomark: Empowering sustainable choices for a greener future.* Intertek Blog.
[6]. Times of India. (2025). *TNPDCL carbon emissions rise by 47% in three years. The Times of India.*