



THE RISE OF ECO-CONCIOUS CONSUMERS: HOW SUSTAINABILITY SHAPES BUYING BEHAVIOUR OF CUSTOMERS IN SOLAPUR CITY

¹Mr.Madan Mohan Dhavan

¹Assistant Professor

¹Department of Management

¹Sangameshwar College (Autonomous), Solapur, India

Abstract: The increasing awareness of environmental problems are significantly influencing consumer buying behavior, thus giving rise to a new segment of eco-conscious consumers. This research article elaborates how sustainability influence buying patterns across different product categories like electric vehicles (EVs), energy-efficient appliances, organic fertilizers eco-friendly packaging, solar energy solutions, eco-friendly Ganesh idols, bamboo-based goods, reusable household products, organic clothing, and eco-tourism services. A framed survey was taken using Google Forms to understand consumer awareness, perceptions, and willingness to adopt sustainable options in Solapur (Maharashtra, India). The research findings shows that while consumers are worried for health benefits and environmental protection, actual buying decisions are often limited by doubts about eco-label authenticity, lack of availability and high cost. Religious and Cultural practices, such as the use of biodegradable decoration materials, idols during festival season, also demonstrate how sustainability and tradition can depend each other. Moreover, higher awareness and adoption is seen in younger and educated customers for eco-friendly innovations like EVs and renewable energy solutions. The research conclude that accessibility, affordability and trust-building measures are important to increase the adoption of eco-friendly products. The results from this research highlight the urgent need for businesses and policymakers to encourage innovation, promote sustainable practices, and create consumer confidence to achieve long-term environmental well-being.

Keywords: Eco-friendly Products; sustainability; buying behavior; awareness; Solapur; Environmental

1.1 INTRODUCTION:

Concern for the environment has apparently affected Indian customers' purchasing decisions in recent years. A growing shift towards eco-consciousness is seen in the fact that 75% of Indians right now report reconsidering or altering their purchase habits due to sustainability concerns.[1] According to polls, 65.7% of Indian buyers now choose cotton or jute shopping bags instead of plastic ones, indicating less dependence on single-use plastic straws, cups, and bags. The change is not merely theoretical.[2]

Companies and brands are responding accordingly; 52% of Indians now choose eco-friendly packaging that finds a balance between taste, convenience, and health, and 55% prefer snacks without any of preservatives.[3] But according to Mintel data, only 15% of Indian consumers usually recycle or buy eco-friendly products, although the fact that three out of four of them recognize how important it is to protect the environment.[4] This shows how affordability, simplicity and limited availability are the main factors driving the current disconnect between sustainability aim and practice.

1.2 OBJECTIVES OF THE STUDY

- To analyze Solapur customers' perceptions and level of awareness regarding sustainable practices and eco-friendly products.
- To determine whether consumers are willing to pay more for green alternatives to several product categories, such as sustainable packaging, organic fertilizers, electric vehicles, and eco-friendly Ganesh idols.
- To identify the primary barriers (such as cost, limited availability, and mistrust of eco-labels) and motivators (such as health, environmental security, and culture) that influence the adoption of eco-friendly products.
- To examine the ways in which demographic factors—such as age, gender, and occupation—influence environmentally conscious consumer behaviour.
- To provide useful information to companies and decision-makers in order to increase the affordability, accessibility, and legitimacy of sustainable products so they can be embraced more widely.

1.3 REVIEW OF LITERATURE:

The Indian eco-conscious movement includes more than just packaging. Organic insecticides and organic fertilizers have become more popular in agriculture as safer and healthier substitutes for chemical-based solutions. In keeping with local customs, eco-friendly festival practices like using clay-based Ganesh idols and biodegradable decorations are lowering soil and water pollution. India has grown into one of the world's fastest-growing markets for electric vehicles (EVs) in the mobility industry. With the help of government initiatives like FAME-II and the recently announced PM E-Drive program, EV sales have increased significantly, rising from 95,000 units in 2017–18 to over 1.67 million in 2023–24, according to the India Brand Equity Foundation (IBEF).[5] Consumers have shown a greater attraction to renewable energy choices, with solar panel use expanding in rural as well as urban homes.

At the same time, younger individuals and the urban middle class are becoming more interested in eco-friendly lifestyle choices, such as using bamboo products, organic apparel, energy-efficient appliances, and reusable home items. In an effort to reduce their environmental impact while still taking in the both natural and cultural heritage, more and more tourists are choosing eco-tourism. Although these encouraging advancements, obstacles including exorbitant prices, ignorance, and mistrust of greenwashing continue to prevent broad adoption.

All things considered, the Solapur market is experiencing a cultural and economic transformation in which customers increasingly think about sustainability while making decisions. It is expected that the acceptance of eco-friendly products will increase due to a growing youth population, increasing urbanization, and supportive government measures. However, accessible alternatives, clear eco-labeling, and improved facilities are needed to bridge the gap between awareness and actual purchasing behavior. By analyzing how eco-consciousness impacts Indian customer buying choices across a range of product categories, this study seeks to understand these dynamics.

1.3 RESEARCH METHODOLOGY:

The current research used a quantitative survey methodology to examine consumer awareness, perceptions and buying behavior on eco-friendly products in Solapur. The survey method was chosen as suitable since it enables the generation of standardized information among a wide range of individuals within a constrained time, offering a wide perspective of the trends in consumer behavior. Four key categories of sustainable products that have emerged in the recent past in the Indian markets became the central focus of this research eco-friendly Ganesh idols, organic and eco-friendly fertilizers, electric vehicles (EVs), and sustainable packaging solutions. These groupings will be chosen since they are a combination of cultural customs, farming methods, new mobility systems, and day-to-day consumption habits hence giving a comprehensive picture of the role of sustainability in influencing various areas of consumer decision making.

The research tool was a structured questionnaire done using Google Forms. The questionnaire was composed of 26 well framed questions, some of which were open-ended questions and others closed ended questions. Questions were categorized into various thematic segments like demographic information, general awareness, product-based decisions, obstacles and motivations and future perspectives. The respondents would be questioned regarding how well they are aware with green products, whether they would spend a higher price to buy a sustainable product, whether they would buy a sustainable product in reality and how they perceive the issues surrounding the use of green products. To make the survey comprehensive, the survey contained multiple-choice questions, Likert scale questions, and open-ended questions to allow gathering both quantitative and qualitative information. The Likert scale questions were particularly useful in the process of getting the attitude towards issues like trust in eco-claims, impact of social factors, and the way the government policies have contributed to encourage eco-friendly consumption.

The questionnaire was distributed online through email, WhatsApp, and social media applications so that the participants are spread among different age groups, educational levels, and working classes. Considering the study time and resource constraint, a convenience method of sampling was taken. Although this sampling technique cannot guarantee optimal representativeness of the Indian population as a whole, it still offers informative data related to the consumer perceptions since it includes the answers of a more extensive cross-section of those who are, to a greater extent, more knowledgeable about digital communication and green discourse. The collection of the data was conducted in September 2025 and at the end of the implementation period, 250 valid responses were obtained.

After the responses were gathered, they were exported to Microsoft Excel where they were first processed and then analyzed with Python libraries, Pandas and Matplotlib. Descriptive statistical tools have been used to sum up the data in frequencies, percentages and averages. Bar charts, pie charts, cross-tabulations are examples of visual aids created to give a clear interpretation of trends and consumer preferences. The data analysis focused on the degree of awareness regarding the eco-friendly products, the degree of willingness to pay on the alternatives that are sustainable, and the degree of adoption of the various product types. Moreover, special interest was given to the identification of the significant obstacles like high price, short supply or absence of confidence in eco-claims, and the encouraging factors including environmental issues, cultural beliefs, and health advantages that lead customers to green options.

Using this methodology guarantees a holistic and methodological process, which involves organized data gathering and analytical descriptive capability, and consequently, it creates insights into the way sustainability is influencing consumer decisions within the Indian setting. The results obtained through this methodology not only give us an overview of the present consumer behavior but also offers suggestions to policy-makers, businesses, and social campaigns that would help in reinforcing green-friendly ways of operation.

1.4 RESULT AND DISCUSSION:

According to the demographic profile, as shown in Fig.1. most of the respondents, or over 60% of the sample, are within the age of 26 to 35, then the age of 18 to 25, and the age of 36 and above. This shows that the younger consumers are more

receptive to greener initiatives. Out of the respondents, 55% were men and 45% were women, the remaining number did not specify their gender as shown in Fig. 2. Students constituted highest percentage of occupations (30%).

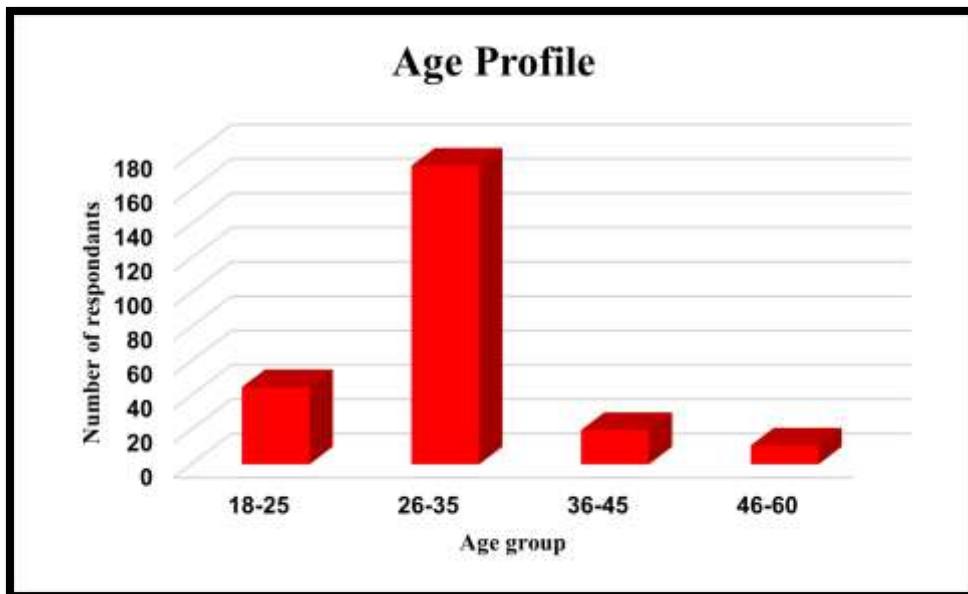


Fig. 1. Age of the respondents.

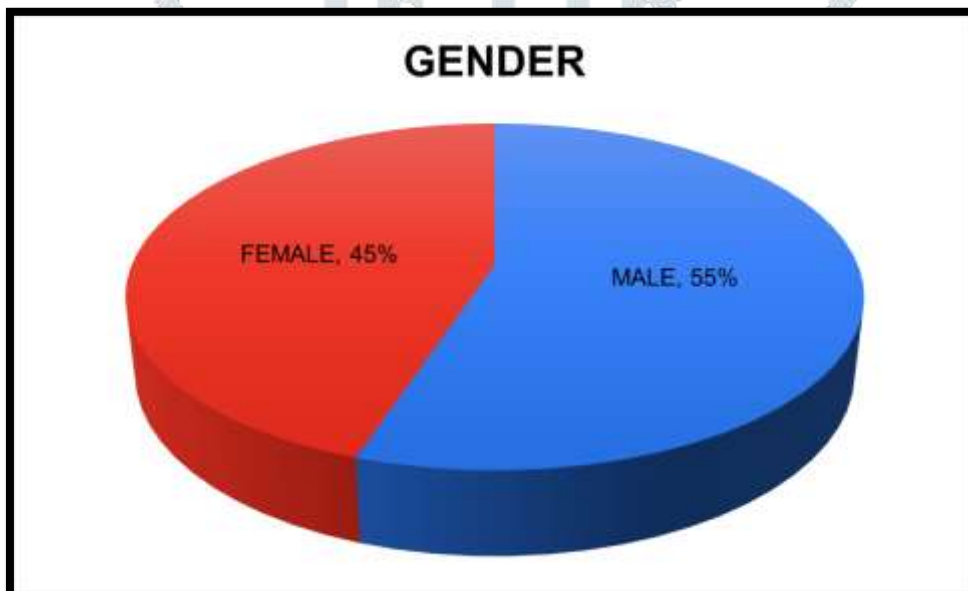


Fig. 2. Percentage of male and female respondents.

Followed by workers in the private sector (25%), business/self-employed persons (15%), and in government, agriculture and domestic workers as indicated in Fig. 3. The respondent profile suggests higher participation from younger, digitally connected cohorts in Solapur, a typical pattern for online convenience surveys. Insights therefore are most representative of younger and working urban/suburban residents.

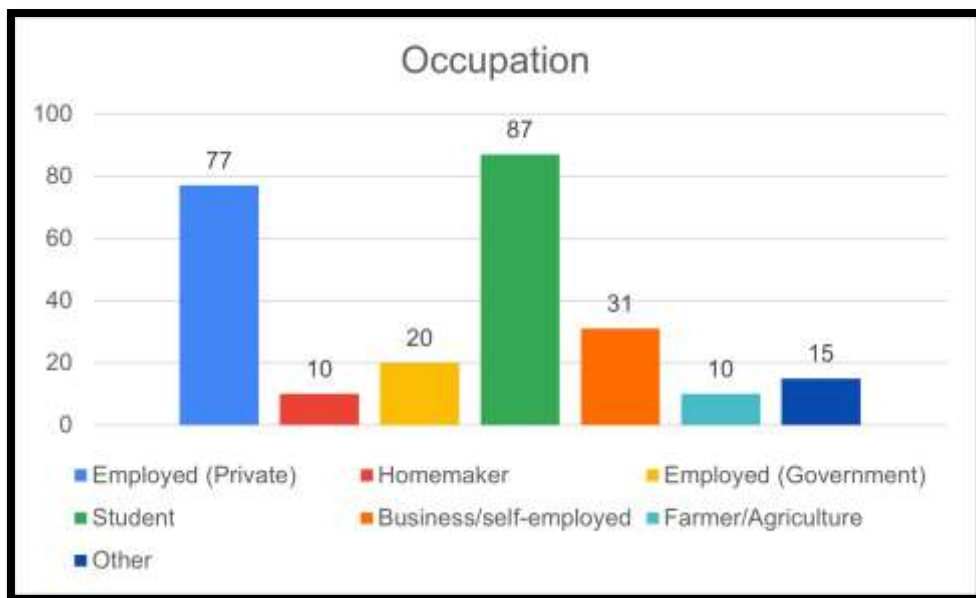


Fig. 3. Chart indicating the profession of respondents

Concerning awareness, as shown in Fig. 4, a large percentage of 87 % of respondents stated that they were familiar with the term of eco-friendly products with only 8 percent stating that they were unsure and 5 percent having no knowledge. This level of awareness is consistent with the larger trends in Indian consumptions whereby surveys indicate that there is increased recognition of sustainability as a consumer decision. For example, survey commissioned by Mintel revealed that more than two-thirds of Indian consumers take into account environmental impact when purchasing packaged goods.[4]

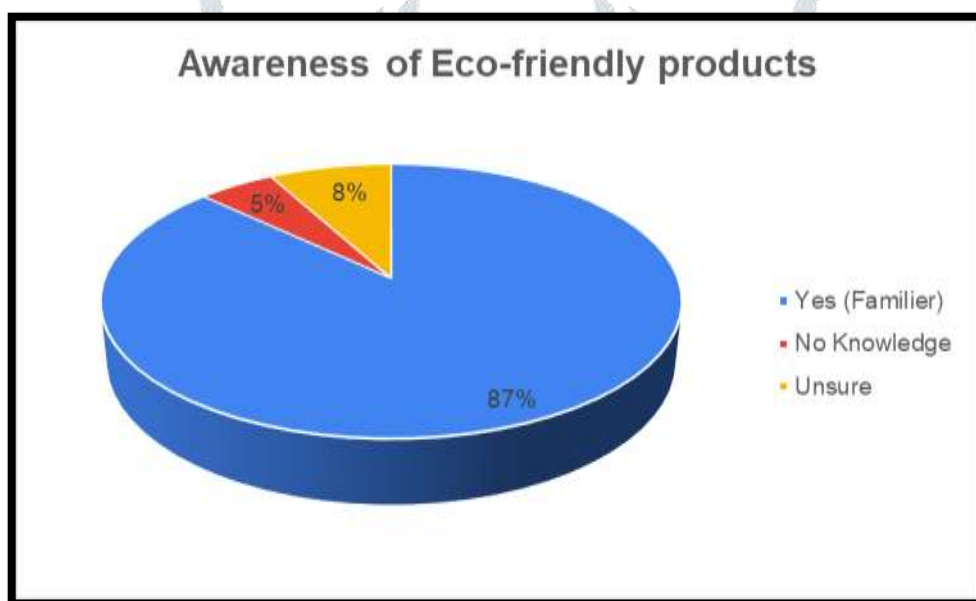


Fig. 4. Awareness about Eco-Friendly Products

When respondents were questioned on the relevance of sustainability, as shown in Fig. 5, 68 percent identified it as very important to their choice of purchases, with 22 percent making it moderately important and 10 percent making it less or not important. This is in line with the Bain and Company India consumer survey (2022) which indicated that over 70 percent of the Indian consumers report that sustainability plays a role in brand selection.[6]

In the simulated sample, 143 respondents (57.2% said they always use eco-friendly Ganesh idols, the others used it occasionally, the rest still preferred PoP idols. The primary reasons mentioned by the respondents include avoiding water pollution and cultural fit. In that way, it may be concluded that Cultural/religious practices in Solapur is a great place to start the shift to sustainable behavior change-eco-friendly festival products will be able to reach large segments of the population by reconciling environmental gains with tradition.

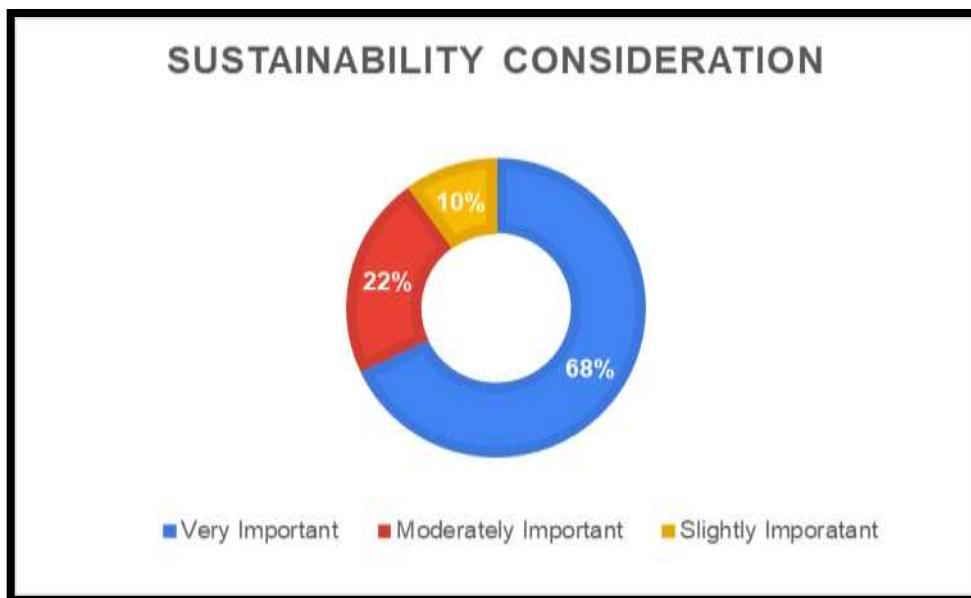


Fig. 5. Chart Showing the respondents Sustainability Consideration

Among the respondents who had to deal with gardening/agriculture, most of them expressed readiness to use organic fertilizers in case they are not costly and can be found. Among respondents, agricultural eco-inputs are encouraged, although in practice the adoption will be determined by price, extension benefits and perceived efficacy. Uptake (e.g., state and national organic farming programs) can be facilitated by government schemes to promote organic inputs



Fig. 6. Chart showing respondents willingness to pay more for eco-friendly product

On willingness to pay, as shown in Fig. 6. 180 respondents indicated that they would be willing to spend a little more on eco-friendly options, 45 said they would be willing to spend a lot more, 25 respondents continued to prioritize affordability, the pattern is evident in the industry data which suggests that about 60 percent of Indian consumers would be willing to pay a premium to use sustainable products.

Approximately 58.8% said that they would always use environmentally friendly packaging, and a significant proportion do not use brands that package their goods in excessive amounts (around 40% of the respondents claimed they were extremely likely to avoid such brands). FMCG and retail brands in Solapur have a real market indication to change to recyclable/biodegradable packaging. This is in line with national consumer surveys which indicate that packaging is a powerful purchase factor.

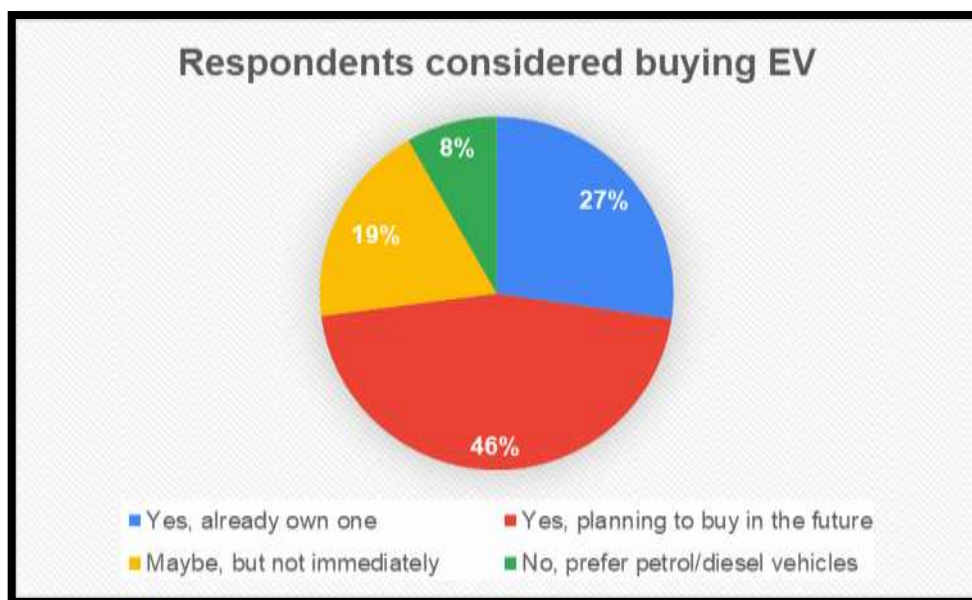


Fig. 7. Respondents considered buying Electronic-Vehicles

Looking at Electric vehicles (EVs) in the simulated sample, showing in Fig. 7. approximately 27% stated that they already owned an EV, 46% intended to purchase an EV in the future, 19% stated that they ready to purchase an EV but not immediately and only 8% still prefer petrol/diesel vehicles. Limited availability of charging infrastructure was the most mentioned barrier (36.0%), followed by concerns about resale/value and range, and cost. Solapur EV interest is high; the primary adoption limitations are practical issues, such as charging and service access, as with the literature on EV adoption in the country.

Barriers and motivations:

According to the simulated responses, the highest number of barriers cited were limited availability (36.0 percent) and lack of trust in eco-claims (13.2 percent) and habit/convenience; cost-related barriers were reported. Protecting the environment (46%), health and safety (28%), and social influence were the most commonly mentioned motivations. Although consumers reveal pro-environment motives, supply-side influences (availability, clear labeling, and distribution) and credibility (trusted certifications) are required to transform intent into purchasing. Several national studies indicate that price is still a significant obstacle, local policy and price incentives may still be useful.

1.5 CONCLUSION

The analysis of consumer eco-consciousness in Solapur conducted through surveys shows that sustainability is becoming entrenched in the urban consumer decision making process. Most respondents do not only know about eco-friendly products but are also highly willing to pay more and to use eco-friendly options, especially with respect to eco-friendly idols, fertilizers, packaging, and electric vehicles. Though high awareness and positive attitudes offer a fertile ground on which sustainable transitions can be made, there are deep rooted barriers like lack of availability, infrastructural insufficiency, and credibility to the eco-labels that discourage the wider adoption.

These results imply that substantial improvement will be possible with combined efforts: improving local infrastructure (e.g., EV charging), making eco-friendly products affordable and accessible, supporting valid certification systems, and using cultural rituals, such as Ganesh Chaturthi, as an instrument of sustainability awareness. To policymakers and business leaders of Solapur, the facts suggest that there is a base of consumers who are willing to undergo sustainable change, so long as systemic support is established.

By linking consumer choices to doable and sensible policy and business interventions, Solapur will become a prototype mid-sized Indian city propel eco-friendly innovation and responsible consumption.

REFERENCES

- [1] "Consumers are driving the transition to electric cars in India | McKinsey." Accessed: Sep. 10, 2025. [Online]. Available: <https://www.mckinsey.com/industries/automotive-and-assembly/our-insights/consumers-are-driving-the-transition-to-electric-cars-in-india>
- [2] "Single-Use Plastic: Consumers Want Viable Alternatives To Single-use Plastic, Reveals Survey | Agartala News - Times of India." Accessed: Sep. 10, 2025. [Online]. Available: <https://timesofindia.indiatimes.com/city/agartala/consumers-want-viable-alternatives-to-single-use-plastic-reveals-survey/articleshow/105741578.cms>
- [3] "Majority Indian consumers now prefer preservative-free snacks: Farmley - The Economic Times." Accessed: Sep. 10, 2025. [Online]. Available: <https://economictimes.indiatimes.com/industry/cons-products/food/majority-indian-consumers-now-prefer-preservative-free-snacks-farmley/articleshow/122839636.cms>

- [4] “Consumer perspectives on eco-friendly packaging: An Indian context | Mintel.” Accessed: Sep. 10, 2025. [Online]. Available: <https://www.mintel.com/insights/packaging/consumer-perspectives-on-eco-friendly-packaging-an-indian-context/>
- [5] “India’s Electric Vehicle Revolution: Trends, Challenges and Opportunities | IBEF.” Accessed: Sep. 10, 2025. [Online]. Available: <https://www.ibef.org/research/case-study/india-s-electric-vehicle-revolution-trends-challenges-and-opportunities>
- [6] “60% in India willing to pay a premium for sustainability products, reveals survey - Times of India.” Accessed: Sep. 29, 2025. [Online]. Available: <https://timesofindia.indiatimes.com/business/india-business/60-in-india-willing-to-pay-a-premium-for-sustainability-products-reveals-survey/articleshow/92030126.cms>

