

Sustainable Consumer Behaviour and Adoption of Eco-Friendly Palmyrah Products: A Tourism Marketing Lensurant in SDG-12

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Abstract

Sustainable consumption has become prominent to Sustainable Development Goal 12 (SDG-12) because it promotes sustainable production and sustainable consumption. A sustainable alternative to plastic products in the southern part of Tamil Nadu is eco-friendly palmyrah products that are not popular, as they are not branded and not widely known, and the market is not large enough. According to the available literature, it is evident that environmental consciousness, perceived value, subjective norms and behavioral control are the elements that affect sustainable consumer behavior though there is an intention-behavior gap. With the promotion and branding of eco-friendly products, tourism marketing has become a significant influence with the use of online promotion. The paper explores the issue of how eco-friendly palmyrah products are influenced to be adopted by consumers and how tourism marketing could contribute to SDG-12. The respondents (n=200) were used to gather the data by administering structured 5-point Likert scale questionnaire. The findings of the descriptive analysis showed high awareness and value perceptions whereas reliability analysis showed consistency. The correlation analysis showed that there were significant positive relationships between awareness and understanding of SDG-12, tourism marketing influence, perceived value, and adoption intention. The regression analysis showed that the perceived value and awareness and tourism marketing are vital determinants and barriers negatively affect the same. The decision is that this paper shows that visibility needs to be raised, digital marketing needs to be enhanced, and tourism marketing needs to be used to promote palmyrah products to ensure that more people adopt it and this leads to SDG-12 achievement.

Keywords: Sustainable Consumer Behaviour, Environmentally-Friendly Palmyrah Products, Tourism Marketing, SDG-12 (Responsible Consumption), Intention of Adoption.

Introduction

Sustainable consumption has become prominent due to the introduction of SDG-12 that has made it clear that responsible production and consumption are essential and studies have shown that sustainable consumer behavior is predicted by awareness, attitudes and perceived environmental benefits (Syed et al., 2024).

The paradigm of the circular economy has also led to consumers around the globe choosing to use recyclable and environmentally-friendly products in the form of sustainable consumption behaviours (Vidal-Ayuso et al., 2023). Studies, however, have shown that there has been some intent-behavior gap, where high environmentally conscious consumers do not translate these intentions into actual adoption of green products (Vermeir & Verbeke, 2006). This intention-behavior gap is continuing to exist across different consumer groups, thus suggesting the fact that sustainable behavior is more prone to decrease despite being optimistically oriented (Gallo et al., 2023). Perceived value, product knowledge, trust, and availability are specifically related to consumer behavior in the Indian case, despite the high levels of environmental awareness (Bergianti, 2025). Ecological knowledge and availability of products also affect sustainable consumption behavior and determine its adoption in developing countries (Nekmahmud et al., 2022). But it is also determined that consumers are ready to pay high price to purchase green products provided that consumers consider that the products are of quality and greener (Laroche et al., 2001). Emotional value and trust are also significant in determining the preferences of the consumers of green brands and environmentally friendly products (Hartmann & Apaolaza-Ibáñez, 2012). It has also been found that biospheric values and moral responsibility further enhance the motivation of the consumers to buy pro-environmentally (Nguyen et al., 2016). The perceived usefulness and subjective norms have additionally been identified to be significant predictors of green purchase intentions among consumers, particularly in the developing countries (Yadav & Pathak, 2016). Another significant role is played by the tourism marketing campaigns in promoting the products that are environmentally friendly through destination branding and communication strategies based on sustainability (Cristobal-Fransi et al., 2020). Associated social marketing, which corresponds to sustainability goals, has been found to affect pro-environmental behaviour of tourists (Chu et al., 2025). Behavioral change theories as well reveal that social elements, feelings, and habits play a significant role in the implementation of sustainable consumption behaviors (White et al., 2019).

Literature Review

It has been revealed that the primary factors that precondition sustainable consumer behaviour are awareness, perceived environmental positive results, and positive environmental attitudes, which are powerful factors contributing to the willingness to buy eco-friendly products (Syed et al., 2024). The idea of the circular economy also enhances consumers to choose sustainable consumption patterns that are greener and can be recycled (Vidal-Ayuso et al., 2023). It is also proposed that even though awareness among the consumers in India is increasing, the sustainability is not uniform (Bergianti, 2025). This is constant since it has been established that high-environment concern consumers can still be unable to purchase sustainable products in a steady manner (Gallo et al., 2023). Studies have also established that consumers who are more concerned with the environment are ready to pay more money to purchase the eco friendly products (Laroche et al., 2001). The gap between attitude and behavior is however still there since positive attitude does not always result in sustainable buying behavior (Vermeir & Verbeke, 2006). In earlier research, environmental worry and societal values have been noted to be great predictors of green purchasing (Mainieri et al., 1997). Emotional value and brand trust raise the level of acceptance of green brands by consumers and contribute to the adoption of environmentally friendly alternatives (Hartmann & Apaolaza-Ibáñez, 2012). The other factor that can affect pro-environmental purchasing is biospheric values and moral responsibility (Nguyen et al., 2016). Perceived usefulness and ecological knowledge are identified to be highly influential on purchase intentions of green products ((Yadav & Pathak, 2016). Considering the specifics of developing countries, environmental concern, subjective norms, and consumer beliefs have been discovered to be the most significant determinants of green product

consumption (Paul et al., 2016). One more factor affecting sustainable consumption behaviour is the awareness, green trust, and perceived behavioural control (Joshi & Rahman, 2015). In addition, behavioral control, as perceived, has been identified as an essential driver that leads to consumers adopting environmentally friendly products on a consistent basis (Joshi & Rahman, 2017). The ability to adopt eco-products is strongly predicted by environmental consciousness, especially among young people (Ki & Kim, 2022). According to tourism marketing research, digital branding and destination-based marketing are significant elements in affecting the adoption by consumers of sustainable products (Cristobal-Fransi et al., 2020). The positive effect of social marketing that is linked to sustainability on tourists has been identified to influence their environmentally responsible behaviour (Chu et al., 2025). The behaviour change theoretical models demonstrate that social and emotional motivators contribute significantly to the usage of sustainable products (White et al., 2019). The eco-friendliness product research has found that people care about eco-friendly features yet are not aware, do not know the brand, and have no knowledge about products (George, n.d.). Green marketing has not been properly explored in promoting local eco-friendly products, thereby they are not able to engage the consumers and be seen (Naveen Kumar, 2023). The research studies conducted on young consumers revealed that value, trust, environmental ethics, and eco-labels play an important role in adopting green products (Kanchanapibul et al., 2014). Cost, accessibility, and information barriers continue to remain barriers to uptake of green products by consumers in developing countries (Biswas & Roy, 2015).

Statement of the Problem

The studies, however, show that sustainable consumption behaviour largely relies on the environmental awareness and perceived benefits of consumers, which however many individuals have not been motivated by the two key elements (Syed et al., 2024). Although the principles of the circular economy promote the consumption of sustainable goods, in reality, consumers in most regions of the world continue to show little interaction with these goods (Vidal-Ayuso et al., 2023). It has been found that there is a wide gap between the intention and actual behaviour as there is no translation of sustainable attitudes into sustainable purchasing behaviour (Vermeir & Verbeke, 2006). Even the environmentally conscious consumers are not taking the environmentally friendly products at a regular pace, which means that there are still discrepancies in their behaviour (Gallo et al., 2023). The price, convenience, and familiarity of the products also influence consumer decision-making, which in most cases overrides the environmental consideration in the process of purchasing the products (Bergianti, 2025). The adoption of the eco-friendly products in the developing countries is still impeded by the barriers of cost sensitivity, unavailability of products, and poor branding (Biswas & Roy, 2015). Studies also show that a lack of perceived behavioural control and sustainability communication remain the weaknesses that destroy the confidence of a consumer when it comes to making a green purchase (Joshi & Rahman, 2015). The absence of efficient green marketing approaches also hinders sustainable consumption and also leads to low consumer participation (Paul et al., 2016). The marketing of tourism shows that destination branding and sustainability communication can make a positive contribution to the use of eco-friendly products but these tools have not been applied in a proper way to promote palmyrah products (Cristobal-Fransi et al., 2020). Though sustainability-related social marketing has proven to be effective in shaping sustainable consumption behavior of the tourists, its application in promoting the consumption of palmyrah products has not been explored (Chu et al., 2025).

Objectives of the Study

1. To examine the drivers of adoption of green palmyrah products among the consumers.
2. The aim of the study is to establish whether tourism marketing is critical in ensuring sustainable consumer behaviour towards palmyrah products.
3. To determine the impact of environmental awareness and SDG-12 on the demand to use eco-friendly palmyrah products among consumers.
4. To find out the issues encountered by consumers in adopting eco-friendly palmyrah products in Tamil Nadu state.

Research Methodology

A descriptive and analytical research design is applied in the current study, where sustainable consumer behavior and adoption of eco-friendly palmyrah products are examined with the specific focus on tourism marketing and tourism awareness of the SDG-12. The survey was conducted on consumers in the southern parts of Tamil Nadu that are within the Madurai, Tirunelveli, Thoothukudi, Virudhunagar, Sivagangai and Ramanathapuram districts that mostly use palmyrah products, and where tourism supports local eco-friendly products. The convenience approach was applied and 200 respondents were selected according to the rules of conducting quantitative research in social sciences. A structured questionnaire with 36 statements on a 5-point Likert scale was used to collect the primary data and it measured six constructs, which included Environmental Awareness, SDG-12 Awareness, Perceived Value, Barriers, Tourism Marketing Influence, and Adoption Intention. Data collection was conducted by the use of Google Forms and direct interviews, and this data constituted a large diversity of consumers. To analyze the data, four statistical tools were used namely, descriptive statistics, reliability analysis (Cronbachs Alpha), Pearson correlation, and multiple regression, which helped to evaluate internal consistency, correlation, and predictors of adoption behavior.

Results and Interpretation

1. Descriptive Statistics

Table 1 - Means of the key variables (N = 200)

Variable	Mean	SD
Environmental Awareness (B)	4.12	0.68
SDG-12 Awareness (C)	3.98	0.73
Perceived Value (D)	4.05	0.71
Barriers (E)	3.21	0.84
Tourism Marketing (F)	3.87	0.76
Adoption Intention (G)	4.08	0.70

Source: Primary Data

Interpretation

The respondents are very environmentally aware, have a perceived value and intention to adopt palmyrah products that are environmentally friendly. Barriers are moderate and need strategic interventions.

Analysis of Reliability (Cronbachs Alpha)**Table 2 Reliability of Constructs**

Construct	Item	Alpha	Status
Environmental Awareness	5	0.86	Highly Reliable
SDG-12 Awareness	5	0.84	Highly Reliable
Perceived Value	5	0.88	Highly Reliable
Barriers	5	0.79	Reliable
Tourism Marketing Influence	5	0.82	Reliable
Adoption Intention	5	0.87	Highly Reliable

Source: Primary Data

Interpretation

All constructs exhibit Alpha values of over 0.70, which is sufficient to have excellent internal consistency. The questionnaire can be used in the further analysis, as it is valid and reliable.

Correlation Analysis**Table 3 Correlation to Adoption Intention**

Relationship	r	Sig.
Environmental Awareness → Adoption	0.62	0.000
SDG-12 Awareness → Adoption	0.55	0.000
Perceived Value → Adoption	0.66	0.000
Tourism Marketing → Adoption	0.58	0.000
Barriers → Adoption	-0.42	0.000
Adoption Intention	5	0.87

Source: Primary Data

Interpretation

Adoption has positive relationships with perceived value, awareness and tourism marketing. The relationship between barriers is negative, implying that the barriers can be overcome to increase adoption.

Multiple Regression Analysis**Table 4 Summary of Regression Model**

R	R ²	Adjusted R ²	Sig.
0.812	0.659	0.646	0.000

Source: Primary Data

Interpretation

The model explains 65.9% difference in adoption intention, which guarantees a good predictive ability.

Table 5 Coefficients Regression

Predictor Variable	Beta (β)	Sig.	Result
Environmental Awareness	0.241	0.000	Significant
SDG-12 Awareness	0.198	0.000	Significant
Perceived Value	0.312	0.000	Most Significant
Tourism Marketing Influence	0.226	0.000	Significant
Barriers	-0.154	0.003	Significant Negative
Adoption Intention	5	0.87	Highly Reliable

Source: Primary Data

Interpretation

Environmental awareness and tourism marketing are less closely related to perceived value, with adoption being the most associated one. There is a negative correlation between barriers and adoption and this means that the product should be more strongly branded and accessible.

Discussion

These results suggest that sustainable consumers in the southern districts of Tamil Nadu are strongly pre-disposed to sustainable consumption, which is in line with the evidence provided by the world that awareness plays a significant role in sustainable behaviour (Syed et al., 2024). It is noted also that a higher level of environmental awareness among consumers may considerably influence the consumer green purchasing behaviour, at least in young generations of developing countries (Bergianti, 2025). This can be added to the argument that awareness is among the most important forces behind sustainable consumption in the context of a circular economy (Vidal-Ayuso et al., 2023). This is in line with the pattern observed in the global community where even the concerned customers are struggling with the inability to turn the worry into steady sustainable behaviors (Gallo et al., 2023). High positive effect of SDG-12 awareness on adoption intention is in agreement with behavioral findings of sustainability knowledge and its positive impact on responsible consumer decisions (Nekmahmud et al., 2022). The perceived value, in turn, is supposed to have a more successful impact on the intention to purchase eco-friendly products, just in the same way high environmental concern affects willingness to pay a higher price on sustainable products (Laroche et al., 2001). Nevertheless, such disposition is usually challenged by the attitude-behavior gap according to which the positive attitudes do not necessarily lead to actual adoptions (Vermeir & Verbeke, 2006). Social norms and environment concerns continued to play a crucial role in the green buying behavior, which strengthens the role of the society in adopting green products (Mainieri et al., 1997). Last, but not least are emotional value and brand trust, which are factors that have caused consumer acceptance of eco-friendly brands, hence the inclusion of the psychological aspect in green purchasing (Hartmann & Apaolaza-Ibáñez, 2012). This finding confirms past studies that demonstrate the desirable biosphere values and ethical responsibility associated with pro-environmental behaviour (Nguyen et al., 2016). Also, consumer behaviour in the developing economies proves the capability of subjective norms and ecological knowledge to decide green purchase intention (Yadav & Pathak, 2016). The general tendency is that, essentially, the beliefs of consumers, usefulness, and environmental concerns are some of the primary factors influencing the purchase of green products (Paul et al., 2016). The comparatively less perceived behavioral control is a finding that is in line with the argument that low levels of self-efficacy define the use of sustainable products (Joshi & Rahman, 2015). Hence, the perceived behavioral control levels should be improved, as it is confirmed that they define the behavior of consumers towards

the purchase of sustainable products (Joshi & Rahman, 2017). The environmentally conscious respondents were greater among the young, which can be explained by the argument that young consumers are the most active agents on the market of green products as (Ki & Kim, 2022). The relevance of tourism marketing in shaping the adoption behaviour has re-established the past results on the relationship between sustainability messages influencing consumer behaviour and destination-based tourism marketing (Cristobal-Fransi et al., 2020). This has confirmed the past study results on the positive impacts of social marketing practices related to sustainability goals in relation to tourist distancing behaviour (Chu et al., 2025). The products made of palmyrah tree are not well known by the consumers. This confirms the prior results regarding the absence of information about the available environmentally-friendly alternatives (George, n.d.). The absence of implementation of green marketing strategies eases the activities of other local industries. This has impacted negatively consumer engagement (Naveen Kumar, 2023). Perception of favourite brands with regard to ethical values plays a significant role in the adoption of behaviour by the young consumer groups (Kanchanapibul et al., 2014). Cost, accessibility, lack of information are also barriers that are an issue and congruent with prior results in emerging economies in reference to low adoption rates of (Biswas & Roy, 2015). The urgency to speak out on behavior change considers the importance of social influence, emotional relationship and consumer motivation towards alteration of sustainable behavior (White et al., 2019).

Suggestions of the Study

The study findings are used to come up with the following recommendations in order to enhance sustainable consumption and bring into use eco-friendly products of palmyrahs in the southern districts of Tamil Nadu. Educational institutions, social organizations and social media campaigns should be enhanced to come up with awareness on the benefits of palmyrah products. Marketing of tourism products needs to be enhanced as far as the promotion of the palmyrah products can be done in the tourist centers, exhibitions, fairs, handicraft stalls and in the eco-tourist attraction sites to create awareness to both the tourist and the locals. The accessibility of the products should be enhanced by providing exclusive sales counters in the supermarkets, tourism stalls, handicrafts shops, and internet locations so that they are easily reachable. Manufacturers, artisans, and SHGs ought to focus on enhancing product quality, design, packaging and branding in order to develop consumer trust and confidence. Price sensitivity can be broken by developing competitive pricing models, combination offers and discount packages that will encourage adoption. Artisan and SHG training can be initiated to enhance production, innovation, branding and digital marketing skills in order to be able to satisfy the market demands efficiently. Through influencer marketing, storytelling, and branding of the tourism, digital marketing can be encouraged in order to target the younger and environmentally conscious generation. The government and the tourism departments can be urged to collaborate and come up with sustainable tourism projects that incorporate the use of the palmyrah products like eco tourism packages, accommodation by the homestay and local souvenir stores. Lastly, poor branding, lack of awareness and information can be dissolved using brochures, demonstrations and sustainability labeling so that more people can adopt them.

Conclusion

The study was dedicated to sustainable consumer behavior and the use of eco-friendly products of palmyrah in the southern districts of Tamil Nadu, in particular, SDG-12 and the role of tourism marketing. The findings of the research work have revealed that consumers depict high rates of environmental awareness, positive perception of the product value and positive intentions towards the use of palmyrah products. Through destination marketing, cultural exposure, and online

marketing, tourism marketing is important in enhancing consumer interest and sustainable buying behavior. As the regression analysis has revealed, perceived value is the highest predictor of adoption, then environmental awareness and the impact of tourism marketing, and the negative predictors are unavailability, ineffective promotion, and prices of the tourism products. The research work makes a conclusion that greater adoption of eco-friendly palmyra products may be achieved by increasing their awareness, making tourism promotion more effective, improving products quality, visibility, and branding, and decreasing the practical barriers. This will contribute towards adoption of sustainable consumption trends, empowerment of local livelihoods, and a significant contribution to realization of SDG-12 in Tamil Nadu.

References

1. Bergianti, F. (2025). Sustainable Consumption Promotion: A Comprehensive Literature Review. *Journal of Consumer Behaviour*, 24(6), 2692–2710. <https://doi.org/10.1002/cb.70018>
2. Biswas, A., & Roy, M. (2015). Green products: An exploratory study on the consumer behaviour in emerging economies of the East. *Journal of Cleaner Production*, 87, 463–468. <https://doi.org/10.1016/j.jclepro.2014.09.075>
3. Chu, Y., Sotiriadis, M., & Shen, S. (2025). Investigating the Impact of Social Marketing on Tourists' Behavior for Attaining Sustainable Development Goals (SDGs). *Sustainability*, 17(15), 6748. <https://doi.org/10.3390/su17156748>
4. Cristobal-Fransi, E., Daries, N., Ferrer-Rosell, B., Marine-Roig, E., & Martin-Fuentes, E. (2020). Sustainable Tourism Marketing. *Sustainability*, 12(5), 1865. <https://doi.org/10.3390/su12051865>
5. Gallo, T., Pacchera, F., Cagnetti, C., & Silvestri, C. (2023). Do Sustainable Consumers Have Sustainable Behaviors? An Empirical Study to Understand the Purchase of Food Products. *Sustainability*, 15(5), 4462. <https://doi.org/10.3390/su15054462>
6. George, R. (n.d.). A Study on Analysing the Customers Perception on Eco-Friendly Products. *International Journal of Arts*.
7. Hartmann, P., & Apaolaza-Ibáñez, V. (2012). Consumer attitude and purchase intention toward green energy brands: The roles of psychological benefits and environmental concern. *Journal of Business Research*, 65(9), 1254–1263. <https://doi.org/10.1016/j.jbusres.2011.11.001>
8. Joshi, Y., & Rahman, Z. (2015). Factors Affecting Green Purchase Behaviour and Future Research Directions. *International Strategic Management Review*, 3(1–2), 128–143. <https://doi.org/10.1016/j.ism.2015.04.001>
9. Joshi, Y., & Rahman, Z. (2017). Investigating the determinants of consumers' sustainable purchase behaviour. *Sustainable Production and Consumption*, 10, 110–120. <https://doi.org/10.1016/j.spc.2017.02.002>
10. Kanchanapibul, M., Lacka, E., Wang, X., & Chan, H. K. (2014). An empirical investigation of green purchase behaviour among the young generation. *Journal of Cleaner Production*, 66, 528–536. <https://doi.org/10.1016/j.jclepro.2013.10.062>
11. Ki, H., & Kim, J.-Y. (2022). Sell green and buy green: A signaling theory of green products. *Resource and Energy Economics*, 67, 101266. <https://doi.org/10.1016/j.reseneeco.2021.101266>
12. Laroche, M., Bergeron, J., & Barbaro-Forleo, G. (2001). Targeting consumers who are willing to pay more for environmentally friendly products. *Journal of Consumer Marketing*, 18(6), 503–520. <https://doi.org/10.1108/EUM00000000006155>
13. Mainieri, T., Barnett, E. G., Valdero, T. R., Unipan, J. B., & Oskamp, S. (1997). Green Buying: The Influence of Environmental Concern on Consumer Behavior. *The Journal of Social Psychology*, 137(2), 189–204. <https://doi.org/10.1080/00224549709595430>

14. Naveen Kumar, C. M. (2023). Green Marketing: Gains and Opportunities. *Shanlax International Journal of Economics*, 12(1), 20–26. <https://doi.org/10.34293/economics.v12i1.6719>
15. Nekmahmud, Md., Ramkissoon, H., & Fekete-Farkas, M. (2022). Green purchase and sustainable consumption: A comparative study between European and non-European tourists. *Tourism Management Perspectives*, 43, 100980. <https://doi.org/10.1016/j.tmp.2022.100980>
16. Nguyen, T. N., Lobo, A., & Greenland, S. (2016). Pro-environmental purchase behaviour: The role of consumers' biospheric values. *Journal of Retailing and Consumer Services*, 33, 98–108. <https://doi.org/10.1016/j.jretconser.2016.08.010>
17. Paul, J., Modi, A., & Patel, J. (2016). Predicting green product consumption using theory of planned behavior and reasoned action. *Journal of Retailing and Consumer Services*, 29, 123–134. <https://doi.org/10.1016/j.jretconser.2015.11.006>
18. Syed, S., Acquaye, A., Khalfan, M. M., Theresa Obuobisa-Darko, & Yamoah, F. A. (2024). Decoding sustainable consumption behavior: A systematic review of theories and models and provision of a guidance framework. *Resources, Conservation & Recycling Advances*, 23, 200232. <https://doi.org/10.1016/j.rcradv.2024.200232>
19. Vermeir, I., & Verbeke, W. (2006). Sustainable Food Consumption: Exploring the Consumer “Attitude – Behavioral Intention” Gap. *Journal of Agricultural and Environmental Ethics*, 19(2), 169–194. <https://doi.org/10.1007/s10806-005-5485-3>
20. Vidal-Ayuso, F., Akhmedova, A., & Jaca, C. (2023). The circular economy and consumer behaviour: Literature review and research directions. *Journal of Cleaner Production*, 418, 137824. <https://doi.org/10.1016/j.jclepro.2023.137824>
21. White, K., Habib, R., & Hardisty, D. J. (2019). How to SHIFT Consumer Behaviors to be More Sustainable: A Literature Review and Guiding Framework. *Journal of Marketing*, 83(3), 22–49. <https://doi.org/10.1177/0022242919825649>
22. Yadav, R., & Pathak, G. S. (2016). Young consumers' intention towards buying green products in a developing nation: Extending the theory of planned behavior. *Journal of Cleaner Production*, 135, 732–739. <https://doi.org/10.1016/j.jclepro.2016.06.120>