

Exploring Nature's Abode: Unveiling Kerala's Enchanting Forest Ecotourism Products

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Abstract

The state of Kerala, renowned for its lush forests and diverse ecosystems, has embraced forest ecotourism as a means of sustainable economic development. This paper goes through the realm of Kerala's enchanting forest tourism products, investigating tourist satisfaction levels and variations across different categories of tourists. The study's objectives encompass comprehending tourist satisfaction with Kerala Forest ecotourism's products and services and discerning whether satisfaction varies among foreign, domestic, and local visitors. The primary data was collected through structured interviews with a sample of 400 tourists who visited 16 forest ecotourism sites across Kerala. Secondary data was sourced from records maintained by the Kerala Forest Department, including official reports and information provided by the Ecotourism wing of the department. Satisfaction levels were measured using a 5-point Likert scale for 17 forest products. Multivariate Analysis of Variance (MANOVA) and subsequent univariate ANOVA tests unveiled significant variations in satisfaction levels across different categories of tourists for specific products. Results showcased that tourist satisfaction with forest ecotourism products was moderate on average, with distinctions observed in satisfaction levels among different tourist categories. The study underscores the necessity of tailoring marketing strategies and product offerings to suit the preferences of diverse tourists. The findings provide insights for policymakers, tour operators, and local communities to enhance the attractiveness and sustainability of forest ecotourism in Kerala. Hence this research also sheds light on the complex dynamics of tourist satisfaction in Kerala's forest ecotourism context.

Keywords: Kerala Forest ecotourism, Forest tourism products, Community-based ecotourism, Nature-based tourism, Sustainable tourism

Introduction

Kerala is one of the most densely populated states in the country. About 29% of the geographical area of the State is under forest (Kerala Forest Department, 2022). Among its many treasures, Kerala's dense and pristine forests stand out as sanctuaries of serenity, rich in biodiversity, and brimming with unique experiences Western Ghats, lakes, lagoons,

and beautiful beaches fetched Kerala the glorious name "God's own Country" (Babu, 2012). Gifted with such marvellous scenic beauty, the hills, the lakes, the forests, and the coasts of Kerala have a very high potential for ecotourism initiatives. Today ecotourism is one of the quickest-growing segments of the commercial enterprise trade- its growth potential is nearly unlimited (Ranjith, 2020).

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Realizing the importance of ecotourism in economic development especially in developing countries, the International Ecotourism Society gave new dimensions to the term ecotourism recently by incorporating socio-economic development, education, interpretation, and sustainable development (Bhuiyan & Darda, 2023). Other ecotourism and forest tourism share a commitment to responsible and sustainable tourism practices, with an emphasis on nature-based experiences and environmental conservation. Ecotourism is an alternative to the development and management of forest areas that is expected to provide sustainable economic, cultural, and social benefits to the surrounding community (Ambarita et al., 2018). Ecotourism is a broader concept that encompasses all forms of nature-based tourism with a focus on responsible travel. Forest tourism, on the other hand, specifically centres on activities and experiences related to forests and wooded areas and is always conservation oriented sustainable (Buultjens et al., 2012).

Ecotourism in India is a niche industry and is largely based on the concept of sustainable tourism or eco-friendly tourism. The mountain ranges of the Himalayas, golden beaches, forest, and plenty of water bodies along with a rich blend of culture made India one of the favourite ecotourism destinations of people worldwide. The states in India that are constantly working towards the promotion of ecotourism are Himachal Pradesh, Odisha, Uttarakhand, Arunachal Pradesh, Sikkim, Assam, and Kerala. Odisha State has received many awards in the category of best ecotourism.¹ “Ecotour Odisha”, the ecotourism project by the Forest Department in Odisha bagged the best eco-tourism initiative in the country, has been developed by taking local communities as stakeholders.

Kerala is also considered one of the greenest parts of India and Thenmala was India's first planned ecotourism destination in Kerala which gained popularity amongst travellers across the globe.² Thenmala Ecotourism is now managed by The Thenmala Ecotourism Promotion Society (TEPS). Kerala has some more extraordinary eco-tourism destinations in the form of its thriving emerald backwaters, palm-fringed seashores, rambling tea and spice plantations on mount gradients, and many beautiful forest areas including national parks and wildlife sanctuaries. Kerala has a forest area of approximately 11,125 square km and Kerala's eastern zone is being projected as the eco-tourism zone. Wildlife sanctuaries are well-known eco-tourism destinations in Kerala, which are managed by the Kerala Forest Department. Realizing the potential and possibilities of ecotourism in forest areas, the Kerala Forest Department extended ecotourism activities in territorial forest areas in the year 1998 in locations with excellent scenic beauty, waterfalls, etc., and where the local community especially the tribal population makes a significant role. The minor forest products are available in the Eco shops run by the Kerala Forest Department in almost all of the ecotourism destinations managed by the Kerala Forest Department.

The Kerala Forest Department classifies Forest Products as Major Forest Produce, Non-Timber Forest Produce (NTFP), and Minor Forest Produce (MFP). The Major Forest Produce includes industrial wood, plywood, matchwood, bobbin wood, pencil wood, packing case wood, pulpwood, and miscellaneous items such as teak poles, fire wood, sandal wood, and billets, while Non-Timber Forest Produce includes ayurvedic herbs, spices, fibre, grass other than fodder, medicinal trees, honey and bee wax.³ The vast list of Minor Forest Produce includes

¹Odisha gets excellence award for ecotourism | Bhubaneswar, Times of India, 09-02-2023 <https://timesofindia.indiatimes.com/city/bhubaneswar/odisha-gets-excellence-award-for-ecotourism/articleshow/70822783.cms>

²Thenmala Eco Tourism | Ecotourism Programmes in Kerala. <https://www.keralatourism.org/ecotourism/trekking-programs/thenmala-ecopackages/43>

³<https://forest.kerala.gov.in/index.php/vanashree>

50 herbal and ayurvedic items collected from forests. However, for this study, forest tourism products are defined to include small honey, big honey, black dammar, white dammar, kashthuri manjal, elaichi, pepper, handicrafts, balms, sandal soaps, soft trekking, hard trekking, jungle camping, jungle/jeep safari, boating, bowl boating and night stay in treetop huts.

Literature Review

Forest ecotourism, as a conservation-oriented ecotourism, has gained significant attention due to its potential to promote sustainable development while conserving natural resources. This section aims to provide an overview of existing research on forest tourism products, focusing on the various aspects that contribute to its appeal, challenges, and impacts on both tourists and the environment. Tourism has risen as the couple of monetary contrasting options to build up the state economy and the state's potential for tourism has been very much acknowledged (Nishad et al., 2018). Ecotourism provides additional pleasurable experiences for tourists through additional meaty connections with native individuals and a larger understanding of the native cultural, social, and environmental problems (Ranjith, 2020). Ecotourism adds to the preservation of the natural areas by giving financial assistance and income to the administration to protect and oversee natural territories. It uses the common assets and gives employment opportunities to the local people (Nishad et al., 2018). Ecotourism is one of the most efficient type of tourism that generates more revenue with less cost, it comes with so many advantages such as creating foreign exchange, promoting sustainability, balancing development, valuing culture, retaining heritage, generating employment and helps in entrepreneurship development (Kumavat, 2021). The concept of ecotourism today has sharpened its aspects in the goals of responsible tourism by making maximum participation in responsible positions for the local as well as tribal hosts India (Sreerekha, 2020).

Forest tourism started in 1982 with the establishment of Zhangjiajie National Forest Park (NFP), the first designated NFP in China (Chen & Nakama, 2013). There is a general sense of disenchantment with economic impacts, as most of them hold tourism responsible for price inflation and growing income inequality in the region (Rao & Saksena, 2021). However, undertaking ecotourism activities in forest resources often functions as a double-edged sword, as it can have adverse impacts through overexploitation and improper management. Hence, maintaining the forest resource, habitat quality, and biodiversity conservation along with potential human-wildlife conflicts remains challenging (Rijal et al., 2021). In Kerala, 56 places have been identified for development as ecotourism destinations emphasizing conservation, ecological sustainability, environmental education, and local community benefits (Ranjith, 2020).

China is endowed with the advantages of developing forest ecotourism. Liang (2016) employed a structural equation model to reflect the relationship and influence between tourist satisfaction and other variables like development effect, quality of talents and support rates of the surrounding residents in the scenic areas. Tourist satisfaction has mediation effects between educational institutions and tourism organizations (Haron et al., 2023). In the study, the mediating roles of tourist satisfaction between tourism operators, event management, local communities, and investment toward tourist intention to revisit have been studied, which has theoretical and practical contributions to tourism organizations, tourism operators, event managers, academicians, and government sectors.

Community forestry claims to be a means for achieving positive environmental and community outcomes through the transfer of some rights, discretionary powers, and capacity to local communities (Anderson et al., 2015). Millions of people living in poverty depend on

non-timber forest products (NTFPs), yet forest protection causes displacement, replacement or reduction of NTFP extraction activities, with implications for human welfare (Latham et al., 2017). Forest and tree resources are of extreme importance to mankind because they provide a wide variety of useful products that feature in our everyday lives (Ogar & Enete, 2010). Forest ecosystems are vital for terrestrial biodiversity and the effective management of these natural resources stands essential, owing to the subsistence needs of humans. The resources derived from the forest ecosystem meet multiple purpose for different sub groups of people (Soman & Anitha, 2020).

There are many studies conducted about ecotourism around the globe, covering areas like community managed ecotourism, sustainable development, forest tourism, socio-economic impacts of ecotourism, etc. In India also, there are many studies conducted about the broad term “ecotourism”. In Kerala, even though many studies have been conducted regarding the ecotourism destinations, including National Parks, Wildlife Sanctuaries, and destinations outside protected areas, the role and significance of Kerala Forest Department have not been mentioned anywhere. More than 90% of the ecotourism destinations in Kerala are in natural forest areas, possessed and managed by Kerala Forest Department. Participatory Forest Management is followed in those destinations, and thousands of local community members including tribes are involved and benefited. But studies covering the Kerala Forest ecotourism, initiatives of the Kerala Forest Department in extending tourism to territorial divisions, visitor’s-satisfaction from the Kerala forest ecotourism products and services, and issues involved have not been studied yet.

In spite of the opening of online sales of ‘Vanasree Eco Shop’s Products’ with the objective of improving the livelihoods of tribal communities by facilitating collection, processing, value addition and market access to the forest produce which has been traditionally collected from interiors of

pristine evergreen forests, the poor marketing system is not up to the mark in helping the tribal folks to come out of abject poverty. The satisfaction of tourists is a critical aspect of the tourism industry, especially when it comes to ecologically sensitive destinations. While the state’s lush and diverse forests have been attracting visitors from all over the world, it is essential to assess the satisfaction level of tourists concerning the forest tourism products offered. The problem at hand is to evaluate and understand the satisfaction level of tourists engaging in forest tourism activities in Kerala from forest tourism products and services offered. This assessment involves examining visitor satisfaction from selected forest tourism products in Kerala, and examining the differences in perceptions on satisfaction of domestic, foreign and local tourists. This study will help stakeholders, including Kerala Forest Department official authorities and local communities, make informed decisions to promote sustainable and responsible forest tourism practices.

Research Objectives

1. To understand the level of satisfaction of tourists towards forest ecotourism products offered by Kerala Forest Tourism
2. To examine whether perceived levels of satisfaction from forest ecotourism products differ across categories of tourists

Data and Method

The methodology of this research unfolds across two significant components: Data and Method. The primary data collection involved direct personal interviews, facilitated by a questionnaire, with 400 tourists who visited 16 forest ecotourism destinations in Kerala. These locations spanned eight territorial forests and eight destinations within National Parks and Wildlife Sanctuaries, spread across districts from Thiruvananthapuram to Kasaragod. A 5-point Likert scale was employed to gauge satisfaction levels from seventeen selected forest products, ranging from “very dissatisfied” to “very satisfied.” Secondary data was extracted from the Kerala Forest

Department website, including official reports and insights provided by the Ecotourism wing of the department. This data helped in supporting the findings from the primary data and provided a broader context for understanding forest ecotourism in Kerala.

The study adopted a multistage random sampling method to derive a representative sample of 400 respondents. The sample comprised foreign tourists 32 (8%), domestic tourists 348 (87%), and local tourists 20 (5%) from the same Taluk of the ecotourism destination. Residents of the same Taluk belongs to the category “Local tourists”. Gender representation was considered, with females constituting 37.5% of the sample.

The questionnaire was crafted meticulously to capture nuanced information about the tourists’ experiences and satisfaction levels. It included structured questions that allowed respondents to rate their satisfaction with different forest products. The design of the questionnaire ensured that it was easily comprehensible and catered to different categories of tourists. The chosen destinations were strategically picked to represent a diverse range of forest ecotourism spots in Kerala, including both territorial forests and protected areas like National Parks. This diversity

ensured that the study captured a broad spectrum of tourist experiences.

Multivariate Analysis of Variance (MANOVA) was the central analytical technique employed to evaluate the satisfaction levels across various groups of tourists. It allowed simultaneous calculation of the difference of mean between different groups, making it possible to understand the multidimensional aspects of tourist satisfaction. Data was handled with utmost care, maintaining its integrity and confidentiality. Statistical tools and software were utilized for efficient data processing and analysis. Continuous monitoring and validation were implemented to ensure the accuracy of the results. By employing this combination of primary and secondary data, careful sampling techniques, and rigorous analytical methods, this methodology presents a robust and comprehensive approach to exploring forest ecotourism in Kerala. It aligns with the research objectives and provides a solid foundation for interpreting and understanding the complex dynamics of tourist satisfaction in the context of forest ecotourism products.

Results and Discussion

The descriptive statistics of the seventeen forest tourism products are shown in Table 1.

Table 1
Descriptive Statistics of Forest Tourism products

| Category | Test Variables | Mean | SD | N | Test Variables | Mean | SD | N |
|--------------------|----------------|-------|-------|-----|----------------|-------|-------|-----|
| Domestic | | 2.602 | 1.774 | 347 | | 1.239 | 0.908 | 347 |
| Foreign | | 1.750 | 1.481 | 32 | | 1.063 | 0.354 | 32 |
| Local (Same Taluk) | Small honey | 2.000 | 1.643 | 21 | Sandal soaps | 1.381 | 1.203 | 21 |
| | Total | 2.503 | 1.761 | 400 | | 1.233 | 0.895 | 400 |
| Domestic | | 1.207 | 0.817 | 347 | | 2.473 | 1.877 | 347 |
| Foreign | | 1.063 | 0.354 | 32 | | 2.469 | 1.883 | 32 |
| Local (Same Taluk) | Big honey | 1.381 | 1.203 | 21 | Soft Trekking | 1.905 | 1.670 | 21 |
| | Total | 1.205 | 0.815 | 400 | | 2.443 | 1.867 | 400 |

| | | | | | | | | |
|--------------------|-----------------|-------|-------|-----|----------------------------|-------|-------|-----|
| Domestic | | 1.104 | 0.585 | 347 | | 2.187 | 1.774 | 347 |
| Foreign | | 1.000 | 0.000 | 32 | | 3.500 | 1.814 | 32 |
| Local (Same Taluk) | Black dammar | 1.143 | 0.655 | 21 | Hard trekking | 1.571 | 1.434 | 21 |
| Total | | 1.098 | 0.565 | 400 | | 2.260 | 1.800 | 400 |
| Domestic | | 1.020 | 0.268 | 347 | | 1.568 | 1.323 | 347 |
| Foreign | | 1.000 | 0.000 | 32 | | 1.938 | 1.605 | 32 |
| Local (Same Taluk) | White dammar | 1.143 | 0.655 | 21 | Jungle camping | 1.571 | 1.434 | 21 |
| Total | | 1.025 | 0.291 | 400 | | 1.598 | 1.353 | 400 |
| Domestic | | 1.072 | 0.508 | 347 | | 1.795 | 1.469 | 347 |
| Foreign | | 1.250 | 0.984 | 32 | | 1.906 | 1.614 | 32 |
| Local (Same Taluk) | Kasthuri manjal | 1.714 | 1.521 | 21 | Jungle/Jeep safari | 1.381 | 1.203 | 21 |
| Total | | 1.120 | 0.661 | 400 | | 1.783 | 1.468 | 400 |
| Domestic | | 1.147 | 0.724 | 347 | | 2.179 | 1.728 | 347 |
| Foreign | | 1.000 | 0.000 | 32 | | 2.281 | 1.836 | 32 |
| Local (Same Taluk) | Elaichi | 1.048 | 0.218 | 21 | Boating | 3.571 | 1.886 | 21 |
| Total | | 1.130 | 0.678 | 400 | | 2.260 | 1.768 | 400 |
| Domestic | | 1.135 | 0.681 | 347 | | 1.617 | 1.428 | 347 |
| Foreign | | 1.000 | 0.000 | 32 | | 1.375 | 1.185 | 32 |
| Local (Same Taluk) | Pepper | 1.143 | 0.655 | 21 | Bowl boating | 1.381 | 1.203 | 21 |
| Total | | 1.125 | 0.652 | 400 | | 1.585 | 1.399 | 400 |
| Domestic | | 1.141 | 0.721 | 347 | | 1.464 | 1.226 | 347 |
| Foreign | | 1.188 | 0.780 | 32 | | 2.031 | 1.492 | 32 |
| Local (Same Taluk) | Handicrafts | 1.000 | 0.000 | 21 | Night stay in Treetop huts | 1.571 | 1.434 | 21 |
| Total | | 1.138 | 0.707 | 400 | | 1.515 | 1.266 | 400 |
| Domestic | | 1.052 | 0.434 | 347 | | | | |
| Foreign | | 1.000 | 0.000 | 32 | | | | |
| Local (Same Taluk) | Balms | 1.000 | 0.000 | 21 | | | | |
| Total | | 1.045 | 0.404 | 400 | | | | |

Note. Standard deviation (SD); Number of observations (N)

The most prominent measure of satisfaction from forest tourism products was found to be ‘Boating’ ($\bar{X} = 3.571 \pm 1.886$) among the local tourists and ‘Hard Trekking’ among foreign tourists ($\bar{X} = 3.500 \pm 1.814$) and ‘Small honey’ among domestic tourists ($\bar{X} = 2.602 \pm 1.774$), while the least prominent one was ‘Black

and White Dammar, Elaichi, Pepper etc’ both among foreign tourists. In the case of 17 products/services studied, the total mean score is less than 2.00 in the case of 13 items.

The multivariate test results with category of tourists as independent variable are shown in Table 2.

Table 2

Multivariate Analysis- MANOVA

| | Value | F | Hypothesis df | Error df | Sig. |
|---------------|-------|-------|---------------|----------|--------------|
| Wilks' lambda | .784 | 2.898 | 34.000 | 762.000 | .000* |

Note. F tests the multivariate effect of category of tourists. The null hypothesis that there is no significant difference in combined dependent variables across categories of tourists gets rejected at 5 per cent significance level, since the p-value of F statistic falls below 0.05. It is inferred that when all the measures of satisfaction from forest tourism products are considered as a whole, statistically significant difference exist across categories of type of tourists.

* $p < 0.05$

Follow-up univariate ANOVA test results are shown in Table 3. The following null hypothesis was tested.

H_{01} : There is no significant difference in individual measures of satisfaction from forest tourism products across categories of tourists.

Table 3

Estimated means, SE and ANOVA test results

| Category | Dependent Variable | Mean | SE | F (2,397) | Sig. | Dependent Variable | Mean | SE | F (2, 397) | Sig. |
|--------------------|--------------------|-------|------|-----------|-------------|--------------------|-------|------|------------|-------------|
| Domestic | | 2.602 | .094 | | | | 1.239 | .048 | | |
| Foreign | Small honey | 1.750 | .309 | 4.405 | .013 | Sandal soaps | 1.063 | .158 | .876 | .417 |
| Local (Same Taluk) | | 2.000 | .381 | | | | 1.381 | .195 | | |
| Domestic | | 1.207 | .044 | | | | 2.473 | .100 | | |
| Foreign | Big honey | 1.063 | .144 | .979 | .376 | Soft Trekking | 2.469 | .330 | .919 | .400 |
| Local (Same Taluk) | | 1.381 | .178 | | | | 1.905 | .407 | | |
| Domestic | | 1.104 | .030 | | | | 2.187 | .095 | | |
| Foreign | Black dammar | 1.000 | .100 | .565 | .569 | Hard trekking | 3.500 | .311 | 9.827 | .000 |
| Local (Same Taluk) | | 1.143 | .123 | | | | 1.571 | .384 | | |

| | | | | | | | | | |
|--------------------|-----------------|-------|------|--------|-------------|----------------------------|--|-------|------|
| Domestic | | 1.020 | .016 | | | | | 1.568 | .073 |
| Foreign | White dammar | 1.000 | .051 | | | | | 1.938 | .239 |
| Local (Same Taluk) | | 1.143 | .063 | 1.899 | .151 | Jungle camping | | 1.571 | .295 |
| Domestic | | 1.072 | .035 | | | | | 1.795 | .079 |
| Foreign | Kasthuri manjal | 1.250 | .114 | | | Jungle/ Jeep safari | | 1.906 | .260 |
| Local (Same Taluk) | | 1.714 | .141 | 10.502 | .000 | | | 1.381 | .320 |
| Domestic | | 1.147 | .036 | | | | | 2.179 | .094 |
| Foreign | Elaichi | 1.000 | .120 | | | Boating | | 2.281 | .308 |
| Local (Same Taluk) | | 1.048 | .148 | .852 | .427 | | | 3.571 | .381 |
| Domestic | | 1.135 | .035 | | | | | 1.617 | .075 |
| Foreign | Pepper | 1.000 | .115 | | | Bowl boating | | 1.375 | .248 |
| Local (Same Taluk) | | 1.143 | .142 | .639 | .528 | | | 1.381 | .306 |
| Domestic | | 1.141 | .038 | | | | | 1.464 | .068 |
| Foreign | Handicrafts | 1.188 | .125 | | | Night stay in Treetop huts | | 2.031 | .223 |
| Local (Same Taluk) | | 1.000 | .154 | .481 | .619 | | | 1.571 | .275 |
| Domestic | | 1.052 | .022 | | | | | | |
| Foreign | Balms | 1.000 | .072 | | | | | | |
| Local (Same Taluk) | | 1.000 | .088 | .377 | .686 | | | | |

Note. hypothesis $df = 2$, Error $df = 397$; Figures in bold indicate significant at 5% level. At a 5% significance level, the null hypothesis is rejected for ‘Small honey,’ ‘Kasthuri manjal,’ ‘Hard trekking’ and ‘Boating’, indicating significant differences in tourist satisfaction across categories in these cases ($p < 0.05$). However, for the remaining products, no statistically significant differences are found as the probability of F statistics exceeds 0.05. Thus, the null hypothesis of no significant difference in satisfaction across tourist categories is retained for those products.

The findings emphasize the need for tourism providers and destination managers to tailor their forest tourism products to suit the preferences and cultural backgrounds of different tourist segments. The significant differences in the satisfaction on small honey and Kasthuri manjal is due to the difference

in perception among category of visitors. Majority of the visitors are unaware of the products, usage and its medicinal values. Also, many destinations with excellent scenic beauty and opportunities for trekking, boating are still unexplored and not known to visitors except the local tourists. The study can help identify

the unexplored eco-products and tourism avenues in forest ecotourism destinations, identifying the untapped tourism potential and understanding and catering to the unique needs of foreign, domestic, and local tourists, can lead to increased overall satisfaction.

The comparatively low mean satisfaction scores for most products highlight areas that may require attention and improvement. Identifying the specific products with lower satisfaction scores can guide efforts to enhance their quality and visitor experiences. Differences in satisfaction levels may also be related to the cultural or educational aspects of the forest ecotourism products. For example, certain products may appeal more to local tourists due to their cultural significance or familiarity. By analysing the products that received higher satisfaction scores, it is possible to identify the strengths of the destination and its tourism offerings. Sustainable development practices can be promoted based on the preferences of each tourist segment. By continuously evaluating and improving products, destinations can remain competitive and attract more tourists.

Conclusion

The level of satisfaction from forest ecotourism products offered to tourists by Kerala Forest Department was generally found to be comparatively low since none of the products appealed to all categories of tourist, as the satisfaction was rated based on expectations and perceptions instead of actual usage. The significant differences in satisfaction levels indicate that tourists from different backgrounds (foreign, domestic, and local) have varying preferences and expectations when it comes to forest tourism products. It suggests that not all products have equal appeal to all types of tourists. More promotional initiatives have to be taken by the Kerala Forest Department. It has to be given due importance in the official websites and other online platforms to create awareness about various available forest ecotourism products. Besides, the diverse linguistic

backgrounds of different visitors and lack of communication proficiency among the staff employed from local community creates imbalance in satisfying the needs of diverse group visitors. Overall, the significance of the differences in satisfaction levels among foreign, domestic, and local tourists highlights the importance of considering tourist diversity when designing the packaging of products, marketing, and managing forest ecotourism products. Today, in the wide spread of internet and social media, the target audience can only be influenced either through personal sources or e-WOM (Electronic Word of Mouth). So, establishing a strong online presence through a user-friendly website and conducting market research is the need of the hour in order to understand the preferences, expectations of both Indian and Foreign visitors separately and in identifying the issues involved.

Further, the study reveals significant implications for Kerala's forest ecotourism sector. It highlights the importance of creating new marketing strategies and product options that cater to the unique preferences of foreign, domestic, and local tourists. The study also underlines the importance of sustainable development practices, and the potential impact on local communities and conservation initiatives. Policymakers and destination managers can leverage these insights for strategic planning, fostering growth while balancing environmental, social, and economic concerns. In general, the results provide a guide for future researches in exploring the impact of sustainability practices in forest ecotourism on tourist satisfaction and their willingness to support conservation efforts.

References

- Ambarita, S. T. P., Basyuni, M., Sulistyono, N., Wati, R., Fitri, A., Slamet, B., Balke, T., Bunting, P., & Munir, E. (2018). Landscape planning and economic valuation of mangrove ecotourism using gis and google earth image. *Journal of Theoretical and Applied Information Technology*, 96(19), 6306–6317.

- Anderson, J., Mehta, S., Epelu, E., & Cohen, B. (2015). Managing leftovers: Does community forestry increase secure and equitable access to valuable resources for the rural poor? *Forest Policy and Economics*, 58, 47–55. <https://doi.org/10.1016/j.forpol.2014.12.004>
- Babu, R. A. (2012). Ecotourism; the Multiplier Waves: A Learning Experience of Thenmala Eco-Tourism Project in Kerala, India. *IOSR Journal of Humanities and Social Science*, 4(5), 19–22. <https://doi.org/10.9790/0837-0451922>
- Bhuiyan, M. A. H., & Darda, M. A. (2023). Local perspectives of ecotourism development in the terengganu state of malaysia. *Journal of Tourism and Development*, 41, 187 – 200. <https://doi.org/10.34624/rtd.v41i0.32418>
- Buultjens, J., Tiyce, M., & Gale, D. (2012). Sustainable Forest-Based Tourism in Northeast New South Wales, Australia: a Problematic Goal. *Tourism Review International*, 7(1), 1–12. <https://doi.org/10.3727/154427203108751776>
- Chen, B., & Nakama, Y. (2013). Thirty years of forest tourism in China. In *Journal of Forest Research* (Vol. 18, Issue 4, pp. 285–292). <https://doi.org/10.1007/s10310-012-0365-y>
- Haron, H. I. C., Abdullah, H., Tajuddin, S. A. F. S. A., & Rahim, N. A. A. A. (2023). Bootstrapping on Tourist Satisfaction: Examine the Mediating Effects Between Determinant Factors and Tourist Intention to Revisit Terengganu's Edutourism Destinations. *International Journal of Sustainable Development and Planning*, 18(6), 1691–1706. <https://doi.org/10.18280/ijstdp.180605>
- Kerala Forest Department. (2022). *Administration Report*. 1–132. <https://forest.kerala.gov.in/>
- Kumavat, P. P. (2021). A Study on Kerala Ecotourism and role of Marketing Strategies in the promotion of Ecotourism sites. *Revista Review Index Journal of Multidisciplinary*, 1(1), 21–26. <https://doi.org/10.31305/rrijm2021.v01.n01.005>
- Latham, J. E., Sallu, S. M., Loveridge, R., & Marshall, A. R. (2017). Examining the impact of forest protection status on firewood sufficiency in rural Africa. *Environmental Conservation*, 44(3), 221–233. <https://doi.org/10.1017/S0376892917000066>
- Liang, H. (2016). Influence mechanism of development effect of forest ecotourism in China. *Forestry Studies*, 64, 93–100. <https://doi.org/10.1515/fsmu-2016-0006>
- Nishad, A., GNANADHAS, M. E., & Rathiha, R. (2018). a Study on the Development of Eco Tourism in Kerala. *International Journal of Research and Analytical Reviews*, 5(3), 52–58. http://www.ijrar.com/upload_issue/ijrar_issue_1590.pdf
- Ogar, A. M., & Enete, A. A. (2010). Performance of forest management committees in Cross River state, Nigeria. *Outlook on Agriculture*, 39(4), 299–304. <https://doi.org/10.5367/oa.2010.0020>
- Ranjith, M. (2020). To Examine the Potential and Scope of Ecotourism in Kerala with a Special Focus on Tourists to Ecotourism Destinations in Trivandrum. *J. Tourism Hospit*, 9(433), 269–2167. <https://doi.org/10.35248/2167-0269.20.9.433>
- Rao, A., & Saksena, S. (2021). Wildlife tourism and local communities: Evidence from India. *Annals of Tourism Research Empirical Insights*, 2(1), 100016. <https://doi.org/10.1016/j.annale.2021.100016>
- Rijal, S., Techato, K., Gyawali, S., Stork, N., Dangal, M. R., & Sinutok, S. (2021). Forest Cover Change and Ecosystem Services: A Case Study of Community Forest in Mechinagar and Buddhahanti Landscape (MBL), Nepal. *Environmental Management*, 67(5), 963–973. <https://doi.org/10.1007/s00267-021-01430-9>

- Soman, D., & Anitha, V. (2020). Community dependence on the natural resources of Parambikulam Tiger Reserve, Kerala, India. *Trees, Forests and People*, 2(July), 100014. <https://doi.org/10.1016/j.tfp.2020.100014>
- Sreerekha, M. (2020). Ecology and Economy: A Case Study on Thenmala Ecotourism in Kerala , India. 8(6), 351–354. <https://doi.org/10.12691/aees-8-6-4>

