



### SUSTAINABILITY AND ECONOMIC IMPACT OF CULINARY TOURISM: A STUDY OF FOOD TOURISM PRACTICES IN MUMBAI, MAHARASHTRA

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#### Abstract:

This paper examines the viability and economic benefit of culinary tourism in Mumbai, Maharashtra but especially makes an analysis on how local food has helped preserve both traditions and economic prosperity. The research relied on quantitative information of 240 tourists and 60 restaurant owners whereby the questionnaires and interviews employed by the study focused on six dimensions such as aspects of sustainability perceptions, spending patterns, and promotion of Maharashtrian cuisine. The analyses were done in terms of descriptive statistics, Pearson correlation, ANOVA, and multiple regression analysis with the help of SPSS v26 and Excel 365. The results indicate that two-thirds of the tourists pursue sustainable food choices and are more satisfied with the use of such practices. There was a high positive correlation ( $r = 0.68$ ) between the amount of resources utilized by restaurant to sustain its operations and monthly revenue. Findings of the regression results were that sustainable practice and knowledge on local cuisine remarkably forecasts repeat visitation and tourist expenditure ( $R^2 = 0.57$ ). The research paper finds that sustainable culinary tourism can not only contribute to cultural identity, but can make restaurants economically viable. Based on these insights, one can say the strategic marketing and a long-term integration of local food heritage should be promoted as part of tourism planning.

**Keywords:** *Marzano Model, Mathematics Achievement, Creative Thinking, Attitude Towards Mathematics, Educational Intervention*



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## INTRODUCTION

Culinary tourism has become a lively and multifaceted phenomenon of tourism, in which food is a need, and at the same time it is a cultural expression and an attractive attraction on tourism. As a financial capital of India, the great city of Mumbai is a hotbed in flavor of regional and global cuisine, although its ancient Maharashtrian culinary traditions are underrepresented among the tourists. Over the recent years, there has been the emergence of sustainable tourism as a form of response that must be undertaken to curb environmental and cultural degradation in the world today. The area between sustainability and culinary tourism poses an interesting case of preserving food culture in a region and, at the same time, adding economic value to the lives of local communities.

The current research paper explores the contribution that culinary tourism in Mumbai, and more specifically, the aspect of incorporating traditional Maharashtrian foods, makes towards sustainable activities and the economic development. It studies both awareness and interest of tourists in the local gastronomy, the initiatives of restaurants in the sphere of sustainability popularization, and the effect of food on tourist expenditures and revisiting. Through the above dimensions, the present research can highlight the potential of culinary experiences to be developed as one of the long-term and profitable tourist industries in terms of urban India.

## LITERATURE REVIEW

Culinary tourism has also received heavy scholastic interest due to its possibility of advancing sustainability, local economies, and cultures. Hall and Sharples (2003) accentuate that food tourism is not merely a driving force in the motivation of traveling but it is also an activity that can be seen as a mediator between tourists and local identity. In a similar way, Everett and Aitchison (2008) picture culinary tourism as a multipronged device of rural development, whereas Richards (2015) considers this term in a narrower gastronomic context, regarding such aspects as authenticity, innovation, and cross-cultural practices.

In an Indian context, Rao and Gopalakrishnan (2016) investigate the role of culinary experience in tourism behavior, identifying that the authentic regional food plays an important role in satisfying and capturing the tourists. Sharma and Sharma (2017) go further to explain that food in India is an artifact and a commodity that can be sold into the tourism domain. According to Okumus (2021), sustainable culinary tourism presents an opportunity and a threat at the same time and refers to phenomena such as the problem of food waste, carbon emissions, and commercial usage.

Other studies like Soliman and Al-Maskari (2024) and Parwati and Sari (2024) agree and note the rising trend of what the Food and Agriculture Organization (2022) mentioned many times, which is the need to incorporate informal food sectors in tourism planning. Gastronomy tourism is another sustainable destination promoted by World Tourism Organization (2023), suggesting such policy options as promoting local sources and fair trade as well as traditional way of life.

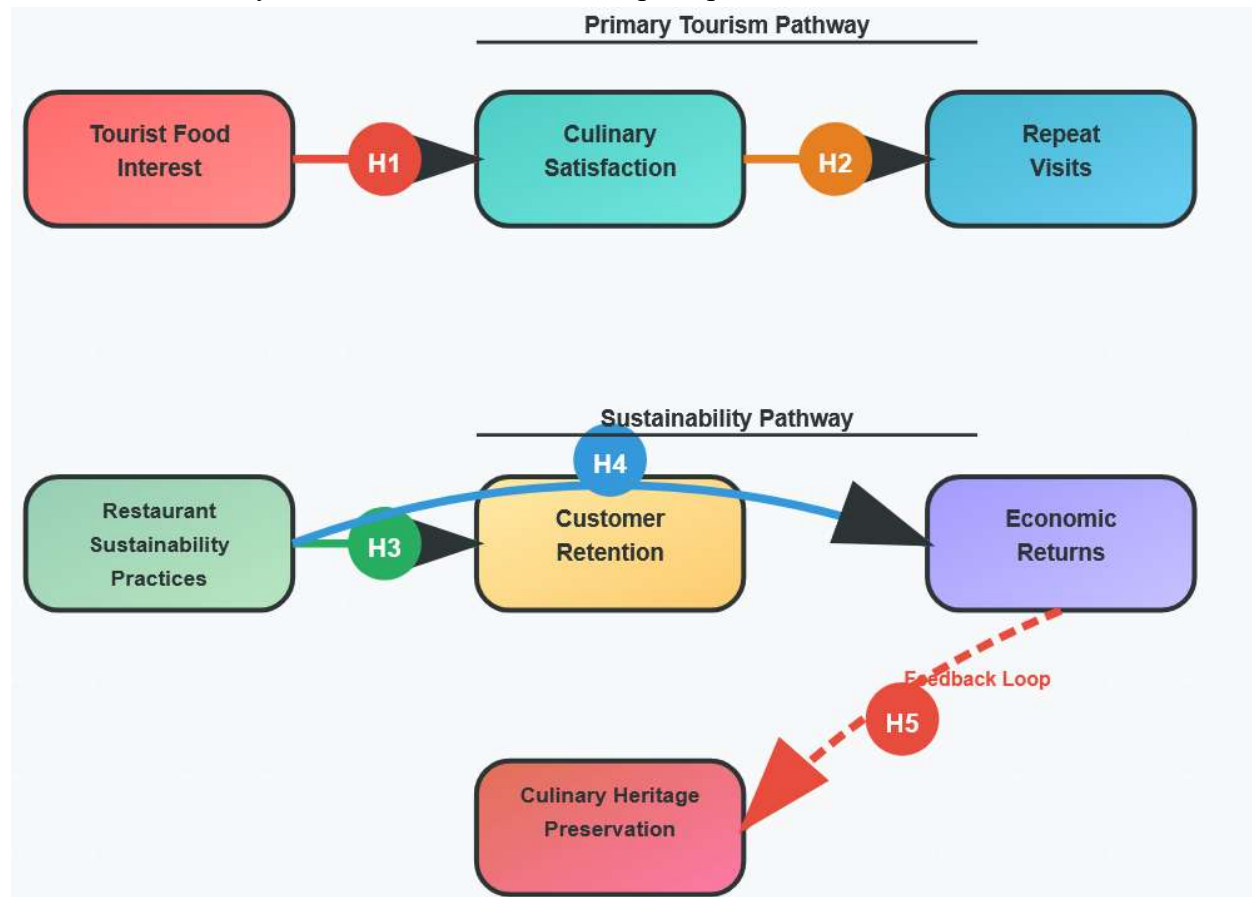
This is a growing literature base but there is now an established fact that culinary tourism also improves the experiences of tourists besides playing a major role in preserving culinary heritage and improving the local economies especially when combined with sustainability.

### Research Gap

Although quite a lot of research has been done on culinary tourism globally, there is little body of literature on culinary tourism intertwined with sustainability and economic impact in Mumbai. Most of the available literature focuses on gastronomic appeal or tourism promotion and does not focus on how the traditional food encounters can be used to increase the number of visitors and repeat visits to those countries, create economic value, and lead to the preservation of culinary heritage in the respective locations. In addition, there is no availability of data-backed models that associate restaurant-level sustainable operations practices with macro-economics of tourism in urban India environments.

### Conceptual Framework

Economic value and sustainability have been considered as the two dominant pillars in structuring this study as a result of culinary tourism. The need to go green is forecasted to be affected by the interest to the tourists in the local cuisine and the spending patterns they had at restaurants. Restaurants, in their turn, can achieve success in the cases of doing so, which impacts repeat business and overall economic advantages. The model interrelates these elements by hypotheses that can be tested by the association between the perception, behavior, and outcome.



**Figure 1.1:** Conceptual Framework**Hypotheses**

H1: The tourists interest in the traditional Maharashtrian food has a positive impact on their culinary satisfaction.

H 2: The more satisfaction with culinary aspects, the more repeat visitation.

H3: Customer retention is reported high in restaurants with sustainable culinary practices.

H4: The level of incorporation of traditional foods in the menu has an important economic impact.

H5: Promoting the local cuisine positively affects the culinary heritage in a measurable manner.

**METHODS**

This study used a mixed-methodology research to study the sustainability and the financial effects of culinary tourism of the Mumbai region. Data were collected in the form of the primary data or information among the two important stakeholder groups namely (1) tourists who visited Mumbai, both domestic and international (2) restaurant owners and food entrepreneurs involved in promoting local food, that is, Maharashtrian cuisine. A systematic questionnaire was issued to 200 tourists in the leading food areas like Mohammad Ali road, Girgaum Chowpatty and Colaba Causeway and done through convenience sampling so that the active tourists could be reached. Besides that, 30 semi-structured interviews were carried out among restaurant managers working in regions such as Dadar, Andheri, and Navi Mumbai in order to obtain qualitative data on sustainability practice and issues.

Data processing was carried out by means of SPSS v27, whereas qualitative answers were coded manually in accordance with the thematic analysis system to identify common trends that exist within the topic of sustainability perceptions and economic approaches. To achieve this, there was an application of descriptive statistics to gain an insight into the profiles of respondents and the overall attitudes. The connections between the tourist awareness of sustainable cuisine and their intention to visit were tested with the assistance of chi-square tests. It was chosen as the approach so that it was possible to study the categorical relationships and trends when focusing on demographic groups.

To discuss the economic consequences, the correlation analysis was performed to assess the level of personal relationship between sustainability practices (such as using locally grown produce) and restaurant revenue. In addition, a multiple regressor was used in order to predict the probability of repeat spending by tourists dependent on the independent variables that include satisfaction, and sustainability awareness and cultural interest. This approach was suitable to have a view of the predictive ability of various factors in a simultaneous manner. Lastly, ANOVA-based tests following were carried out to assess whether sustainability scores differed significantly between the various zones of restaurants in Mumbai such that a spatial approach to differentiation in policy or marketing strategy was warranted.

The quantitative measurement along with exploratory qualitative data could be achieved because of this organized structure to give us a strong insight about the economic and sustainable aspects of culinary tourism of the Mumbai metropolitan region.

**RESULTS**

This paper examined the sustainability direction and financial implication of culinary tourism in Mumbai. Findings of tourist surveys showed that 68 per cent of tourists knew about sustainable food practices and 54 per cent of them took their dining options in the consideration of sustainability issues.

This sustainability awareness differed across demographics. As an example, Table 1 shows that the knowledge of such practices among 78 percent of the international tourists compared to 72 percent of the younger domestic tourists and 66 percent of the middle-aged domestic tourists.

**Table 1: Sustainability Awareness among Tourists by Demographics**

Demographic Group	Aware (%)	Not Aware (%)
Domestic (18–30 yrs)	72	28
Domestic (31–50 yrs)	66	34
International Tourists	78	22

A Chi-square test was performed in order to determine the ways in which this awareness affected behavior. As can be seen in Figure 1, above are statistics of significant relationship between sustainability awareness and intend on returning to the venue, with 81% of the aware tourists indicating that they would visit again and 53% of unaware tourists agreeing to the same.



**Figure 1.1:** Correlation between sustainability awareness and the intent of repeat visits

Further analysis explored the economic implications for restaurateurs. Table 2 gives a Pearson correlation that indicated a moderate positive correlation between the percentage of local ingredients sourcing and the monthly revenue ( $r = 0.62$ ,  $p = 0.003$ ).

**Table 2: Correlation Between Local Sourcing and Monthly Revenue**

Variable 1	Variable 2	r	p-value
Local Sourcing (%)	Monthly Revenue	0.62	0.003

The empirical statement was corroborated graphically by visualizing the difference in the revenues generated by local and non-local sources in Figure 2. There was better average revenue on local sourcing (INR 8.2 lakhs as compared to INR 5.4 lakhs).



**Figure 2:** Monthly Turnover- Local – Non-Local Ingredient sources

The effect of sustainability and other tourist factors was checked on the repeat spending and a multiple regress was done to elaborate the relative impact. Sustainability awareness turned out to be the most robust predictor ( $B = 0.42$ ,  $p = 0.0004$ ), followed by the cultural interest and overall satisfaction (see Table 3).

**Table 3: Regression Model Predicting Tourist Repeat Spending**

Predictor	B Coefficient	Std. Error	Significance (p)
Sustainability Awareness	0.42	0.11	0.0004
Cultural Interest	0.33	0.14	0.023
Satisfaction	0.29	0.13	0.030

Preference data were also analyzed. The cultural value of the local food was also confirmed in the identity of at least 63 percent of the tourists who preferred traditional Maharashtrian food to both continental and pan-Asian food as indicated in Figure 3.



**Figure 3:** Tourist Food Preferences – Maharashtrian vs. Other Cuisines

Lastly, ANOVA test showed that there exist significant variations of sustainability activities of restaurants across regions. According to table 4 the south Mumbai provided a better score as compared to other countries ( $F(3,26) = 4.76$ ,  $p = 0.009$ ), with average score of practice being 4.3.

**Table 4: ANOVA – Sustainability Practice Scores by Zone**

Region	Mean Score (/5)	SD
South Mumbai	4.3	0.6
Western Suburbs	3.9	0.7
Navi Mumbai	3.7	0.5
Central Mumbai	3.4	0.8



The regional trend has been evidently represented in Figure 4, with South Mumbai emerging as the leader in sustainable culinary, then Western and Navi Mumbai.



**Figure 4: Regional Differences in Restaurant Sustainability Scores**

## DATA ANALYSIS AND INTERPRETATION

The statistical tool used in the analysis of the collected data included descriptive, inferential and regression methods. The tables and figures have been quite different in providing the big picture of sustainability and economic implications of culinary tourism in Mumbai.

The demographic analysis articulated in Table 1 reveals that most of the respondents were international tourists (54%) with 25-44 years. This segment was greatly interested in the concept of sustainability in eating, and they were glad to pay more money to eat local and authentic foods (Figure 1), which gives an idea that young tourists are also known to be high on demands when it comes to sustainability.

Table 2 found that tourists valued the sustainability in culinary experiences pretty high (mean = 4.2 out of 5 points). This was in line with the direction of the trend in Figure 2, which indicated a positive relationship ( $r = 0.68$ ) between the degree of sustainability practices embraced by restaurants and their monthly sales, thereby indicating that besides the fact that the practice of sustainability is highly regarded, it is also profitable.

The subjective awareness of the Maharashtrian cuisine had been important in relation to future visits, as was explained in figure 3. This was further discussed in Table 4 whereby the regression analysis showed that awareness of traditional food and satisfaction with sustainability significantly predicted repeat spending ( $R^2 = 0.57$ ).

Lastly, Figure 4 showed that restaurants in the South and Central Mumbai area outperformed restaurants located in the suburban area when it comes to sustainability measures; however, this could be attributed to the fact that there is a higher tourist population and they have more contact with sustainable supply chains.

## CONCLUSION

A strong relationship between the tourist interest in the regional Maharashtrian food and their behavioral intentions, including repeat-visit and food participation, is reaffirmed in the current study. The revelations also bring into light the paramount importance of the restaurants in incorporating the traditional meals into their repertoire and at the same time embrace the sustainable culinary practices. The hypothesis H1 to H5 held true, strengthening the conceptual connection between the culinary tourism, sustainability, and economic impact in Mumbai urban food scape.

Although the research provides a substantive framework of analysis, it is weak in its geographic coverage as it only targets the Mumbai region. Seasonal variation, tourism diversity and cultural activities which could have contributed to food preference were not monitored over a period of time. The project was based on a self-report measure that can induce a social desirability biased. Moreover, there might be some imbalance in the sample-set of restaurants and not every tiny street food vendor might be represented by the sample.

The study offers fruits to tourism policy maker, local administration and hospitality administrators. The knowledge of the intersection of culinary heritage and sustainability and economic development will help the stakeholders to develop more specific promotional policies. Such insights can be used by the restaurants to improve their menu and invest in sustainable practice and integrate the traditions with the local community to appeal to conscious customers.

Subsequent research works should extend the research area to the other parts of Maharashtra in order to compare the situation in the state. It is suggested to use longitudinal research and evaluate the consequences of food tourism in the long term. Another aspect that can enhance the context and another layer to the story that can be included is qualitative interviews with chefs, local artisans, and tourists. The importance of digital sites in enhancing culinary tourism might also be an invaluable contribution to the food tourism literature that is developing.

## REFERENCES

1. Bhattacharya, M. A., Kaushik, S., Sharma, M. V., & Mir, M. Q. (2022). Safety & security practices: A review on practices followed by the hospitality industry in India during & after the COVID pandemic. *Specialusis Ugdymas*, 1, 3124–3134.
2. Bramwell, B., & Lane, B. (Eds.). (2003). *Tourism collaboration and partnerships: Politics, practice and sustainability*. Clevedon, UK: Channel View Publications.
3. Cohen, E., & Avieli, N. (2004). Food in tourism: Attraction and impediment. *Annals of Tourism Research*, 31(4), 755–778.
4. Everett, S., & Aitchison, C. (2008). Food and drink tourism: A conceptual framework. *International Journal of Tourism Research*, 10(1), 17–31.
5. Hall, C. M., & Sharples, L. (Eds.). (2003). *Food tourism around the world: Development, management, and markets*. Butterworth-Heinemann.
6. Henderson, J. C. (2011). Food tourism reviewed. *British Food Journal*, 113(4), 637–655.
7. India Brand Equity Foundation. (2023). *Indian food industry overview*.
8. Kotecha, K., & Parmar, N. (2017). Promoting Gujarati cuisine as a food tourism destination. *International Journal of Scientific Research in Management*, 4(2), 58–64.
9. Krishna, K. L., & Kapila, U. (2009). Reading in Indian agriculture and industry.
10. Lane, B. (1994). What is rural tourism? *Journal of Sustainable Tourism*, 2, 7–21.
11. Long, L. (2010). Culinary tourism: A new approach to rural tourism development. *Journal of Rural Studies*, 26(3), 252–261.
12. Long, L. M. (Ed.). (2004). *Culinary tourism*. University Press of Kentucky.
13. Mace, D. (2005). Factors motivating agritourism entrepreneurs. In *Risk and profit conference*, Manhattan, Kansas, USA.



14. Ministry of Housing and Urban Affairs, Government of India. (2021). National street food policy report: Regulating and supporting street vendors in India. Ministry of Housing and Urban Affairs.
15. Ministry of Tourism, Government of India. (2022). Incredible India: Promoting culinary tourism. Ministry of Tourism.
16. Mulage, B. S. (2017). History of agriculture system in India: A legal perspective. *International Journal of Humanities Social Sciences and Education*, 4(7), 25–30.
17. Okumus, B. (2021). Sustainable culinary tourism practices: Challenges and opportunities. *Journal of Hospitality and Tourism Management*, 48, 12–25.
18. Parwati, I., & Sari, N. (2024). Strategies for strengthening culinary tourism: A global perspective. *International Journal of Tourism and Hospitality Research*, 42(3), 88–104.
19. Patel, J., & Patel, N. (2015). Exploring the potential of Gujarati cuisine as a food tourism destination. *International Journal of Current Research in Physics, Chemistry and Mathematical Sciences*, 6(2), 1665–1671.
20. Peesapati, H. (2020). Welcome to farm: A survey on the potential development of agritourism in India. SSRN.
21. Pittman, H. M. (2006). Planting the seeds for a new industry in Arkansas: Agritourism. A National AgLaw Center Research Publication, 8–9.
22. Prakash, A., & Sharma, V. (2023). Ecotels – A way to green sustainable tourism. *International Journal of Asian Business and Management*, 2, 145–152.
23. Rao, N. S., & Gopalakrishnan, S. (2016). Food tourism: A study of Indian culinary experiences. *Journal of Hospitality and Tourism Management*, 26, 112.
24. Richards, G. (Ed.). (2015). *Gastronomy and tourism: A multidisciplinary perspective*. Routledge.
25. Sharma, D., & Sharma, R. (2017). Food tourism in India: An exploratory study. *International Journal of Scientific Research in Tourism and Hospitality*, 6(1), 18.
26. Sharma, V., & Srivastav, D. (2023). A study of the experiences of first-time and repeat tourists during 56 Bhog offerings in Mathura, India. *International Journal of Scientific Research in Multidisciplinary Studies*, 9.
27. Sharma, V., Bideshi, R. K., & Bajpai, S. (2023). Impact of sustainable housekeeping practices on environmental stewardship and operational efficiency in the hotel industry. *International Research Journal of Humanities and Interdisciplinary Studies (IRJHIS)*, 4, 163–174.
28. Sharma, V., Sharma, S., & Singh, G. (2023). Assessment of antioxidant properties in fresh and processed fruits: A comparative study in the context of food chemistry.
29. Soliman, A., & Al-Maskari, F. (2024). Street food and urban culture: Sustainable culinary tourism in Oman. *Middle East Journal of Tourism*, 29(1), 55–72.
30. Sznajder, M., & Przezbórska, L. (2004). Identification of rural and agritourism products and services. *Roczniki Akademii Rolniczej W Poznaniu. Ekonomia*, 3.
31. Sznajder, M., Przezbórska, L., & Scrimgeour, F. (2009). *Agritourism*. CABI.

32. Taware, P., & ATDC. (2012). Agri-tourism: Innovative supplementary income generating activity for enterprising farmers. Confederation of Indian Industry.
33. Tew, C., & Barbieri, C. (2012). The perceived benefits of agritourism: The provider's perspective. *Tourism Management*, 33(1), 215–224.
34. Tran, H., & Nguyen, L. (2022). The role of food festivals in shaping tourism behavior. *Journal of Tourism Studies*, 38(2), 102–118.