



Cultural Tourism and Its Socio-Economic Impact: A Case Study of Gorakhpur Division

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Abstract

This study follows a quantitative cross-sectional design to examine the effects of tourism on local communities in Gorakhpur Division. Data were collected from residents through a structured survey covering employment opportunities, household income, infrastructure improvement, pollution, habitat degradation and congestion. Descriptive statistics, correlation analysis and regression were used to examine the relationships between these factors and overall community satisfaction. The results show that improved infrastructure, wider employment opportunities and higher household income are associated with more positive views of tourism. Pollution, congestion and habitat degradation show the opposite relationship and reduce residents' satisfaction. These effects do not occur separately. Economic and infrastructural benefits tend to reinforce one another, while environmental problems are also closely connected. Tourism management in the region should therefore consider both sides of this relationship. Employment and local economic activity remain important reasons for supporting tourism development. However, congestion, pollution, and pressure on local resources may continue to weaken their effect. The results indicate that tourism planning should not focus only on visitor growth and income generation. Attention must also focus on the environmental and social conditions in which tourism develops, particularly where these conditions directly affect the resident community.

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1. Introduction

Travel motivated by culture is not a recent development. Pilgrimage and the Grand Tour had already taken travellers to sacred places, historic towns and works of art. What changed with the expansion of leisure travel was the recognition of these journeys as cultural tourism. The definition offered by the World Tourism Organisation (1985) was relatively narrow, covering study tours, festivals, pilgrimages and visits to monuments. Since then, cultural tourism has moved away from a concentration on museums, monuments and historic buildings towards a much wider field of cultural practices. The changing nature of cultural tourism has also focused attention on the role of intangible heritage. Food, crafts, rituals, festivals, music, and everyday ways of life increasingly form part of a destination's cultural offering. Contemporary cultural tourism therefore relates not only to sites and monuments, but also to living practices and how visitors experience them. A monument or religious site is therefore encountered not in isolation, but through the streets, markets, beliefs and social relations of the destination (Richards, 2001). The growth of tourism may also create opportunities for local guides, artisans, traders, farmers and accommodation providers, although the extent of these benefits depends on how far visitor expenditure remains within the local economy.

In some destinations, increased visitor demand also provides an incentive for investment in transport and other public services. However, these benefits depend on local ownership and the extent to which tourism enterprises connect with the wider economy.

The effects of tourism are rarely uniform. Revenue creation, employment and cultural engagement may occur alongside environmental degradation, commodification and social disruption (Bergström and Larsson, 2022). Where enterprises depend on external investors, labour or supplies, much of the income may leave the destination. Residents may then receive limited economic benefit while facing congestion, rising prices, waste generation and pressure on water, roads and public spaces. Cultural traditions may gain recognition through tourism, yet repeated commercial presentation can also alter their timing, form or social meaning. Residents therefore judge tourism through their experiences. Researchers have widely discussed these relationships and their costs. Although these relationships have been widely discussed, evidence from emerging destinations in Gorakhpur Division remains limited. The present study examines residents' perceptions of the economic, infrastructural, socio-cultural and environmental effects of tourism and identifies the factors associated with their overall satisfaction with tourism development.

3. Research Methodology

3.1. Study Design

A cross-sectional survey design was used for the study. The survey was conducted on residents' perceptions of the socio-economic effects of tourism in Gorakhpur Division at one point in time. The final survey included 363 residents drawn from the four districts of Gorakhpur Division: Gorakhpur, Kushinagar, Maharajganj and Deoria. Within these district groups, respondents were selected purposively. The sampling method may therefore be described as stratified purposive sampling.

The sample was not limited to people directly engaged in tourism. Men and women between 18 and 70 years of age were included, together with traders, business owners, farmers, salaried employees, students and individuals involved in tourism-related work. Some respondents were directly connected with tourism through employment or business. Others experienced tourism mainly through changes in public services, prices, congestion or the local environment. Their inclusion was important because all sections of the community experience tourism differently.

Differences in income and education were also considered. Monthly household income ranged from below ₹10,000 to above ₹50,000, while educational attainment extended from no formal schooling to postgraduate education. No attempt was made to confine the survey to one income or educational group. The purpose was to obtain responses from residents occupying different positions within the local community and having different levels of connection with tourism.

3.2. Data Collection

Primary data for the study were collected through a structured questionnaire. Most of the questions were closed-ended. A five-point Likert scale was used for the statements related to residents' perceptions, where 1 indicated Strongly Disagree and 5 indicated Strongly Agree. The questions were arranged according to the main effects of tourism that were considered in the study.

The economic part of the questionnaire included employment opportunities, household income and the growth of local businesses. Respondents were asked, for example, whether tourism had created additional employment for local people. Other questions concerned income received from tourism and the development of business activities linked with visitors.

Questions on infrastructure referred to roads, transport, electricity, water supply, internet services and public facilities. These questions were included to record residents' views on the changes in infrastructure associated with the movement of tourists.

The socio-cultural part dealt with local traditions, cultural practices and community life. Questions covered the preservation of traditions as well as their possible change through tourism. They also included cultural commodification, community events, and cultural awareness among young people.

Environmental questions referred to crowding, traffic congestion, noise, pollution and habitat degradation. These were considered some of the problems connected with an increase in tourism activities.

Respondents were also asked about their overall satisfaction with tourism development. Questions were also included on whether the benefits of tourism outweighed its negative effects and whether respondents supported further tourism development.

It was pre-tested before the main survey for clarity. During the survey, all key questions were completed by the 363 respondents. The final dataset therefore consisted of 363 complete responses.

3.3. Sample Size

Cochran's formula was used as a reference for determining the survey sample. The formula is generally applied where the population is large, and the expected population proportion is not known:

$$n_0 = \frac{Z^2 pq}{e^2}$$

Where:

Z is the z-value corresponding to the desired confidence level (for example, $Z \approx 1.96$ for 95% confidence).

p is the estimated proportion of the population possessing a given attribute (often conservatively set to 0.5 if there is no prior data to maximise variability).

q = 1 – p, the complement proportion.

e is the tolerable margin of error (the desired level of precision) in decimal form (e.g., 0.05 for $\pm 5\%$).

$$n_0 = \frac{(1.96)^2 \times (0.5) \times (0.5)}{(0.05)^2} \approx 384.16 (\pm 5\%)$$

The calculation indicated a sample of approximately 384 respondents. During the field survey, complete responses were obtained from 363 residents. The achieved sample was therefore slightly lower than the value obtained from Cochran's formula, but it remained close to the initial requirement.

Cochran's formula was used mainly for sample planning. The final survey included 363 respondents from the four districts. Respondents were selected within the district groups using purposive criteria; the sample was therefore not a simple random sample. Cochran's value was used only as an indication of the number of responses required. The achieved sample was retained because it covered Gorakhpur, Kushinagar, Maharajganj and Deoria and included residents from different occupational, educational and income groups.

3.4. Analytical Techniques

The survey data were first arranged and coded for analysis. Descriptive statistics were calculated for each variable included in the questionnaire. Frequencies and percentages were used for categorical responses. Mean and standard deviation were used for the Likert-scale items. In the case of employment, the mean was 4.12, and the standard deviation was 1.02. More than 52 per cent of the responses fell in category 5. The same procedure was followed for the economic, infrastructural, socio-cultural and environmental variables. Tables and figures were prepared to show the distribution of responses.

$$\bar{X} = \Sigma X_i / N$$

where,

$\bar{X}$ is the arithmetic mean,

X_i represents each individual observed value,

N = the total number of observations

The next stage involved correlation analysis. Pearson's product-moment correlation coefficient was calculated for selected pairs of variables. These included household income and overall satisfaction, employment and satisfaction, infrastructure and satisfaction, and pollution and satisfaction. The coefficient was used to show the direction and strength of the linear relationship between two variables.

$$r = \Sigma[(X_i - \bar{X})(Y_i - \bar{Y})] / \sqrt{[\Sigma(X_i - \bar{X})^2 \times \Sigma(Y_i - \bar{Y})^2]}$$

r = Pearson's correlation coefficient

X_i = observed value of variable X

Y_i = observed value of variable Y

$\bar{X}$ = mean of variable X

$\bar{Y}$ = mean of variable Y

N = number of paired observations

Positive coefficients were obtained, indicating that higher economic benefit scores were associated with higher satisfaction scores. Negative coefficients were found when higher environmental pressure scores were associated with lower satisfaction. The statistical significance of the coefficients was examined mainly at the ($p < 0.05$ level).

A multiple linear regression model was then estimated by the Ordinary Least Squares method. Overall satisfaction was taken as the dependent variable. Employment, household income, infrastructure and the selected social and environmental variables were entered as explanatory variables. The general form of the model was:

$$Y_i = \beta_0 + \beta_1 X_{1i} + \beta_2 X_{2i} + \beta_3 X_{3i} + \beta_4 X_{4i} + \varepsilon_i$$

Y_i = overall tourism satisfaction of respondent i

β_0 = regression intercept or constant

$\beta_1, \beta_2, \beta_3, \beta_4$ = regression coefficients

X_1 = employment opportunities

X_2 = household income benefits

X_3 = infrastructure improvement

X_4 = pollution or environmental pressure

ε_i = random error term

The coefficients examined each variable's relationship with overall satisfaction after including the other variables in the model. A positive coefficient indicated that a higher value of the explanatory variable was associated with higher satisfaction. A negative coefficient indicated the opposite relationship. The model was estimated for the complete sample of 363 respondents. The significance of the coefficients was examined through t-tests at the ($p < 0.05$), ($p < 0.01$) and ($p < 0.001$) levels.

Diagnostic tests were applied after the regression model was estimated. The regression estimates were reported with heteroskedasticity-consistent standard errors. The Breusch–Pagan test did not indicate statistically significant heteroskedasticity in the regression model.

$$LM = nR^2$$

LM = Breusch–Pagan test statistic

n = total number of observations

R^2 = auxiliary regression ka coefficient of determination

Multicollinearity was examined through the variance inflation factor calculated for each explanatory variable. All VIF values remained below 5, with the average value being approximately 1.5. The predictors were therefore retained in the model. Residual and partial regression plots were also examined. No marked departure from linearity appeared in these plots. The results of the diagnostic tests were considered together with the regression coefficients during interpretation.

$$VIF_i = 1 / (1 - R_i^2)$$

VIF_i = Variance Inflation Factor for the i -th independent variable

R_i^2 = Coefficient of determination obtained by regressing the i -th independent variable on all the other independent variables

4. Result

4.1. Demographic Profile

Nearly half of survey respondents are young adults aged 18–30, with this group forming the largest share (48%) of the

sample. Adults aged 31–50 comprise about 35%, while those 51–70 make up 15%. Only 2% are under 18. This age distribution shows that feedback is primarily from younger and working-age individuals, who are most engaged in local economic and community activities. Understanding this youthful skew is key, as perceptions of tourism’s impacts may vary across age groups.

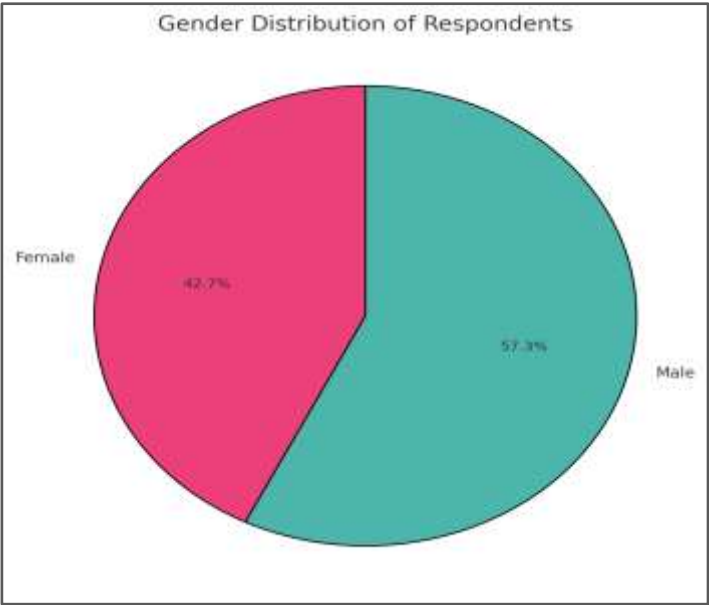


Figure 1: Gender distribution of Respondents

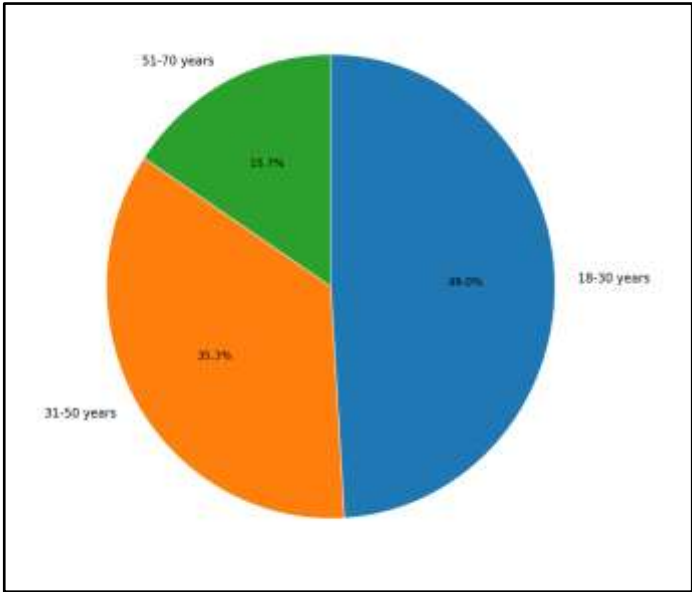


Figure 2: Age distribution of Respondents

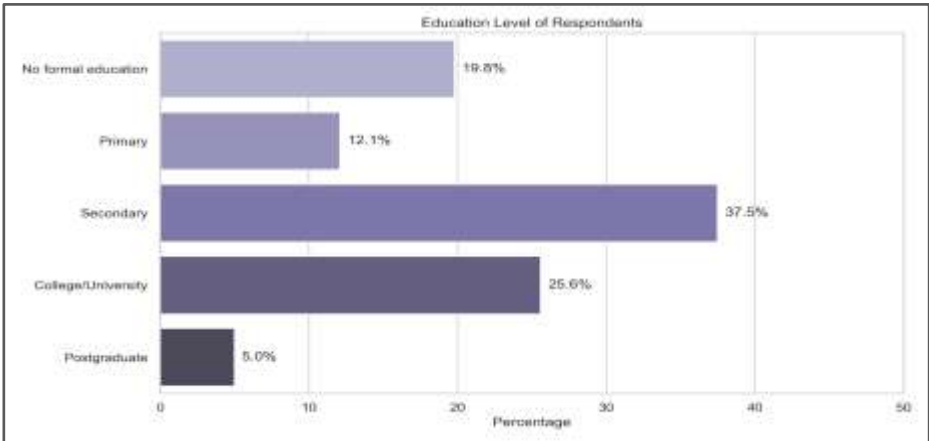


Figure 3: Education of Respondents

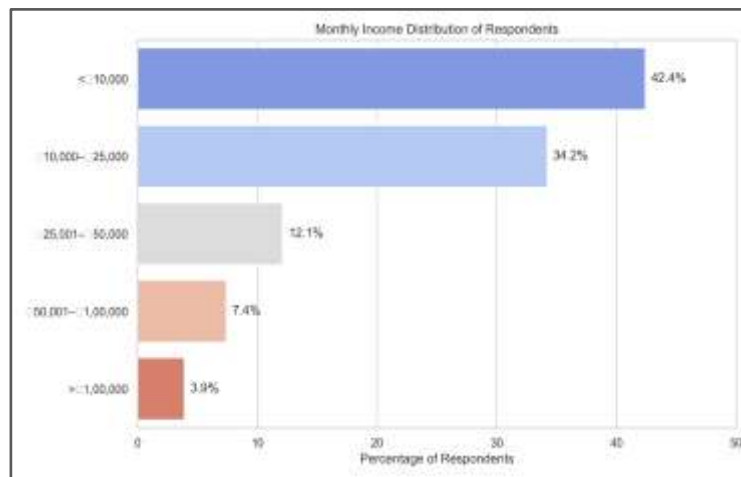


Figure 4 - Monthly Income Distribution of Respondents

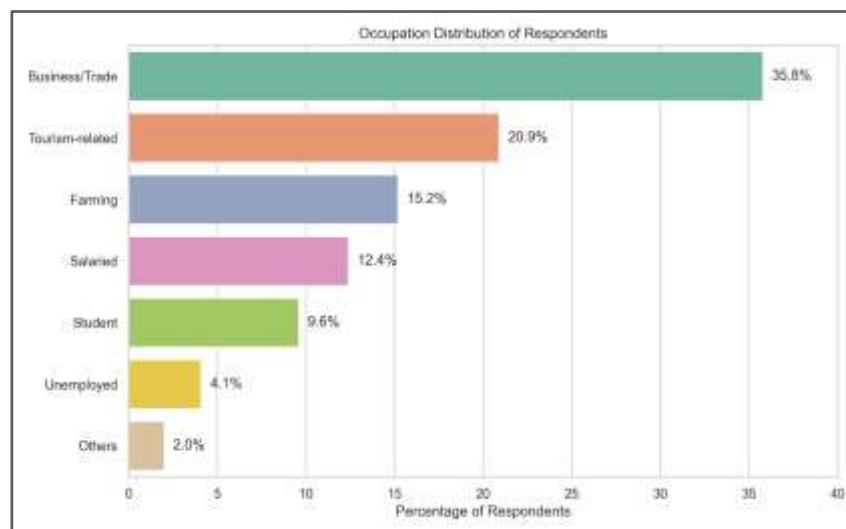


Figure 5 - Occupation of Respondents

4.4.2 - Economic Impact

Residents report significant economic benefits from tourism. All economic factors scored high on a 5-point scale – especially local business growth and job opportunities (including for women), which were among the top-rated benefits.

Local Employment Opportunities – ~4.1/5: Most residents agree that tourism has created additional jobs for local people. This high score (over four on average) shows that employment generation is a widely felt benefit. New hotels, restaurants, and tourist services are creating local staff, helping reduce unemployment or underemployment in the area.

Employment for Women – ~4.0/5: There is also a strong positive perception that tourism creates jobs for women in the community. This suggests that tourism development may contribute to greater gender inclusion in the workforce.

Business Growth – ~4.2/5: The growth of local businesses is the highest-rated economic benefit, with an average score of roughly 4.2 out of 5. This indicates that, more than anything, people have noticed local shops, restaurants, hotels, and other businesses thriving thanks to tourist spending. Over half of respondents gave this a full 5/5 rating, reflecting widespread observation of new businesses opening and existing businesses expanding. Tourism brings more customers and revenue to the area, stimulating entrepreneurship and trade.

Income Increase for Residents – ~4.0/5: Many residents report higher personal or family incomes due to tourism, with an average rating of around 4. This implies that jobs are more plentiful, and wages or earnings are rising in response to the influx of tourists. For instance, farmers might sell their produce to hotels, artisans might sell their crafts to visitors, or people might earn rental income from homestays, all contributing to household income growth.

Overall Economic Condition – ~3.9/5: Respondents feel that, in general, the economic condition of their community has improved with tourism (just under four on average). While this score (approximately 3.9) is slightly lower than the specific items mentioned above, it still indicates a moderately positive sentiment. It suggests that beyond individual

benefits, people perceive a broader uplift in the local economy, such as better standards of living or reduced poverty, attributable to tourism.

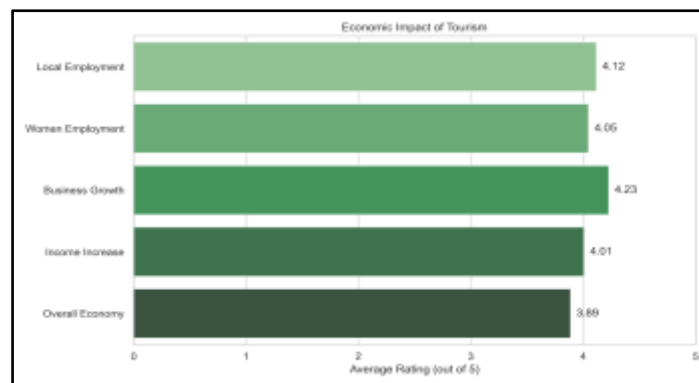


Figure 6 - Economic Impact of Tourism

4.3. Infrastructure Impact

Improvements to local infrastructure resulting from tourism are viewed positively, but somewhat less enthusiastically, than economic gains. Roads have improved moderately (with an average rating just under 4/5), and access to utilities, such as water and electricity, also shows a mild improvement (approximately 3.6/5). There is an appreciation for better infrastructure, although it is clear that there is room for further development.

Road Improvements – average ~3.8/5: People feel that roads and transport have improved with tourism. A score of 3.8 reflects a moderately positive view. Most respondents agree that roads have improved with tourism—citing new construction and better connectivity—but the rating suggests many still see room for further upgrades or more consistent quality across areas

Utility Access (Water, Electricity, etc.) – average ~3.6/5: There is a mild improvement in utilities and basic services. With an average score of 3.5–3.6, respondents feel tourism has somewhat improved basic services like electricity, water, and telecom. While many note better infrastructure, the moderate rating suggests these benefits are uneven, with some communities seeing more progress than others.

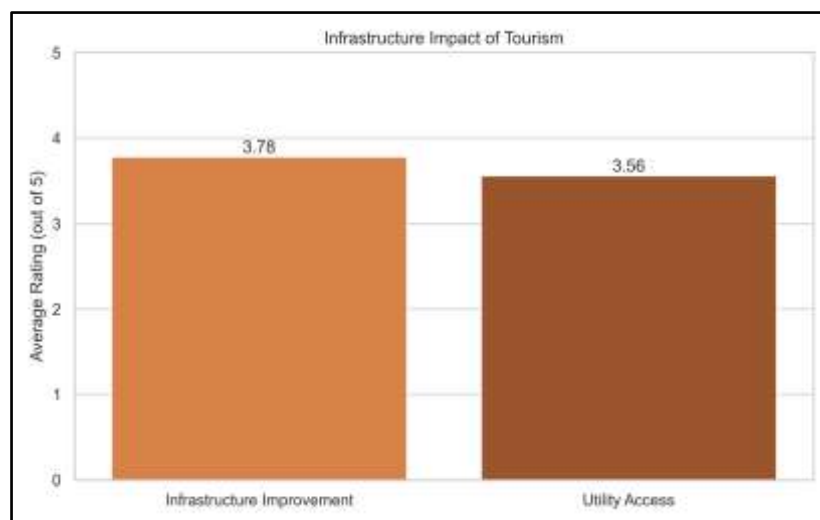


Figure 7 - Infrastructural Impact of Tourism

The community recognises that tourism has improved local infrastructure, particularly transport and utilities. However, the moderately high scores suggest that while residents value these changes, they still hope for further upgrades to fully meet local and tourist needs.

4.4. Social & Cultural Impact

Community participation reached a mean score of nearly 3.9. Tourism activities, local festivals and other events provided more occasions for residents to participate in community programmes. The responses were generally positive, although not all respondents reported the same level of participation.

The highest mean in this group was found for cultural exchange (4.1). More than half of the respondents used the highest point of the scale. Their responses mainly referred to meeting visitors and presenting local food, customs, festivals and other cultural practices.

Tradition preservation recorded a mean value of around 3.8. Tourism was viewed as useful for giving attention to local arts, festivals, historic sites and cultural practices. At the same time, the score remained below that of cultural exchange.

This value may also reflect some concern about the commercial presentation and gradual change of traditions.

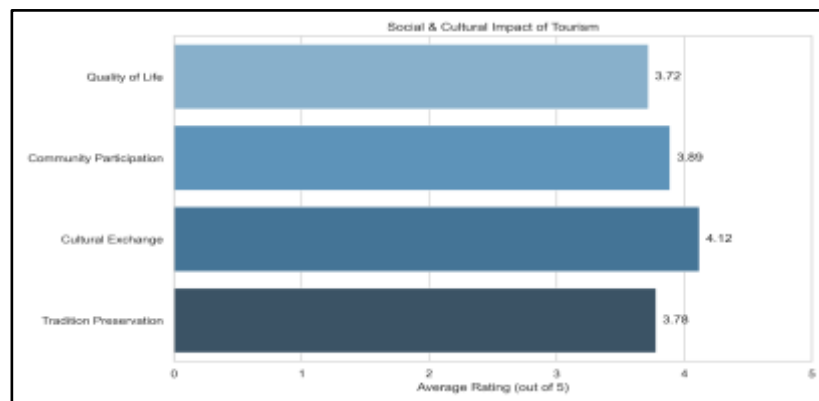


Figure 8 – Social-Cultural Impact of Tourism

In summary, tourism has had a largely positive social and cultural impact—boosting pride, community connection, and heritage preservation. Residents value the cultural exchange and enhanced cohesion, though moderate scores suggest these benefits need ongoing support to sustain traditions and quality of life.

4.5. Negative Impacts

The negative effects did not receive the same level of response. Pollution and environmental pressure recorded the highest mean value, followed by crowding and traffic. The value for rising housing costs was lower, remaining below 3. The results therefore place pollution and congestion among the more visible problems associated with tourism in the study area.

Crowding and traffic reached a mean value of 3.45. Increased movement of visitors was accompanied by traffic jams and a greater concentration of people near tourist places. Such conditions were more noticeable during festivals, holidays and other periods when the number of visitors increased. Around 28 per cent of respondents placed this effect as the highest; responses were spread across the scale. Crowding was thus recognised as a problem, although it was not reported equally across all locations or at all times.

A different result was obtained for housing costs. The mean value was approximately 2.9, the lowest among the negative effects considered in the survey. More than one-quarter of respondents marked the lowest category, whereas about 20 per cent gave a high score. Changes in housing prices were therefore not widely associated with tourism. This effect may still be present in places where accommodation facilities and tourism-related commercial activities have expanded, but it was not a major concern for most respondents.

Pollution and environmental pressure recorded a mean score of nearly 3.67. This score was the highest value among the negative variables. More than one-third of respondents considered it a serious effect. Litter, plastic waste, noise and pressure on local resources were repeatedly connected with the growth of visitor activity. These problems were more visible around heavily visited sites and during periods of large tourist gatherings.

Some responses also referred to disturbances of wildlife and local habitats. The expansion of tourism activity, movement of visitors and disposal of waste can place additional pressure on environmentally sensitive areas. Pollution was therefore not treated as an isolated problem. It appeared together with waste generation, noise, resource pressure and habitat disturbance.

The results do not show that these negative effects exceeded the benefits of tourism in the overall assessment. They do, however, indicate that environmental pressure has become a noticeable part of tourism development in the division. Waste management, traffic regulation and the protection of sensitive sites require greater attention where visitor numbers are increasing.

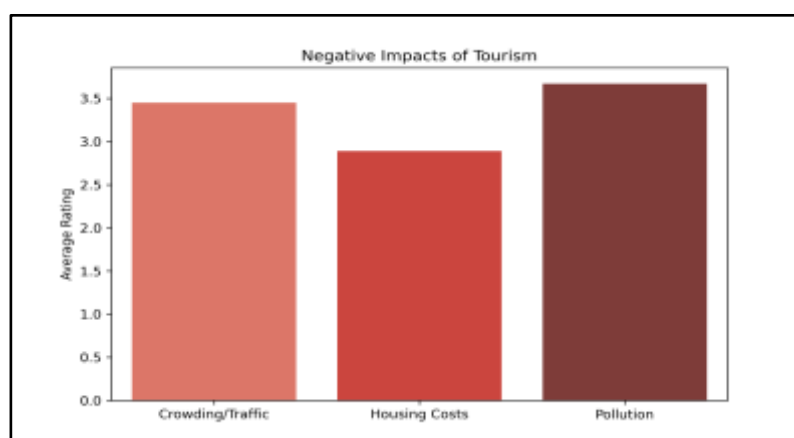


Figure 9: Negative Impact of Tourism

Overall, residents see tourism's negatives—mainly crowding and pollution—as real but manageable. Housing costs haven't surged, and most consider the downsides tolerable. Effective planning and environmental measures can help the community enjoy tourism's benefits while limiting its drawbacks.

4.6. Overall Satisfaction

Overall, most residents are satisfied with tourism's impact—about two-thirds report being satisfied or very satisfied, while only a small minority are dissatisfied. This reflects a generally positive community attitude, despite some noted challenges.

A combined majority of roughly 65% of respondents said they are either “satisfied” or “very satisfied” with tourism's overall impact. (About 38% gave the highest satisfaction rating of 5 in the data, and roughly 27% showed a 4 out of 5.) Nearly two-thirds of locals generally believe that tourism has benefited their community. They've seen benefits that outweigh the drawbacks, which leads to a favourable overall impression. Many people likely appreciate the jobs, income, and improvements that tourism has brought, resulting in this high level of satisfaction.

Approximately 19% of respondents are neutral (a 3 out of 5 on the satisfaction scale). These individuals feel the impact has been neither distinctly good nor bad. They might acknowledge some benefits but also see some negatives, landing in the middle. It's possible they haven't been personally affected much by tourism, or they think the changes have been mixed. This neutral group is essential because it could sway towards either satisfaction or dissatisfaction, depending on the right improvements (or if negative factors grow). They are undecided, watching how tourism continues to evolve.

Only around 16% expressed dissatisfaction (combining roughly 10% “dissatisfied” and 6% “very dissatisfied”). This is a relatively small minority. These residents are likely to have experienced more downsides or feel left out of the benefits. For instance, they might face noise or crowding or not see any personal economic benefit. The fact that this group is the smallest segment suggests that severe negative experiences, while present, are not widespread.

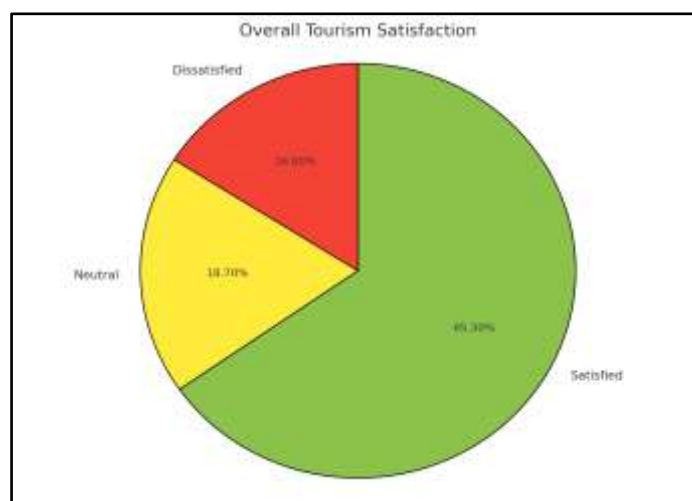


Figure 10 - Overall Satisfaction with Tourism

The pie chart shows that most residents are satisfied with tourism, with only a small portion dissatisfied. This reflects strong community support, as around 69% agree tourism's benefits outweigh its negatives. Overall, the mood is positive and hopeful, with broad backing for further responsible tourism development.

4.7. Key Drivers of Satisfaction

To understand what drives these satisfaction levels, we performed a regression analysis. In simple terms, this statistical analysis identifies the factors that have the most significant influence on overall satisfaction. The bar chart illustrates the regression coefficients (β values) for several key predictors. Infrastructure improvements had the highest positive effect, followed by economic gains such as employment and income. Pollution had a notable adverse effect on satisfaction.

Infrastructure Quality – $\beta \approx +0.5$ (highest positive impact): Improvements in infrastructure, such as better roads, transportation, and utilities, proved to be the most potent driver of satisfaction. A high beta value (~ 0.5) shows that improved infrastructure from tourism—like better roads and utilities—strongly boosts resident satisfaction. Infrastructure had the greatest impact among all factors, confirming that visible upgrades make both locals and tourists happier.

Employment Opportunities – $\beta \approx +0.4$: Job creation from tourism is a major driver of resident satisfaction, with a beta of $+0.4$. More local jobs—especially those for women—directly boost approval of tourism, confirming that employment is a key factor in positive community perceptions.

Income Increase – $\beta \approx +0.4$: Higher household income from tourism strongly boosts satisfaction (beta $\sim +0.38$ to $+0.4$). It's not just job availability but actual financial gains at the family level that drive positive views—when locals see their earnings rise, they're much more likely to support tourism.

Pollution Levels – $\beta \approx -0.4$ (negative impact): Increased pollution from tourism has a strong negative impact on satisfaction (beta ~ -0.4), nearly offsetting the positive effects of infrastructure. When tourism leads to more waste or

environmental harm, support drops—highlighting the need for better sustainability and pollution control.

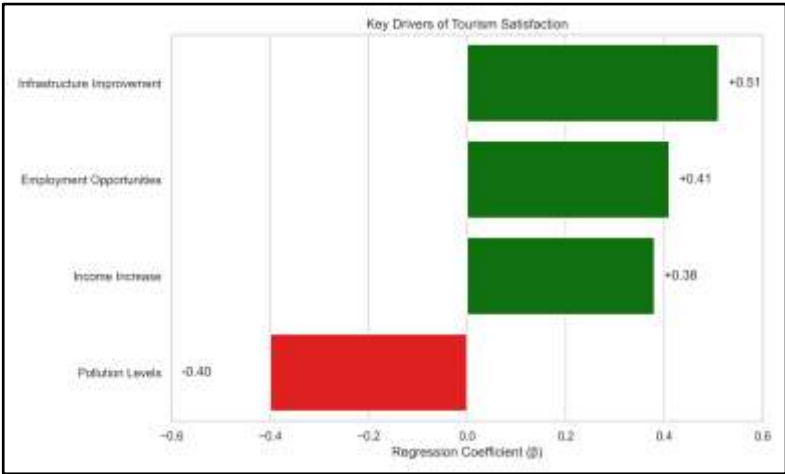


Figure 11 - Factors Affecting Tourism Satisfaction

The regression results show which factors most closely relate to residents’ satisfaction. Infrastructure, employment and household income showed positive effects, with infrastructure recording the strongest contribution. Pollution moved in the opposite direction and reduced satisfaction.

These results have a direct implication for tourism planning in the division. Investment in roads, transport, utilities and local employment may strengthen residents’ support for tourism. Such measures, however, require effective control of pollution and other environmental pressures. Satisfaction is likely to remain higher where residents can see economic and infrastructural gains and keep negative effects within manageable limits.

4.8. Interrelationships Among Factors

The correlation heatmap shows that positive factors like better infrastructure, jobs, and income are closely linked and all boost satisfaction, while negatives like pollution cluster together and lower satisfaction. This reinforces that improvements in key areas are closely linked, as are the challenges.

Factors that improve together: Beneficial factors like household income ($r \approx +0.42$), tourism jobs ($r \approx +0.38$), and especially road improvements ($r \approx +0.51$) all positively correlate with overall satisfaction. Road upgrades also align with better utilities ($r \approx +0.44$), showing development happens together. Even women’s employment shows a positive link ($r \approx +0.22$). These findings highlight that economic and infrastructure gains reinforce each other, leading to higher community satisfaction with tourism.

Factors that were opposed or clustered negatively showed a different pattern for the negative variables. Pollution was inversely related to satisfaction ($r \approx -0.45$); higher pollution scores were accompanied by lower satisfaction. Pollution and habitat degradation were also closely associated ($r \approx +0.61$), showing that these two effects were often reported together. The relationship between tourism employment and pollution was weakly negative. Employment benefits, therefore, did not necessarily increase at the same rate as environmental pressure.

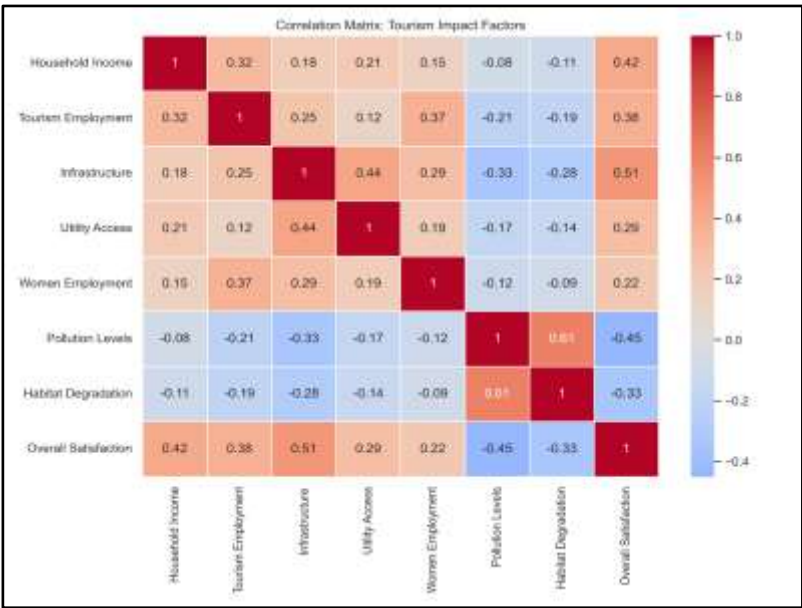


Figure 12 - Heat Map

Overall pattern from the heatmap: The heatmap shows two main clusters: positive factors like income, jobs, infrastructure, and satisfaction all rise together, while negatives like pollution and habitat loss are linked and reduce satisfaction. This suggests that boosting economic and infrastructure benefits while minimising environmental harm is key to keeping community attitudes towards tourism positive.

Conclusion

The results from Gorakhpur Division show that tourism has been associated with several economic gains for residents. Employment opportunities increased, household income improved, and local businesses benefited from visitor activity. Infrastructure changes were also reported, although these were less pronounced than the economic effects.

The social and cultural results were positive, but moderate. Residents referred to greater participation in local activities and more contact with visitors through cultural exchange. Environmental effects followed a different pattern. Pollution and crowding were among the main problems reported by the respondents.

The correlation and regression results support these differences. Improvements in infrastructure, employment and income were positively related to community satisfaction. Pollution and overcrowding were both associated with lower levels of satisfaction. Further tourism development in the division therefore needs to be considered alongside managing these pressures. Employment and infrastructure remain important, but greater attention is also required for pollution, congestion and related environmental effects.

References

1. Bergström, A., & Larsson, M. (2022). Tourism development and its socio-economic impact on local communities. *International Journal of Geography, Geology and Environment*, 4(2), 220–222. <https://www.geojournal.net/archives/2022.v4.i2.C.257>
2. Cahyadi, H. S. (2018). Tourism economic impact of South Lampung Regency. *Journal of Indonesian Tourism, Hospitality and Recreation*, 1(2), 106–115. <https://doi.org/10.17509/jithor.v1i2.13771>
3. Cochran, W. G. (1977). *Sampling techniques* (3rd ed.). Wiley.
4. Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Lawrence Erlbaum Associates.
5. Crompton, J. L., Lee, S., & Shuster, T. J. (2001). A guide for undertaking economic impact studies: The Springfest example. *Journal of Travel Research*, 40(1), 79–87. <https://doi.org/10.1177/004728750104000110>
6. Doxey, G. V. (1975). A causation theory of visitor-resident irritants: Methodology and research inferences. In *Proceedings of the Sixth Annual Conference of the Travel Research Association* (pp. 195–198). Travel Research Association.
7. Durberry, R. (2004). Tourism and economic growth: The case of Mauritius. *Tourism Economics*, 10(4), 389–401. <https://doi.org/10.5367/0000000042430962>
8. Faber, B., & Gaubert, C. (2019). Tourism and economic development: Evidence from Mexico's coastline. *American Economic Review*, 109(6), 2245–2293. <https://doi.org/10.1257/aer.20161434>
9. Goeldner, C. R., Ritchie, J. R. B., & McIntosh, R. W. (2000). *Tourism: Principles, practices, philosophies* (8th ed.). John Wiley & Sons.
10. Jafari, J. (2001). The scientification of tourism. In V. L. Smith & M. Brent (Eds.), *Hosts and guests revisited: Tourism issues of the 21st century* (pp. 28–41). Cognizant Communication Corporation.
11. Lim, C.-K., Tan, K.-L., & Farid Ahmed, M. (2023). Conservation of culture heritage tourism: A case study in Langkawi Kubang Badak remnant charcoal kilns. *Sustainability*, 15(8), 6554. <https://doi.org/10.3390/su15086554>
12. Liu, A., Kim, Y. R., & Song, H. (2022). Toward an accurate assessment of tourism economic impact: A systematic literature review. *Annals of Tourism Research Empirical Insights*, 3(2), 100054. <https://doi.org/10.1016/j.annale.2022.100054>
13. Makmun, M. D. M., Muryani, C., & Wijayanti, P. (2021). The tourism impact on the social economic life of community in Ngargoyoso Sub-district, Karanganyar Regency. *IOP Conference Series: Earth and Environmental Science*, 683(1), 012114. <https://doi.org/10.1088/1755-1315/683/1/012114>
14. Meyer, D. F., & Meyer, N. (2015). The role and impact of tourism on local economic development: A comparative study. *African Journal for Physical, Health Education, Recreation and Dance*, 21(1:1), 197–214.
15. Nopiyani, N. M. S., & Wirawan, I. M. A. (2021). The impact of tourism on the quality of life of communities in tourist destination areas: A systematic review. *Open Access Macedonian Journal of Medical Sciences*, 9(F), 129–136. <https://doi.org/10.3889/oamjms.2021.5966>
16. O'Brien, R. M. (2007). A caution regarding rules of thumb for variance inflation factors. *Quality & Quantity*, 41(5), 673–690. <https://doi.org/10.1007/s11135-006-9018-6>
17. Pereira, E. M., & Mykletun, R. J. (2012). Guides as contributors to sustainable tourism? A case study from the Amazon. *Scandinavian Journal of Hospitality and Tourism*, 12(1), 74–94. <https://doi.org/10.1080/15022250.2012.663558>
18. Richards, G. (Ed.). (2001). *Cultural attractions and European tourism*. CABI Publishing.
19. Shepherd, R. (2002). Commodification, culture and tourism. *Tourist Studies*, 2(2), 183–201. <https://doi.org/10.1177/146879702761936653>
20. Shukla, A., & Singh, A. (2024a). Evaluating tourist satisfaction through structural equation modeling: Insights from

- Gorakhpur District. *Nanotechnology Perceptions*, 20(7), 3951–3968. <https://doi.org/10.62441/nano-ntp.v20i7.4940>
21. Shukla, A., & Singh, A. (2024b). Exploring sustainable tourism development and visitor experience enhancement through innovative circuit planning and GIS integration: A case study of Gorakhpur District, Uttar Pradesh, India. *NIU International Journal of Human Rights*, 11(II), 1–11.
 22. Singh, A., & Shukla, A. (2025). Evaluation of cultural places in Gorakhpur Division: A framework and SWOT analysis. *International Journal of Environmental Sciences*, 11(5s), 1387–1398. <https://doi.org/10.64252/sk3nd753>
 23. White, H. (1980). A heteroskedasticity-consistent covariance matrix estimator and a direct test for heteroskedasticity. *Econometrica*, 48(4), 817–838. <https://doi.org/10.2307/1912934>
 24. Williams, D. R., & Stewart, S. I. (1998). Sense of place: An elusive concept that is finding a home in ecosystem management. *Journal of Forestry*, 96(5), 18–23. <https://doi.org/10.1093/jof/96.5.18>
 25. Williams, S. (2009). *Tourism geography: A new synthesis* (2nd ed.). Routledge. <https://doi.org/10.4324/9780203877555>
 26. World Tourism Organization. (1985). The state's role in protecting and promoting culture as a factor of tourism development and the proper use and exploitation of the national cultural heritage of sites and monuments for tourism. World Tourism Organization.