

HARNESSING RESPONSIBLE TOURISM FOR EMPLOYMENT GENERATION: EVIDENCE FROM KERALA

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Abstract

This study examines the impact of responsible tourism initiatives on job creation in Kerala, a state renowned for its sustainable tourism practices. Using primary cross-sectional data from 363 respondents across three districts—Calicut, Ernakulam, and Trivandrum—and employing Ordered Probit and OLS regression models, the study analyzes the relationship between various forms of responsible tourism and employment opportunities. The findings highlight the significant role of ecotourism and community-based tourism in generating direct and indirect employment, with socio-economic factors such as education, experience, and income further influencing job creation outcomes. The study underscores the potential of responsible tourism to empower local communities, enhance sustainable development, and serve as a replicable model for other regions.

Keywords: Responsible Tourism, Community Development, Employment Impact, Kerala, Socio-economic Factors

1. Introduction

Tourism has long been recognized as a powerful driver of economic growth, particularly in regions endowed with cultural and natural heritage. In recent years, responsible tourism has emerged as a transformative approach to promoting sustainable development by integrating environmental conservation, cultural preservation, and community well-being. Sustainable development has become a global priority, with the United Nations Sustainable Development Goals (SDGs) emphasizing the role of tourism in achieving this vision. Target 8.9 of the SDGs highlights the need to "devise and implement policies to promote sustainable tourism that creates jobs and promotes local culture and products," while target 12.b. focuses on monitoring the impacts of sustainable tourism to enhance its contribution to community welfare and ecological preservation. Indian state of Kerala, often referred to as "God's Own Country," has been a pioneer in adopting responsible tourism initiatives, including ecotourism, community-based tourism, and organic farming tourism. These initiatives aim to balance the economic benefits of tourism with the need to empower local communities and preserve ecological resources, making Kerala a global model for sustainable tourism practices.

Despite the growing interest in responsible tourism, the extent to which it influences employment opportunities, particularly in diverse forms of tourism, remains underexplored in the academic literature. Existing studies predominantly focus on the environmental and cultural aspects of responsible tourism, with limited emphasis on its economic dimensions, especially job creation. Moreover, the role of demographic and socio-economic factors such as education, income, and experience in shaping employment outcomes in responsible tourism settings has not been adequately analyzed. This study addresses these gaps by examining the differential impact of various forms of responsible tourism on job creation in Kerala, using robust empirical techniques to provide a comprehensive understanding of this relationship. This study contributes to the literature by analyzing the employment effects of



responsible tourism, considering socio-economic and demographic variables. The findings are particularly relevant for policymakers and tourism planners, for effective interventions that can be maximized employment generation while promoting sustainable tourism practices. By focusing on Kerala, this research also provides a replicable framework for other regions seeking to align tourism development with social and economic inclusivity.

2. Review of Literature

Responsible tourism is often defined as tourism practices that respect the host community's natural, cultural, and built environment while balancing the interests of stakeholders (Smith, 1992; Stanford, 2000). Kerala Tourism in 2012, conceptualizes responsible tourism as a strategy that integrates planning, management, product development, and marketing to generate positive socio-economic, cultural, and environmental impacts. Leslie (2012) emphasized the behavioral aspects of responsible tourism, defining it as actions and management practices that uphold respect for others and their environment. DEAT (1996) and Spenceley et al. (2002) highlighted responsible tourism's role in enabling better quality of life for local communities through increased socio-economic benefits and improved natural resource management. Goodwin (2011) positioned responsible tourism as a pathway to more sustainable tourism practices, distinguishing it from sustainable tourism by its focus on action-oriented responsibility. Although responsible tourism and sustainable tourism are closely related, Mihalic (2016) clarified that the former focuses more on implementing sustainable practices.

Research has demonstrated the socio-economic benefits of responsible tourism, particularly in job creation and livelihood opportunities. Mathew, P.V. and Sreejesh, S. (2017) reported that Kerala's responsible tourism initiatives contributed to economic sustainability and community empowerment. Spenceley et al. (2002) noted similar outcomes, with responsible tourism supporting community-based tourism enterprises (CBTE) and increasing employment opportunities. Michot (2010) identified responsible tourism as a pro-poor tourism initiative that directly enhances local economic development by creating jobs and empowering marginalized groups. Further studies highlight that responsible tourism not only creates direct employment but also enhances indirect opportunities by promoting local businesses and services (Bah, 2008; Greiner, 2010). Cape Town (2009) highlighted the potential of responsible tourism to positively impact economic, social, cultural, and environmental dimensions, which indirectly leads to job creation and better livelihoods for local communities. At a micro-level, tourism development has been shown to improve the quality of life of residents through job creation and economic growth. Faulkner and Tideswell (1997) and Crotts and Holland (1993) demonstrated a positive correlation between tourism development and local residents' quality of life due to improved income levels and service facilities. However, they also caution that if tourism development disproportionately benefits external stakeholders at the cost of local resources, it may lead to resentment among residents (Doxey, 1975; Cavus&Tanrisevdi, 2003).

Kerala's responsible tourism initiatives provide a compelling case study of how sustainable tourism practices can foster local employment. For example, Mathew and Sreejesh (2017) demonstrated that such initiatives empower local communities by enhancing skill development and providing sustainable income sources. Similarly, Mathew et al. (2024) highlighted that responsible tourism practices significantly enhance destination perceptions, visitor satisfaction, and re-visit intentions. Additionally, Mathew and Nimmi (2021) offered an insightful analysis of how responsible tourism improves community well-being and life satisfaction through economic, social, cultural, and environmental responsibilities. These practices align with the Global Sustainable Tourism Criteria (GSTC-D, 2013), which link



tourism sustainability to local community well-being. While these studies underscore the potential of responsible tourism to foster job creation, limited empirical evidence exists on the mechanisms through which these initiatives translate into sustainable community-level employment.

Despite the extensive literature on the socio-economic impacts of responsible tourism, studies addressing the specific mechanisms through which responsible tourism initiatives create jobs in Kerala remain scarce. Previous research has focused on broad impacts such as sustainability, pro-poor tourism, and community well-being, with limited emphasis on how these initiatives directly influence employment outcomes at both macro and micro levels. This study fills the gap by exploring the effect of responsible tourism on job creation in Kerala, particularly examining the economic, social, and cultural factors influencing employment opportunities.

3. Data Source

This study is based on primary cross-sectional data collected from 363 units in Kerala, covering three distinct regions: South, Central, and North. The data collection employed systematic random sampling to ensure representativeness and reliability. The study initially aimed to survey the entire state but, due to logistical constraints, focused on three randomly selected districts: Calicut (South Kerala), Ernakulam (Central Kerala), and Trivandrum (North Kerala). According to the official website of Responsible Tourism Kerala, there are 17,600 registered units in the state. Using a 95% confidence level and a 5% margin of error, the calculated sample size was 376. However, the final sample size achieved was 363, as some units did not meet the inclusion criteria or were unresponsive. From the selected regions, units were systematically chosen at intervals of three from the list of registered units, and the process continued until the required sample size for each district was nearly met. The collected data provide a robust foundation for analyzing the effects of responsible tourism on job creation across these regions.

4. Estimation Methods

To examine the factors influencing the perceived contribution of responsible tourism initiatives to job creation in Kerala, this study employs two estimation methods: Ordered Probit regression and Ordinary Least Squares (OLS) regression. These methods were chosen to account for the ordinal nature of the dependent variable and to provide a linear approximation of the relationships between the variables.

The Ordered Probit model is the primary estimation technique used in this study, given that the dependent variable, "perceived job creation," is measured on an ordinal scale (ranging from 1 to 5). The Ordered Probit model is appropriate when the dependent variable is ordinal and assumes that there are underlying continuous latent variables that determine the observed ordinal outcomes. In this model, the ordered responses (job creation scale) are explained as a function of both the variable of interest (forms of responsible tourism) and several control variables (age, gender, marital status, education, etc.). The estimation uses cut points (thresholds) to map the continuous latent variable to the observed ordinal categories. The coefficients in the Ordered Probit model represent the change in the probability of a respondent choosing a higher category of perceived job creation as the independent variables change.

The model can be expressed as follows:

$$Yi * = \beta 0 + \beta 1Xi + \beta 2Zi + \epsilon i$$

In the Ordered Probit model, the latent variable Yi* represents the underlying perception of job creation for individual i, which is influenced by Types of responsible tourism (Xi), and a



set of control variables denoted as Zi. The coefficient $\beta 1$ represents the effect of responsible tourism on latent variable perceived job creation, $\beta 2$ tells the effect of control variables on the latent variable, while $\beta 0$ is the constant term. The error term, ϵi , captures the unobserved factors influencing the perception of job creation for each individual. The latent variable is then mapped to the observed ordinal categories using threshold values, which determine the specific perception level chosen by the respondent.

In addition to the Ordered Probit model, the above function is also estimated using the OLS method to determine the linear relationship between perceived job creation and the explanatory variables. While OLS is less appropriate for ordinal dependent variables, it is used here to provide a clearer understanding of the magnitude and direction of the relationships in a linear context. OLS regression assumes that the dependent variable is continuous, and the model estimates the average change in the dependent variable for a one-unit change in an independent variable.

5. Result and Discussions

Descriptive Statistics of the dependent and independent variables

Table 1 provides a detailed summary of the descriptive statistics used to analyze the impact of responsible tourism on job creation in Kerala. The table includes the dependent variable, "Job creation," alongside explanatory variables categorized into variables of interest and control variables. The dependent variable, Job creation, represents the perceived impact of responsible tourism initiatives on employment opportunities. It is an ordinal variable ranging from 1 to 5, where higher values indicate a greater perceived contribution to job creation. The mean score of 3.014 reflects a moderate level of perceived job creation, while the standard deviation of 1.291 suggests variability in respondents' perceptions. The minimum and maximum values of 1 and 5 confirm the ordinal nature of the variable.

The variables of interest focus on different forms of responsible tourism, with organic farming tourism serving as the reference category. Two other forms are analyzed: ecotourism, which involves 43.8% of respondents (mean = 0.438, SD = 0.497), and community-based tourism, accounting for 32.8% (mean = 0.328, SD = 0.470). These variables highlight the diversity in responsible tourism initiatives and allow for a comparative analysis of their contributions to job creation.

The study also includes several control variables to account for other factors influencing perceptions of job creation. Age shows that the average respondent is 50.658 years old, with a standard deviation of 9.125, indicating a relatively older sample, ranging from 28 to 70 years. Gender is a binary variable where 1 represents males, who make up 45.2% of the sample, while females comprise the remaining 54.8%. Marital status, another binary variable, shows that 87.9% of respondents are married (mean = 0.879). Household income is another key control variable, with respondents reporting an average monthly income of ₹49,285.12 (SD = ₹8,067.01), ranging from ₹30,000 to ₹69,000. This indicates a sample belonging to a moderate-income group. Education levels are also included as control variables, categorized into three groups, with below SSLC as the reference category. Among respondents, 27% have completed SSLC (secondary school level), and 15.7% have completed Plus Two (higher secondary education). Data on degree holders, though not fully visible, is also part of the analysis. Table 1 provides a comprehensive overview of the characteristics of the study sample, showing the diversity in responsible tourism forms and key demographic and socio-economic variables. These variations allow for a thorough examination of the factors influencing job creation in Kerala's responsible tourism sector.



Table 1: Descriptive statistics the variables used for the study

Variable	Mean	Std. Dev.	Min	Max
Dependent variable				
Perceived job creation	3.014	1.291	1	5
Variables of interest				
Form of responsible tourism (organic				
farming tourism=reference category)				
Ecotourism	0.438	0.497	0	1
Community based tourism	0.328	0.470	0	1
Control variables				
Age	50.658	9.125	28	70
Gender (male =1; female =0)	0.452	0.498	0	1
Marital status (married =1; others =0)	0.879	0.327	0	1
Household income	49285.120	8067.009	30000	69000
Education (below SSLC=reference				
category)				
SSLC	0.270	0.445	0	1
Plus Two	0.157	0.364	0	1
Degree	0.083	0.276	0	1
Pg and above	0.055	0.228	0	1
Training certificate completed	0.931	0.254	0	1
(yes=1;no=0)				
Experience in tourism (in years)	12.813	5.596	1	30

Source: Estimated from survey data

Impact of Responsible Tourism on Job creation: Results from Regression Estimation

The results from both Ordered Probit and OLS (Ordinary Least Squares) models reported in Table 2 provideinsights into the impact of responsible tourism initiatives on job creation. The Ordered Probit model, which is suitable for analyzing an ordered dependent variable (e.g., job creation ranked from low to high), shows that both ecotourism and community-based tourism significantly contribute to job creation. Specifically, the coefficient for ecotourism is positive and statistically significant (0.392, p < 0.05), indicating that involvement in ecotourism significantly increases the likelihood of perceiving higher job creation compared to organic farming tourism. Similarly, community-based tourism exhibits a stronger positive and highly significant effect (0.448, p < 0.01), suggesting it is even more impactful in driving employment outcomes. The Ordered Probit results underline the relative importance of these tourism types in influencing perceptions of job creation, with community-based tourism emerging as the more impactful initiative.

The OLS model, which treats the dependent variable as continuous, provides complementary findings. The coefficients for ecotourism (0.389) and community-based tourism (0.443) are consistent with the Ordered Probit results, both being positive and statistically significant. In the OLS framework, the interpretation is more intuitive: a one-unit increase in involvement in ecotourism is associated with a 0.389-unit average increase in perceived job creation, while a similar increase in community-based tourism leads to a 0.443-unit average rise in perceptions of job creation. These findings confirm the positive relationship between responsible tourism and employment outcomes, with community-based tourism having a marginally stronger effect. Both models corroborate the robust impact of



responsible tourism on job creation, with consistent results reinforcing confidence in the findings. The Ordered Probit model highlights the likelihood of higher perceptions of job creation in ordinal terms, while the OLS model offers a straightforward interpretation of average effects. Together, they emphasize the significant role of responsible tourism—especially community-based tourism—in fostering employment opportunities in Kerala.

Effect of Control Variables on Job creation: Results from Regression Estimation

The results from both the Ordered Probit and OLS models reported in Table 2 reveal that education significantly influences perceptions of job creation. A positive and statistically significant coefficient indicates that higher levels of education lead to greater perceptions of job creation. This suggests that individuals with more education are better able to recognize the employment opportunities generated by responsible tourism initiatives. Education likely enhances awareness, skills, and the capacity to engage with tourism-related opportunities, making educated individuals more likely to benefit from and acknowledge the impact of such programs. Moreover, education could equip individuals with the ability to transition into tourism-related jobs, particularly those requiring managerial or specialized skills, which increases their perceptions of job creation.

Gender also plays a significant role in shaping perceptions of job creation. The analysis shows that being male is positively associated with perceiving higher job creation compared to being female, as evidenced by the positive coefficient in both models. This result may reflect existing gender disparities in labor market participation within the tourism sector, where men may have greater access to jobs or economic activities linked to responsible tourism. Alternatively, cultural or societal norms may restrict women's involvement in tourism-related work, leading to lower perceptions of job creation among female respondents. These findings highlight the need for gender-inclusive policies within responsible tourism initiatives to ensure equitable opportunities.

The effect of age on job creation perceptions is negative and significant, indicating that younger individuals are more likely to perceive higher job creation compared to older individuals. This result could stem from the fact that younger individuals are often more adaptable to new economic opportunities and may be more actively involved in tourism-related jobs. Additionally, older individuals may have lower participation rates in tourism-related employment due to physical constraints or a preference for traditional occupations.

Family size has a significant positive effect on perceptions of job creation. Larger households may have more members actively participating in the labor force, increasing their exposure to tourism-related employment opportunities. This could also mean that families with more members diversify their income sources, with at least one member engaging in tourism-related activities. As a result, such households are more likely to recognize the job creation benefits of responsible tourism.

Income is another key determinant of perceptions of job creation, with higher income levels positively associated with greater perceptions of employment benefits. Wealthier individuals or households may be more involved in or directly benefit from tourism activities, such as running homestays, providing services, or selling local products to tourists. Higher-income groups may also have better access to information and resources, allowing them to leverage opportunities created by responsible tourism. These findings highlight the role of economic status in shaping access to and benefits from tourism-related employment.

The region of residence significantly impacts perceptions of job creation, with individuals in urban areas reporting higher perceptions compared to those in rural areas. This result may reflect the fact that tourism initiatives are often concentrated in urban or semi-urban areas, where infrastructure and accessibility support tourism development.



Additionally, urban residents may have better awareness of job opportunities created by responsible tourism due to higher exposure to information and greater proximity to tourist hubs. Policymakers should consider expanding tourism-related employment programs to rural areas to ensure more inclusive benefits. These results provide crucial awareness into the socio-demographic and economic factors shaping perceptions of job creation. These findings emphasize the importance of designing responsible tourism policies that are inclusive and sensitive to the diverse needs and characteristics of the population.

Table 2: Estimation of job creation function of responsible tourism in Kerala

Variable 2: Estimation of job creation function	OLS	
variable	Ordered Probit Estimation	Estimation
Dependent variable-	Coefficient	Coefficient
Variable of interest	Coefficient	Coefficient
Form of responsible tourism (organic farming		
tourism=reference category)		
Ecotourism Ecotourism	-0.705***	-0.510***
Ecotourism	(0.247)	(0.169)
Community based tourism	0.486**	0.325***
Community based tourism	(0.255)	(0.179)
Control variables	(0.233)	(0.17)
Age	0.031***	0.021***
ngc	(0.017)	(0.011)
Gender (male =1; female =0)	0.334***	0.215***
Gender (maie –1, lemaie –0)	(0.201)	(0.135)
Marital status (married =1; others =0)	-0.004**	0.009*
Marital status (married –1, others –0)	(0.268)	(0.183)
Household income	0.000*	0.000*
Household income	(0.000)	(0.000)
Education (below SSLC=reference category)	(0.000)	(0.000)
SSLC	0.376*	0.234*
SSEC	(0.268)	(0.180)
Plus Two	0.150	0.083
Tius Two	(0.314	(0.217)
Degree	0.913***	0.638***
Degree	(0.424)	(0.276)
Pg and above	0.238*	0.171*
i g and above	(0.037)	(0.266)
Training certificate completed (yes=1;no=0)	-0.218*	-0.194*
Truming certificate completed (yes=1,110=0)	(0.042)	(0.239)
Experience in tourism (in years)	-0.044*	-0.027*
Experience in tourism (in years)	(0.026)	(0.017)
Cut Points	(0.020)	(0.017)
/cut1	0.142	
, 54,1	(1.168)	
/cut2	1.385	
, 50,52	(1.179)	
/cut3	1 2.535	
/cut3	2.535 (1.187)	



	(1.198)	
		1.731***
		(0.786)
Wald chi2(12) /F Test	43.81***	18.56***
Pseudo R2/ R2	0.0374	0.34
Sample size	363	

Source: estimated from sample survey; Note: Brackets indicate robust standard errors; * indicates 10% level of significance; ** indicates 5% level of significance; *** indicates 1% level of significance.

6. Conclusion

This study highlights the significant impact of responsible tourism on job creation in Kerala, demonstrating its potential as a tool for sustainable economic development. Responsible tourism initiatives, including ecotourism, community-based tourism, and organic farming tourism, have been instrumental in generating direct and indirect employment opportunities, particularly for local communities. These initiatives not only support the livelihoods of individuals but also contribute to broader socio-economic development by fostering skill development, empowering marginalized groups, and encouraging entrepreneurship. The findings underline that responsible tourism aligns closely with the Sustainable Development Goals (SDGs), particularly in promoting inclusive and sustainable economic growth.

Moreover, the study identifies the role of demographic and socio-economic factors such as education, gender, marital status, and prior experience in influencing employment outcomes within responsible tourism frameworks. These findings suggest that the effective interventions addressing specific barriers faced by different demographic groups could enhance the inclusivity and effectiveness of responsible tourism initiatives. For instance, promoting skill development programs to less-educated individuals and supporting women's participation in tourism-related activities can further amplify the positive effects of responsible tourism on job creation.

While the study emphasizes the economic benefits of responsible tourism, it also underscores the importance of addressing challenges such as limited access to resources, financial constraints, and social exclusion, which may hinder the equitable distribution of benefits. Governments and tourism planners in Kerala can leverage these insights to design and implement policies that maximize the employment potential of responsible tourism while ensuring that its benefits are shared equitably among all stakeholders.

The broader implications of this research extend beyond Kerala, offering a replicable model for other regions aiming to integrate sustainable tourism practices into their development strategies. By emphasizing community participation, cultural preservation, and environmental conservation, responsible tourism can serve as a catalyst for achieving sustainable and inclusive economic growth globally. Future research could explore the long-term impacts of responsible tourism on community resilience, environmental sustainability, and cultural heritage preservation to provide a more comprehensive understanding of its transformative potential.

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