

BARRIERS TO DEVELOPING RURAL TOURISM INFRASTRUCTURE, ACCESSIBILITY, AND RESOURCE CHALLENGES

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ABSTRACT

The potential of rural tourism to create jobs while maintaining the authenticity of rural India makes it a tool that can mitigate the deteriorating conditions of rural India. In India, rural tourism has a big potential to boost the economy, preserve culture, and protect the environment. However, several obstacles to infrastructure, accessibility, and resource availability are impeding the growth of rural tourism industries. The purpose of conducting this study is to evaluate the barriers to developing rural tourism infrastructure, accessibility, and resource challenges. The technique used in this study is Exploratory Factor Analysis (EFA). The findings of the study indicated that the major challenges faced in developing rural tourism are Accessibility challenges, Infrastructure Challenges, and Resources Challenges.

Keywords: Rural India, Exploratory Factor Analysis.

Introduction

Humans' innate desire for adventure, learning, and amusement is largely expressed through tourism (Raghavendra et al., 2016). The tourism business is a huge, dynamic, and growth-oriented sector of the global economy. According to Raghavendra et al. (2016), the tourism sector is one of the fastest-growing areas of the global economy, employing over 225 million people globally and contributing 11% of GDP. Additionally, one of the biggest global contributors to job creation is the tourism sector. The industry accounts for around 10% of all jobs worldwide (Market Width, 2019). Since gaining its independence, India has been acknowledged for its tourism potential. 1950 saw the introduction of tourism as a lucrative endeavour (Nair and Ramachandran, 2016). When Indians began to travel and see friends or family for pilgrimages and education, domestic tourism increased (Nair and Ramachandran, 2016; Abhyankar, 2013). Its rich heritage has been reinforced and unity in variety has been preserved by the massive growth of domestic tourism. With the increase in tourism, other economic activities have improved, including infrastructure development, employment opportunities, communication channels, and efforts to reduce poverty.

Rural Tourism

Rural tourism is a type of vacation where visitors spend a significant amount of time relaxing on farms or in rural settings and their surroundings (Fisher and Beatson, 2002; Siow et al., 2015). Tourists who travel to rural areas to partake in a variety of activities are said to be participating in rural tourism (Kaptan Ayhan et al., 2020). According to Dimitrovski et al. (2012), this interaction could be made to experience the genuine sensation of rural living or to get closer to nature.

The main occupations of India's rural populations up until this point have been agriculture and dairy (Srivastava, 2016). State and central governments must frequently use farm loan exemptions as a means of easing the load. These behaviours typically lower economic morale (Pandey et al., 2019). Additionally, the migration of individuals in search of employment harms the cultural legacy of rural India (Akoijam, 2012). Due to its potential to create jobs while maintaining the authenticity of rural India, rural

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tourism is a tool that helps mitigate the deteriorating conditions of rural India (Yang and Hung, 2014). Rural tourism improves rural communities by creating jobs, developing infrastructure, offering an alternative source of income, and promoting social and financial inclusion (Kachniewska, 2015; Kumar et al., 2018). According to Singh and Narban (2015) and the Ministry of Tourism (2011), people who need to detox from the stressful lifestyle of the city often travel to rural areas. In India, there are countless opportunities for rural tourism to grow (Ministry of Tourism, 2008). According to the 2011 census, around 70% of people in the nation live in rural areas (Press Trust of India, 2013). Additionally, rural land makes up roughly 93% of India's overall area (Centre for International Earth Science Information Network, or CIESIN-Columbia University, 2013). The size of India's rural tourism industry is demonstrated by the large proportion of rural areas and inhabitants. In India, several rural tourism attractions have emerged.

However, these locations are restricted to a small number of states (Cook, 2019). Since the early 2000s, India's government has implemented several policies, projects, and initiatives to boost rural tourism as it has grown globally (Kar and Sahoo, 2016). Nevertheless, despite the passage of fifteen years, rural tourism has yet to reach its full potential. Out of all the rural tourism projects that were done, 38% were deemed successful, 31% were deemed failures, and 31% were deemed failures (Ministry of Tourism, 2012). The absence of a strategic component in rural tourist planning is the cause of this failure (Gabor, 2017). Policymakers' goals are contradicted and the subject is not well understood (Singh et al., 2016). Additionally, the marketing campaigns established to promote rural tourism appear to be failing.

It is clear from the literature study that there is several research on the development of rural tourism. The majority of them are examined in a Western setting. However, India's rural socioeconomic situation differs greatly from that of Western nations. As a result, developing nations like India would not be able to benefit from the incentives or hurdles that these studies point to as driving the expansion of rural tourism. Furthermore, there isn't any research in the literature that focuses on identifying and ranking the obstacles to India's rural tourism industry's expansion.

Review of Literature

Jena, R. K., & Dwivedi, Y. (2023) used responses from central Indian tourism specialists to examine the obstacles preventing the expansion of tourism in rural areas of the country. The study emphasised the significance of several important obstacles to the expansion of tourism in rural India. It offered a thorough grasp of these obstacles, with an emphasis on the expansion of rural tourism, and it recommended a course of action and steps to overcome them. The results provided insightful information for future growth in rural tourism and added to the corpus of existing tourism research.

Ahmed, Mohamed, Al, Matris. (2023) examined the aspects of developing rural tourism such as "economic, social, environmental and infrastructure" using case studies from prosperous rural tourism initiatives. Several obstacles to the growth of rural tourism were found such as "poor infrastructure, limited funding, lack of effective marketing techniques, and negative environmental effects." Social concerns like "managing cultural shifts, encouraging community involvement, and keeping the local population were also emphasized.

Rosalina, et al. (2021) elaborated on the definition of rural tourism and investigated the difficulties encountered in rural tourism in developed and developing countries. The study found four major components dominating the definition of rural tourism those are "experiences, community-based features, sustainable development, and location. It was seen that geography was a major differentiator for both developed and developing nations, furthermore, community-based and sustainable development elements were seen as more prevalent in developing nations than in developed nations.

Apostolopoulos, N., et al. (2020) examined how the implementation of European financial institutions for rural tourism in Greece impacted the rural communities and what difficulties they encountered in obtaining EU money. It was discovered that there is a major challenge for the absorption of EY money due to the "stringent laws, program design, procedure of the local government, bureaucracy, and malpractices" in the country. The study found that rural tourism in the country is yet to show results and is still in the infancy stage.

Zielinski, S., et al. (2020) the authors to determine the primary factors that account for the imbalance in rural community tourism programs in developed and developing countries conducted this research. It was found that rural community tourism projects in both types of countries had several obstacles and many common traits. Both types of countries' operating environments differ greatly. It was further seen that both viewed rural tourism differently in terms of definition, socioeconomic and cultural variables, visitor types as well as integration of external stakeholders.

Wanner, A., & Pröbstl-Haider, U. (2019) explored the obstacles to rural communities' participation in planning techniques for sustainable development. It was discovered that stakeholders' perceptions of sustainability differed greatly. The study found that the general awareness rose in response to perceived gaps in the knowledge of sustainability. It was also found in the study that before using any participative planning approach, the stakeholder's understanding of sustainability needs to be on the important indicators of development.

Khanal, S., & Shrestha, M. (2019) investigated the agro-biological facets of Nepali tourism, looking at its potential, significance, travel locations, difficulties, and recommendations for enhancements to the industry's current situation. According to the report, Nepal offers a wide range of potential tourist locations that combine natural beauty and cultural legacy, including the Kathmandu Valley, Pokhara, Ghandruk, Illam, national parks, and conservation zones. However, Nepal's agrotourism industry was still in its infancy and was beset by several issues and shortcomings that made it difficult to succeed. Despite its potential, tourism's GDP contribution was still quite small.

Objectives of the Study

- To evaluate the barriers to developing rural tourism infrastructure, accessibility, and resource challenges.
- To give suggestive measures towards overcoming the barriers to developing rural tourism infrastructure, accessibility, and resource challenges.

Methods and Material

The current study is based on Descriptive Research Design. Both primary and secondary data collection sources have been used in the current research. A structured questionnaire using 5 5-point Likert scale has been used to collect data on problems and challenges from 473 users of online shopping. The technique used in the study is exploratory Factor analysis (EFA) Using SPSS.

Data Analysis and Interpretation:

Table: 1 Descriptive Statistics

	Mean	Std. Deviation
Lack of adequate accommodation facilities for Tourist in Rural areas	4.65	.480
Poor or insufficient road quality connecting tourist sites	4.21	.835
Limited access to essential utilities (Electricity, Internet)	4.62	.529
Inadequate healthcare services for Tourists	4.30	.763
Limited availability of reliable public transportation to rural destinations	3.40	1.029
Lack of directional signage and clear maps for Tourist	3.20	1.091
Limited digital navigation support (Poor GPS and digital map accuracy)	3.35	1.044
Shortage of skilled Tourism and hospitality personnel in Rural areas	2.99	1.343
Limited financial resources for tourism development projects	2.85	1.216
Limited private sector investment in rural tourism initiatives	2.89	1.406

Table: 2 KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.722
Bartlett's Test of Sphericity	Approx. Chi-Square	853.190
	df	45
	Sig.	<.001

From the above table no: 2 it can be concluded that the data is sufficient for further analysis as the value of KMO = .731 indicates that the present data has an adequate sample. Also, the value of Bartlett's test = .000 indicates that the correlation matrix is distinct from the identity matrix and that adequate correlation between the variables exists.

Table 3: Communalities

	Initial	Extraction
Lack of adequate accommodation facilities for Tourist in Rural areas	1.000	.681
Poor or insufficient road quality connecting tourist sites	1.000	.591
Limited access to essential utilities (Electricity, Internet)	1.000	.736
Inadequate healthcare services for Tourists	1.000	.453
Limited availability of reliable public transportation to rural destinations	1.000	.855
Lack of directional signage and clear maps for Tourist	1.000	.817
Limited digital navigation support (Poor GPS and digital map accuracy)	1.000	.836
Shortage of skilled Tourism and hospitality personnel in Rural areas	1.000	.617
Limited financial resources for tourism development projects	1.000	.759
Limited private sector investment in rural tourism initiatives	1.000	.717

Extraction Method: Principal Component Analysis.

Table 4: Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.471	34.711	34.711	3.471	34.711	34.711	2.796	27.962	27.962
2	2.194	21.940	56.652	2.194	21.940	56.652	2.281	22.809	50.770
3	1.396	13.964	70.616	1.396	13.964	70.616	1.985	19.846	70.616
4	.765	7.646	78.262						
5	.599	5.986	84.247						
6	.517	5.174	89.421						
7	.390	3.903	93.324						
8	.311	3.115	96.439						
9	.192	1.919	98.357						
10	.164	1.643	100.000						

Extraction Method: Principal Component Analysis.

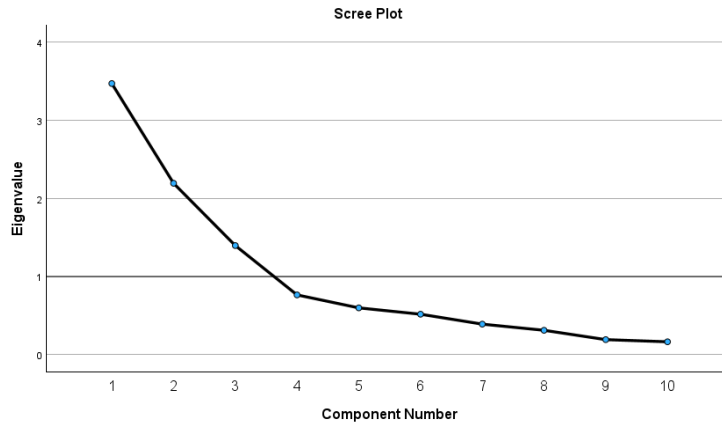


Figure 1: Scree Plot

According to Figure No. 1, the number of factors that can be kept is ascertained. According to Cattell (1966), all of the elements that contribute the most variance to the data set are extracted, the eigenvalues are displayed on the y-axis and the number of components that can be retrieved on the x-axis. All of the factors with Eigenvalue are retrieved, and Eigenvalue is the sum of the factor loadings of the vertically rotated component matrix. As a result, it is evident that three factors have eigenvalues greater than 1, and the curve's shape becomes uniform after the fourth component. Therefore, the Scree test indicates that all three criteria can be kept.

Table 5: Rotated Component Matrix

	Component		
	Accessibility Challenges	Infrastructure Challenges	Resources Challenges
Lack of adequate accommodation facilities for Tourist in Rural areas		.810	
Poor or insufficient road quality connecting tourist sites		.665	
Limited access to essential utilities (Electricity, Internet)		.855	
Inadequate healthcare services for Tourists		.622	
Limited availability of reliable public transportation to rural destinations	.909		
Lack of directional signage and clear maps for Tourist	.877		
Limited digital navigation support (Poor GPS and digital map accuracy)	.904		
Shortage of skilled Tourism and hospitality personnel in Rural areas			.729
Limited financial resources for tourism development projects			.811
Limited private sector investment in rural tourism initiatives			.839
As per table no: 5 Rotated component matrix there are 3 variables in factor 1, there are 4 variables in factor 2 and there are 3 variables in factor 3.			
Rotated component matrix table gives the correlation between the variables and the dimension. The values of component matrix are known as factor loading. These are the correlation values; hence, possible values range from -1 to +1. So, it is seen that total 10 items have clubbed and formed 3 independent factors and are named as Accessibility challenges, Infrastructure Challenges, Resources Challenges.			

Findings

Accessibility Challenges explain 34.711 per cent of variance with λ 6.187 It has a total of three items viz, Limited availability of reliable public transportation to rural destinations with factor loading .909, Lack of directional signage and clear maps for Tourist with factor loading .877 and Limited digital navigation support (Poor GPS and digital map accuracy) with factor loading .904.

Infrastructure Challenges explain 21.940 per cent of variance with λ 2.398 it has a total of four items viz, Lack of adequate accommodation facilities for Tourist in Rural areas with factor loading .810, Poor or insufficient road quality connecting tourist sites with factor loading .665, Limited access to essential utilities (Electricity, Internet) with factor loading .855 and Inadequate healthcare services for Tourists with factor loading .622.

Resources challenges explain 13.964 per cent of variance with λ 2.064 it has a total of three items viz, Shortage of skilled Tourism and hospitality personnel in Rural areas with factor loading .729, Limited financial resources for tourism development projects with factor loading .811 and Limited private sector investment in rural tourism initiatives with factor loading .839.

Conclusion

The outcome of this study revealed that accessibility, infrastructure, and resource challenges are major barriers to rural tourism development. Tourists attempting to reach remote destinations face major challenges due to accessibility concerns, such as a lack of available transportation alternatives, confusing signage, and inadequate digital navigation. Inadequate lodging, bad roads, fewer utilities, and a shortage of medical facilities are examples of infrastructure issues that further lower the standard of the travel experience. Problems with resources, such as lack of qualified workers, little funding, and little private sector involvement, also hinder the expansion of rural tourism. Based on these findings, it is imperative to solve these interrelated obstacles to enhance rural tourism infrastructure and promote sustainable growth. For rural tourism to be viable over the long term, effective solutions must prioritize improving transportation, modernizing infrastructure, and boosting financial and human resource investments.

Suggestions

- Increase accessibility for tourists by offering reliable and affordable ways to go to far-flung locations, such as government-sponsored bus lines, shuttle services, or partnerships with local transportation providers.
- Invest in clear, multilingual signage and digital navigation aids (such as GPS updates and digital maps) to provide a smoother travel experience and make it simpler for tourists to find isolated areas.
- Through subsidies, incentives, and public-private partnerships, encourage the development of a range of housing alternatives and essential amenities like electricity and internet to make rural areas more tourist-friendly.
- Focus on constructing medical facilities, enhancing road conditions, and providing basic utilities to create a safe and comfortable environment for visitors to increase the allure of rural areas as tourist destinations.
- Establish training programs for locals to develop a workforce with the necessary skills for expansion of the tourism industry.
- Attract private sector investment and offer grants or subsidies for rural tourism projects to boost financial resources and encourage long-term, sustainable tourism growth.

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