

Socio-Economic Impact of Ecotourism Development on Local Community in Kanha National Park, Madhya Pradesh, India

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Abstract-

Kanha National Park is a Tiger reserve in Madhya Pradesh, India. It is known for its rich biodiversity, including tigers, leopards and deer. The park is a popular ecotourism destination that aims to promote sustainable tourism practices and support local communities. Kanha National Park supports local communities through employment and economic opportunities. Many local residents work in the park as guides, drivers and other subsistence jobs. In addition, the park receives revenue from visitor fees and other sources to fund conservation initiatives and community development projects. The surge of visitors to the park, however, can have a negative impact on the local community. For example, an increase in crime and disruption or exploitation of the local population may occur in the name of tourism development. To reduce these effects, studies are being conducted to investigate the potential effects of tourism on the local population. This data is used to build strategies to reduce negative consequences while maximise the benefits. Kanha National Park is an important contributor to the local economy and community. Still, it is important to manage the socioeconomicimpacts of tourism to ensure a sustainable and harmonious relationship between visitors, the park and the local community. Tourism development around Kanha National Park changes the local communities' ways of life. This study asserted the needfor Sustainable Ecotourism DevelopmentwithoutExploiting the Local Community and MaximiseCommunity participation.

Keywords-Kanha National Park, Ecotourism Development, Local Community, Socio-Economic Impact Analysis.

Introduction

Tourism is defined as the action of traveling to and staying in locations outside of one's usual surroundings for leisure, business, or other reasons. It encompasses various activities including sightseeing, adventure sports&cultural experiences, and can be undertaken

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domestically and internationally. The tourism industry is a significant contributor to the world economy, encompassing everything from transportation and lodging to food and entertainment Tourism-related activities arise as a result of tourists' arrival, stay, and mobility. Tourism Related activities arise from the entry stay and movement of tourists. Some common definitions of tourism include:

- "Tourism is the temporary, short-term movement of people to destinations outside the places where they normally live and work and their activities during the stay at each destination." (World Tourism Organization)
- "Tourism comprises the activities of persons traveling to and staying in places outside their usual environment for not more than one consecutive year for leisure, business, and other purposes." (United Nations Statistics Division)
- "Tourism is the business of providing services to tourists." (American Marketing Association)

India's tourism industry is a significant one that supports the economy and creates employment opportunities. India is a popular tourist destination because of its diverse natural landscapes, diverse cultural and historical heritage, and a wide variety of tourist destinations. According to the Ministry of Tourism, Government of India, the number of foreign tourist arrivals (FTA) in India in 2019 was 10.89 million, an increase of 3.2% from the previous year. However, due to the COVID-19 pandemic, the number of FTAs in 2020 decreased to 2.69 million, a decrease of 73.7% from the previous year. In terms of domestic tourism, India saw 2.5 billion domestic tourist visits (DTVs) in 2019, a 15.5% increase over the previous year. Notwithstanding, because of the Coronavirus pandemic, the quantity of DTVs in 2020 diminished to 1.8 billion, a reduction of 25.7% from the earlier year. India's economy relies heavily on tourism, and the government has taken a number of steps to encourage more tourists to visit the country. Improving infrastructure, streamlining visa procedures, and launching marketing campaigns to attract tourists from all over the world are just some of the measures that the Indian government has taken in recent years to promote tourism in the country. In order to safeguard the country's natural and cultural heritage for future generations, the tourism industry in India has also adopted sustainable tourism practices.Regardless of the difficulties Given by the Coronavirus pandemic, The Indian travel sector is expected to recover consistently as global travel restrictions are eased and domestic travel beings. (Tourism, 2022)

The sector is also looking into new opportunities, such as rural tourism, wellness tourism, adventure tourism, and others, to bring in a wider range of tourists and provide local communities with long-term employment. (Karmakar, 2011)

Ecotourism is an emerging trend with the fundamental objective of Striking a balance between tourism, the environment, and the well-being of the local people. It is a responsible form of travel and tourism that gives tourists an opportunity to study, admire and enjoy the nature and culture of the place visited. (Sampad Kumar Swain, Jitendra Mohan Mishra, 2015) Ecotourism is a growing industry in India that focuses on showcasing the country's natural beauty and rich cultural heritage while also encouraging environmentally responsible travel. "Ecotourism" refers to the responsible migration to natural regions that maintain the environment, sustain the well-being of local peoples, and involve interpretation and education. India has a different scope of normal and social assets that draw in sightseers from everywhere in the world. Some of the Popular Ecotourism Destinations in India include Jim Corbett National Park, Bandhavgarh National Park, and Kanha National Park, which offer guests the valuable chance to notice uncommon and jeopardized untamed life right at home. The Himalayan foothills, the Western Ghats, and the Andaman and Nicobar Islands are all popular ecotourism destinations in India. (Singh, 2021)

The public authority of India has likewise taken a few drives to advance ecotourism in the country. Ecotourism infrastructure, such as nature trails, trekking routes, and wildlife safaris, has been developed through a number of initiatives initiated by the Ministry of Tourism.In addition, the government has established eco-tourism parks and camping places throughout the country. Aside from providing financial advantages to nearby networks, ecotourism also aids in the preservation of natural resources and the advancement of sustainable turn of events. It allows tourists to learn about the issues that local communities confront and their conservation efforts, as well as to encourage visitors to respect the environment and local cultures.(Stone, 2004)

2. Review of Literature

Kumar, V. (2009)In his Research Paper, "Impact of Ecotourism on Visitors and Villagers in Satpura national park, Madhya Pradesh". Assessed the Impact of Ecotourism on Visitors (both Indians and foreigners) in terms of its extended effects favoring forest and the environment and the local Villagers in Satpura National Park regarding various parameters like the standard of living, food intake expenditure, cultural activities, etc.

Panigrahi, N. (2019), in the Article "Development of Ecotourism in Orissa's tribal regions: Potential and Recommendations", recommended that efforts be undertaken to safeguard the ethnic tribal groups' physical and cultural ecosystem by empowering them through a participatory protected area management method.

Tata Consultancy Service Survey (2000) carried out the study on the "Economic Benefits to Tourism Sector in Kerala". the highlights Kerala's tourism-related economic benefits. The survey looked at how long tourists stay, what they spend and the jobs and money tourists make. It also calculated the economic impact of both domestic and international tourists arriving.

Tapank Panda, Sitikantha Mishra&BivrajBhusanParida (1992)in the book "Tourism Management: The Socio-Economic and Ecological Perspective," mentioned that tourism is a multifaceted economic activity that interacts with the environment in a two-way process. Environmental resources, on the other hand, are an integral part of the tourism industry: the normal and/or man-made environment in which the traveller can appreciate, live and relax. On the other hand, tourism produces various unwanted by-products that are removed either intentionally or unintentionally and that change the environment: Negative externalities on the environment.

Andrew Holden (2000) writes in his book Environment and Tourism, 'ecotourism is big business today'. Products with an eco-label may fetch higher prices in the market. Similarly, donors and well-meaning organizations provide ecotourism promoters with significant amounts of money, making consultancy a lucrative endeavour. The study provides the global context and necessary policy components for ecotourism development in other parts of Malaysia.

Viswanath &Chandrashekara (2014) Structured a study on the "Economic Impact of Ecotourism-A Perceptional Study" which was based on two dimensions, these are Positive and negative Impacts of ecotourism. The scientific investigation was conducted to the 300 Respondents which includes Government officers, NGO leaders, Community Leaders, and employers of local Authorities.it is recognized that the number of positive effects of ecotourism is rather due to the increase in job opportunities, cash flow and social welfare. Some of the negative effects of ecotourism the interviews, such as high cost of living, high income from the migration of local people.

Bharat Bhusan, Swapna Sarita Swain and Piyush Ranjan (2022) Organised a Study on Potential Ecotourism development and its impact on local communities: A Case study of

Dhenkanal. The study concludes that ecotourism creates a positive socio-economic effect on the local community of Saptasajyaand Kapilash of Dhenkanal District. In Odisha, there are lots of Potential Ecotourism Sitesneeds proper Development and Maintenance.

3. Objective of the Study

The paper attempts to explore the socio-economic impact of ecotourism on the local Community in Kanha National Park and determine whether such Components are Significant in Analysing the Socio-economic Impact.

4. Study Area

Kanha National Park is a large protected area in the central state of Madhya Pradesh, India. The Area of Kanha National Park is Situated between 22° 1′ 5″ to 22° 27′ 48″Latititde and 80°- 26′-10″ to 81°-4′-40″ Longitude. It is home to many plants and animal species, including many endangered and threatened species, such as the Bengal tiger, Indian leopard, and Indian rhinoceros. The park covers an area of approximately 940 sq. kilometers and is known for its beautiful forests, grasslands, and streams. It is a popular destination for wildlife enthusiasts, who see the park's abundant wildlife and enjoy activities such as safari tours and birdwatching. Kanha National Park is a beautiful and popular ecotourism destination located in Madhya Pradesh in central India. It is known for its diverse wildlife, including Bengal tigers, Indian leopards, sloth bears, and over 200 species of birds. Visitors to Kanha National Park can participate in various ecotourism activities, such as wildlife safaris, bird watching, and nature walks. There are also several lodges and resorts within the park where visitors can stay and experience the area's natural beauty. Additionally, several tour operators offer guided tours and packages for those interested in exploring the park and learning about its ecology and conservation efforts. Ecotourism is a form of tourism that involves visiting nature-based areas and engaging in activities with a low environmental impact while supporting the local community and culture. In Kanha National Park, ecotourism can positively and negatively impact on visitors and villagers.(Madhya Pradesh Forest Department, 2023)

Table -1 Year Wise Break up of visits of Indian & Foreign Visitors in the years 2016-2021

S.N.	Year	Indian Visitors	Foreign Visitors
1.	2016	129616	17211
2.	2017	138204	17481
3.	2018	156018	20539
4.	2019	230685	24764

5.	2020	61708	9033
6.	2021	149568	146

Source: Madhya Pradesh Tourism Board Administrative Report.

5. Research Methodology

The Study was Conducted in April2023 to assess the Socio-economic Impact of ecotourism in the Kanha National Park on the local community in terms of various categories like Personal Growth, Infrastructure Development, Employment Opportunities for Youth, IncomeGeneration, Improvement of living standard and Increasing crime rate. A sample of 100 Respondents was selected by multi-stage random Sampling based on the tourism-affected areas. The Sample Consisted of the local population living near the Kanha National Park.

The level of the socio-economic impact of ecotourism on local communities was rated on a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). EFA and CFA were used in this data. Principal Components extracted with Eigenvalue greater than 1, were named to represent first-order latent variables in Socio-economic Impact- Measurement Model.

6. Result and Discussion

The Profile of the Respondents issketched out from Table 2 to Table 5.

Table -2 Age Group&Gender

Years	N	Percentage (%)		N	Percentage (%)
Below 20	15	15.0	Male	68	68.0
21-40	41	41.0	Female	32	32.0
41-60	33	33.0			
61-80	11	11.0			
Total	100	100.0	Total	100	100.0

The sample consisted of 68Percent male Respondents and 32 Percent female of which 15 percent are below 20 years of age.41 percent are 21 to 40 years; 33 percent are 41 to 60 years Age Group and 11 percent are 61-80 years of age group. (Table-2)

Table-3Education level&Occupation

	N	Percentage (%)		N	Percentage (%)
Up to 10th	18	18.0	Student	13	13.0
Up to 12th	40	40.0	Self-employed	28	28.0
Graduate	27	27.0	Employed	22	22.0
Post Graduate	12	12.0	Semi-employed	20	20.0
Others	3	3.0	Unemployed	17	17.0
Total	100	100.0	Total	100	100.0

The Education Level and Occupation of the Respondents have been tabulated in Table-3Which reveals thatout of the total respondents 100,18 were Up to 10th Pass,40wereup to 12th Pass,27 were Graduate,12 were Post Graduate and3 Were Diploma Graduates.

The Respondents belongs to different Occupation,12 Were Student,28 was Self Employed 22 Were Employed,20 Worked as Freelancer, and 17 were Unemployed.

Table-4Descriptive Statistics

	Mean	SD	N
Improvement in living standard	3.16	1.161	100
Ecotourism helped to increase the production of local goods.	4.07	0.868	100
Recreational Facility and Amenities Development	2.97	1.141	100
Improvement the community hospitality toward tourists	3.93	1.008	100
Ecotourism benefited young people of the community	4.00	0.876	100
Local Community Disturbed and Exploited for Ecotourism Development	4.37	0.800	100
Ecotourism Control of a few operators	2.91	1.280	100
Tourism has brought more money into the community	3.78	1.088	100
Ecotourism improves the social well-being	3.31	1.107	100
Ecotourism increases the Crime rate	4.27	0.815	100

Local Community Disturbed and Exploited for Ecotourism Development with the highest Mean score of 4.37 and SD ±0.800 was found to be the most suitable socio-economic impact factor in Kanha National Park, while the least satisfying one was Ecotourism Control of a few operators indicated by the lowest mean of 2.91 and SD ±1.280 .All other impact factors other than Recreational Facility and Amenities Development had a mean score greater than 3.00, indicating average or more than average impact. A thorough scan of the Pearson Correlation coefficients revealed that the highest Correlation is 0.583.

The sample adequacy measures and the Test of sphericity were checked and the result is shown in Table 5.

Table-5KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of	.752	
Bartlett's Test of Sphericity	Approximate Chi-Square	271.647
	Degree of Freedom	45
	Sig.	.000

With a KMO measure of sampling sufficiency of 0.752 which is considered to be average and Bartlett's measure of Chi-square of 271.647 at 45 degrees of freedom. with an importance worth of under 0.05 which dismisses the null hypothesis that the first Correlation is an identity matrix

examination. The data is proper for Principal Component Analysis.

Table-6Communalities

	Initial	Extraction
Improvement in living standard	1.000	0.700
Ecotourism helped to increase the production of local goods.	1.000	0.635
Recreational Facility and Amenities Development	1.000	0.683
Improvement the community hospitality toward tourists	1.000	0.508
Ecotourism benefited young people of the community	1.000	0.723
Local Community Disturbed and Exploited for Ecotourism Development	1.000	0.686
Ecotourism Control of a few operators	1.000	0.620
Tourism has brought more money into the community	1.000	0.620
Ecotourism improves the social well-being	1.000	0.604
Ecotourism increases the Crime rate	1.000	0.583

Principal component analysis is predicated on the notion that all variances are originally common, and hence all commonalities prior to extraction will be unit. The extracted communalities represent the shared variation in the data structure, such as 70.0 percent of the variance associated with the first measure which is Improvement in living standard. The Highest Extraction value is 0.723 for the Ecotourism benefited young people of the community and the lowest Extraction value is 0.583 for Ecotourism increases the Crime rate.

Table-7Total Variance Explained

		C	Componen	ıt
		1	2	3
Initial Eigenvalues	Total	3.303	1.887	1.172
	% of Variance	33.025	18.874	11.721
	Cumulative %	33.025	51.899	63.621
Extraction Sums of Squared Loadings	Total	3.303	1.887	1.172
	% of Variance	33.025	18.874	11.721
	Cumulative %	33.025	51.899	63.621
Rotation Sums of Squared Loadings	Total	2.557	2.360	1.445
	% of Variance	25.569	23.597	14.454
	Cumulative %	25.569	49.167	63.621

Extraction Method: Principal Component Analysis.

Table 7 shows the explanation for the Total variance and the eigenvalues associated with thefirst three linear components or factors detected in the data set following extraction and rotation. The extraction of factors with eigenvalues greater than 1 extracted3 components into which the other factors load. Before rotation, Principal Component 1 explained 33.025 % of

the variance, Principal Component 2 explained 18.874% of the variance, Principal Component 3 explained 11.721% of the variance and a Cumulative 63.621% of the Variance. However, After Rotation Principal Component 1 explained 25.569% of the Variance. Principal Component 2 explained 23.597% of the Variance and Principal Component 3 explained 14.454% of the Variance though the total variance Explained remains the same at 63.621% of the Variance. The Rotated Component Matrix is shown in Table 8.

Table-8Rotated Component Matrix

	Component		ent
	1	2	3
Ecotourism helped to increase the production of local goods.	.774		
Improvement the community hospitality toward tourists	.771		
Ecotourism increases the Crime rate	.738		
Tourism has brought more money into the community	.665		
Improvement in living standard		.826	
Recreational Facility and Amenities Development		.803	
Ecotourism improves social well-being.		.668	
Ecotourism Control of a few operators		.594	
Ecotourism benefited young people of the community.			.761
Local Community Disturbed and Exploited for Ecotourism Development	.429		.709

The Improvement in living standardshows the highest factor loading of 0.826in Principal Component 2 while Local Community Disturbed and Exploited for Ecotourism Development shows the lowest loading of 0.429in Principal Component 1 because it is cross-loaded.so this loading ignored and considered the value in Component 3.Component 1 has Four Factor loading, Component 2 also has Four Factor loading and Component 3 has two Factor loading

The three factors are identified as:

6.1 Income /Goods,Hospitality and Crime-This Principal Component Comprises 4 Measures of the Economic Impact of Ecotourismnamely 'production of local goods', 'community hospitality towards tourists',' increase the Crime rate and 'Income Generation'that loads0.774,0.771,0.738, 0.665 Respectively with loading greater than 0.50. They Together account for 25.569 % of the total Variance after rotation.

6.2 Living standard, social well-being improvement and Infrastructure DevelopmentThis Principal Component Comprises Four Measures of the Economic Impact of Ecotourism

namely Improvement in living standard', 'Recreational Facility and Amenities Development', 'Ecotourism improves social well-being' and 'Ecotourism Control of a few operators' that loads 0.826, 0.803, 0.668, 0.594 respectively with loading much greater than 0.50. and together account for 23.597% of total variances after rotation.

6.3 Community Benefit and Exploitation-

'Ecotourism benefited young people of the community; and 'Local Community Disturbed and Exploited for Ecotourism Development' are the two measures of Economic impact of Ecotourism that positively load 0.761 and .709into this component with loading greaterthan 0.50 and it explains for 14.454% of total variances after rotation.

7. Confirmatory Factor Analysis

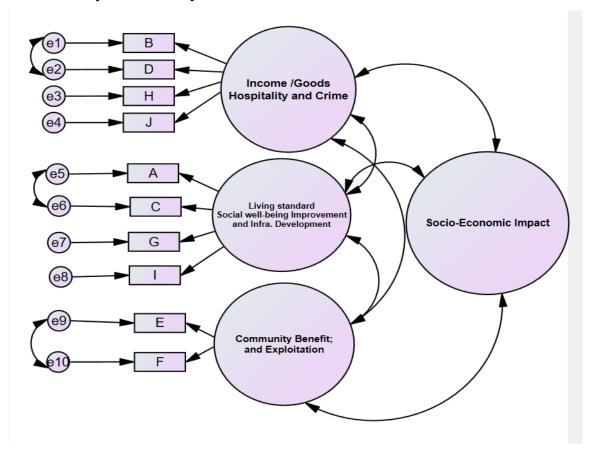


Figure-1 Socioeconomic Impact- Measurement Model

Legends for the Figure	
Improvement in living standard	A
Ecotourism helped to increase the production of local goods.	В
Recreational Facility and Amenities Development	С

Improvement the community hospitality towards tourists	D
Ecotourism benefited young people of the community	E
Local Community Disturbed and Exploited for Ecotourism Development	F
Ecotourism Control of a few operators	G
Tourism has brought more money into the community	Н
Ecotourism improves the social well-being	I
Ecotourism increases the Crime rate	J

7.1 Internal reliability

Internal reliability is a measure that considers correlations between different items on the same test, or subscales of larger trials. Cronbach's Alpha was used to assess the model's internal consistency, which indicates how well the measuring items stay together while measuring the corresponding constructs. When Cronbach's Alpha value surpasses 0.70, internal reliability is established. Table 9 shows the internal reliability of these 10 items as reflected by Cronbach's Alpha. Cronbach's alpha for the 10 response items was determined to be 0.768, indicating that the model had acceptable internal reliability.

Table -9Reliability Statistics

Cronbach's Alpha	N of Items
0.768	10

7.2 Composite Reliability and Convergent Validity

Composite Reliability is yet another method by which a researcher can assess the internal consistency of his variables. It is suggested that a construct's dependability be at least 0.70. High composite reliability indicates that all of your items consistently measure the same concept.

The Composite Reliability of the variables can be calculated as follows.

$$CR = (\Sigma \lambda)^2 / [(\Sigma \lambda)^2 + (\Sigma 1 - \lambda^2)]$$

Where λ =Factor loading on each item and $(1-\lambda)$ =Error

In addition to eliminating low factor loading items in a model that might cause the construct to fail Convergent Validity, such convergent validity could also be confirmed by computing the Average Variance Explained (AVE) for the construct as shown below.

Average Variance Explained (AVE)= $\Sigma \lambda^2/N$

Where λ =Factor loading on each item.

N= Number of items in the model.

Table-13 Shows the Average Variance Explained (AVE) and Composite Reliability (CR) of the model explaining the latent variable Economic impact.

The findings show that the composite reliability for the Variables is **0.921**which is more than the threshold value of 0.70. This is a clear indicator that all items consistently measure their associated construct.

The proposed Average Variance Explained (AVE) threshold value is 0.5, and convergent validity is stated to be achieved when AVE is more than 0.50. the AVE in the model under consideration is **0.53883**, So the convergent validity is achieved properly.

Table-13 Average Variance Explained (AVE) and Composite Reliability (CR)

Variables	λ	λ^2	$1-\lambda^2$
Ecotourism helped to increase the production of local goods.	0.774	0.5991	0.4009
Tourism has brought more money into the community	0.771	0.5944	0.4056
Ecotourism increases the Crime rate	0.738	0.5446	0.4554
Improvement the community hospitality toward tourists	0.665	0.4422	0.5578
Improvement in living standard	0.826	0.6823	0.3177
Recreational Facility and Amenities Development	0.803	0.6448	0.3552
Ecotourism improves social well-being.	0.668	0.4462	0.5538
Ecotourism Control of a few operators	0.594	0.3528	0.6472
Ecotourism benefited young people of the community.	0.761	0.5791	0.4209
CommunityDisturbed and Exploited for Ecotourism Development	0.709	0.5027	0.4973
Total	7.309	5.3883	4.6117
Average Variance Explained (AVE)			0.921
Composite Reliability (CR)		0.5388	

7.3 Discriminant Validity

The model ensures discriminative validity by identifying element redundancy in the model using a discordance measure called the Modified Index (MI), and "free parameter estimates" for redundant elements with high Modified Index values. Constrained the redundant pair as a "value". This indicates that the measurement model for the construction of cultural tourism products does not contain redundant elements. Another criterion for discrimination validity is that the correlation between endogenous constructs should not exceed 0.85. A correlation value greater than 0.85 indicates that the two configurations are redundant or have severe multicollinearity problems. The Correlation between the variables is shown in Table-12.

Table-12 Implied CorrelationsBetween Variables

		В	C	D	E	F	G	Н	I	J	K
Correlation	В	1.00									

C	0.04	1.00								
D	0.58	0.14	1.00							
Е	0.17	0.40	0.27	1.00						
F	0.36	0.17	0.35	0.26	1.00					
G	0.14	0.34	0.12	0.25	0.43	1.00				
Н	0.37	0.19	0.37	0.32	0.06	0.09	1.00			
I	0.22	0.47	0.21	0.47	0.10	0.29	0.25	1.00		
J	0.47	0.01	0.48	0.07	0.38	0.15	0.18	0.02	1.00	
K	0.03	0.53	0.16	0.32	0.07	0.39	0.17	0.44	0.09	1.00

The highest correlation between variables is 0.58 and it is less than 0.85 which indicated no concern about multicollinearity.

Pattern Matrix

	Component		
	1	2	3
EI_2 Ecotourism helped to increase the production of local goods.	.782		
EI_8 Improvement the community hospitality towards tourists	.769		
EI_10 Ecotourism increases the Crime rate	.745		
EI_4 Tourism has brought more money into the community	.647		
EI_1 Improvement in living standard		.831	
EI_3 Recreational Facility and Amenities Development		.797	
EI_9 Ecotourism improves social well-being.		.668	
EI_7 Ecotourism Control of a few operators		.591	
EI_5 Ecotourism benefited young people of the community.			.750
EI_6 Local Community Disturbed and Exploited for Ecotourism			.705
Development.			

Extraction Method: Principal Component Analysis.

Average Loading for Component 1	0.73575	Variance Extracted	0.541328
Average Loadingfor Component 2	0.72175	Variance Extracted	0.520923
Average Loadingfor Component 3	0.7275	Variance Extracted	0.529256
		Variance Extracted between	0.530502
		Components 1,2 and 3	
		Correlation	0.58
		Correlation Sq.	0.3364

The average Loading for Components 1,2 and 3 is Computed Through a Pattern Matrix table and Variance Extracted is the Square of Average Loadingafter the calculation the average sum of Variance Extracted between Components 1,2 and 3 is taken. The correlation is shown as 0.58 and Correlation Square is 0. 3364. Therefore the variance Extracted is greater than Correlation Sq., So Discriminant Validity Established.

7.4 Construct Validity

Table-Fitness Indices-Ecotourism Socioeconomic Impact Model

Ecotourism Socioecon	Values	df	Threshold	
	Standardized RMR	0.476		< 0.08
Absolute Fit	CMIN χ^2	253.798	33	p>0.05
	RMSEA	0.066		<0.08
	GFI	0.911		>0.90
Permission Fit	χ^2/DF	2.513		<5

All of the indices are within an acceptable range, and the threshold value criteria are fulfilled. The model is said to be a great match the regression weight prediction of the latent variable "Ecotourism Socio-Economic Impact" reflections of observed variables is not Significantly different from zero at the 0.001 level (two-tailed).

Table-Hypothesis Test Results

Null Hypothesis	SRW	p (Significance	Decision
		Level)	
H ₀₁ The dimensions of Income /Goods,	0.774	0.01	Reject
Hospitality and Crime areinsignificant in			
predicting the Socio-Economic Impact of			
Ecotourism.			
H ₀₂ The dimensions of Living standard,	0.826	0.01	Reject
social well-being improvement and			
Infrastructure Development are not			
significant in the prediction of the Socio-			
Economic Impact of Ecotourism.			
H ₀₃ The dimensions of Community Benefit	0.761	0.01	Reject
and Exploitation are not significant in the			
prediction of the Socio-Economic Impact of			
Ecotourism.			

It is thus Observed that the dimension of 'Income /Goods, Hospitality and Crime', 'Living standard, social well-being improvement and Infrastructure Development and 'Community Benefit and Exploitation are significant in the Prediction of the Socio-economic Impact of Ecotourism in Kanha National Park that Happened.

Positive and Negative Impact of Ecotourism

Positive impacts on Local Community:

- Ecotourism can provide an alternative source of income for villagers living in or near the national park.
- It can also create employment opportunities in areas such as guiding, homestays, and cultural experiences.
- Ecotourism can also bring awareness to local issues and encourage the involvement of villagers in conservation efforts.

Negative impacts on Local Communities:

- Ecotourism can sometimes lead to an increase in the cost of living for villagers as the demand for goods and services increases.
- It can also lead to the displacement of villagers if their land is taken over for tourism development.
- There may be cultural conflicts if the values and beliefs of tourists and villagers are not respected.

8. Conclusion

The available statistics regarding the Socio-Economic Impact of Ecotourism Development on the Local community in Kanha National Park, Madhya Pradesh,highlight the Positive and negative Socio-Economic impact of ecotourism. The Responses received from the Respondents through the Structured Questionnaire. To increase sustainable tourism in the local area this is the need of the hour to sustain the indigenous knowledge of the local people. If the nation wants to achieve sustainable development, then in different goals like life on land and life in water, the sea must be protected which is clearly mentioned in the Sustainable Development Goals. Modernity is about the holistic development of different aspects such as socio-economic, political, technological, etc.

Ecotourism in Kanha National Park, which has not been considered at par with many other Ecotourism destinations in India, can be a focal point of Development through tourism if the Ecotourism activities in and around the National Park are Impact Positively. The Ecotourism impact on local community have been examined and the level of impact of such activities are brought under the scanner. A detailed analysis of such variables highlighted the prominence of

Improvement in living standards, Infrastructure Development and Local Goods Production. However,Improvement in social Well-being and Ecotourism increased the crime rate and was found less impactful from the perspective of the local community. The reason behind the Dissatisfaction is that the Business Owner or Service Provider e.g., Jeep Owner is getting a

high share in the Profit Margin. The Study focused on the assessment of the impact of different variables and confirmed that Except Ecotourism benefited young people and Community Disturbed and Exploited for Ecotourism Development all other principal Components identified as a Combination of Socio-Economic Impact so these should be Positioned. The policymakers should indulge the Local Youth in Ecotourism Development.

References

- 1. Kumar, V. (2009). Impact of Ecotourism on Visitors and Villagers in Satpura national park, Madhya Pradesh. *Journal of Tropical Forestry*, 25(1/2), 62-65.
- 2. Panigrahi, N. (2019). Development of Ecotourism in tribal regions of Orissa: Potential and recommendations. *Culture Mandala*, *13*(3), 9410.
- 3. TCS (Tata Consultancy Services, 2000). Economic Benefits of Tourism Sector in Kerala. Report of the study conducted by TATA Consultancy Services, India.
- 4. Tapan, K. Panda, Sitikantha Mishra & Bivaraj Bhusan Parida, *Tourism Management: The Socio-Economic and Ecological Perspective*. UniversityPress, New Delhi (1992) PP 100-124.
- 5. Holden, A. (2016). Environment and tourism. Routledge.
- 6. Darda, M. A., & Bhuiyan, M. A. H. (2022). A Structural Equation Model (SEM) for the socio-economic impacts of ecotourism development in Malaysia. *Plos one*, *17*(8), e0273294.
- 7. Stone, M., & Wall, G. (2004). Ecotourism and community development: case studies from Hainan, China. *Environmental management*, *33*, 12-24.
- 8. Karmakar, M. (2011). Ecotourism and its impact on the regional economy–A study of North Bengal (India). *Tourismos*, *6*(1), 251-270.
- 9. Viswanath, S.&Chandrasekhara, B.(2014).Economic Impact of Ecotourism-A Perceptional Study. International Journal of Innovative Research &Studies, Vol.3,Issue3,15-24.
- 10. Swain, S.K.& Mishra, J.M. (2015). Tourism Principles and Practices. New Delhi: Oxford University Press.
- 11. Stone, M. (2004). Ecotourism and community development: case studies from Hainan, China. Environmental management, Springer, 12-24.
- 12. Tourism, M. o. (2022). Annual Report. New Delhi: Ministry of Tourism, Government of India.

- 13. Madhya Pradesh Forest Department. (2023, 5 13). Madhya Pradesh Van Vibhag.

 Retrieved from Kanha Tiger

 Reserve:https://www.mpforest.gov.in/HO_Outer/kanha.aspx.
- 14. Singh, J. (2021). Ecotourism 2021. New Delhi: Wiley India.

Theses

- 1. Tripathi, U. (2021). Ecotourism In India A Case Study of Kanha National Park. Retrieved from http://hdl.handle.net/10603/363393.
- 2. Ponni Brinda, R. (2009). Sociocultural Impact of Ecotourism in Thenmala Kerala. Retrieved from http://hdl.handle.net/10603/225620.
- 3. Rawat,D. (2021). Potential for Promotion of Ecotourism in National Park-A Case Study of Rajaji National Park. Retrieved from http://hdl.handle.net/10603/315508.
- 4. Oommen, B. (2016). Impact of Ecotourism on Village Economy and Society in Sikkim.Retrieved from http://hdl.handle.net/10603/175252.
- 5. Bhalla, P. (2018). Ecotourism impact assessment on Binswar wildlife sanctuary of Uttarakhand India. Retrieved from http://hdl.handle.net/10603/303067.
- Pareek, S. (2014). An Analytical Study of Sustainable Development of Ecotourism: A
 Case Study of Ranthambore National Park. Retrieved
 fromhttp://hdl.handle.net/10603/139668.
- Kumar, V. (2020). Impacts and Sustainability of Ecotourism in Great Himalayan National Park A UNESCO World Heritage Site. Retrieved from http://hdl.handle.net/10603/318007.
- 8. Suneera, A. (2017). Role of ecotourism in socio-economic empowerment of thecommunity with special reference to Kerala. Retrieved from http://hdl.handle.net/10603/213802.

Books

- 1. Swain, S.K.&Mishra, J.M. (1992). *TourismPrinciples andPractices*. UniversityPress, New Delhi.
- 2. Fennell, D. A. (2014). *Ecotourism*. Routledge.