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Identifying the Determinants of Ecotourism Potential: An Investigation of Reiek in Mizoram

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Cover Page Footnote

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Identifying the Determinants of Ecotourism Potential: An Investigation of Reiek in Mizoram

1. Introduction

The phenomenon of ecotourism became a trend in the later part of 1980s (Wild, 1994, p.12), but there exists ambiguity with the conceptualizations of the term (Dimitriou, 2017, p.28). This argument finds support from Bjork (2000), who affirms that literature is still limited when it comes to kinds of areas that fall under ecotourism. Moreover, the conceptual clarity over the term ecotourism has little to do with the growing consumption of the term (Bottrill & Pearce, 1995). In fact, the growing number of ecotourism definitions indicate that the concept is perceived differently by people (Orams, 1995). There is a vast and ever-increasing literature on ecotourism worldwide that has touched upon various issues related ecotourism including definition, dimensions, and relation with other form of tourism and environmental management principles (Boyd & Butler, 1996).

While talking about India and especially the North-eastern region of India, the concept of ecotourism is gradually emerging as a much talked about phenomenon. Despite having enormous tourism resources, one state which is still very much underexplored of this region is Mizoram - the land of blue mountains. Unfortunately, the ecotourism prospects of the state have always been underestimated and poorly studied, which is regarded as essential for destination development (Yan et al., 2017). As such, many prospective destinations in Mizoram could not be developed due to inadequate and deficient assessment mechanism of tourism potential. In context of this, the current study attempted to identify and evaluate the determinants of ecotourism potential of *Reiek* in Mizoram.

To evaluate the determinants of ecotourism potential of *Reiek*, the *Ecotourism Opportunity Spectrum (ECOS) framework* developed by *Boyd and Butler (1996)* for ecotourism destinations were examined in this study. Specifically, this ECOS framework identifies eight different factors - accessibility, relationship of ecotourism to other resources, regional attractions, availability of tourism infrastructure, status of users' capability and knowledge, degree of social interaction, acceptable degree of effects and control on utilization, and type of management developed for long term protection of the area - that determine the ecotourism potential of an ecotourism destination. This study was carried out with the intention of further validating the ECOS framework. Firstly, by replicating the framework and extending it to new geographical area by relying on a relatively large sample of 201 participants in *Reiek*, Mizoram. Secondly, because of its evidence-based nature, cause-effect relationship among variables were studied by explaining, predicting, and delighting (Cannatelli, 2017).

1.1 Scope for Ecotourism in Mizoram

These are significant positive and negative factors to enhancing ecotourism in Mizoram. Although Mizoram tourism industry has taken some curative measures, no considerable progress is evident (Tourism Department, Govt of Mizoram). The reason being the fact that the state is plagued by policy paralysis as well as no significant infrastructural development has occurred in the last few years. However, the state is endowed with a myriad of tourism activities which include: adventure related tourism, nature based

tourism, cultural &, heritage tourism, rural tourism, community based tourism, music tourism, fashion tourism, religious tourism among others. The state is also endowed with profound beautiful landscapes surrounded by forest, rivers and streams between the hills, along with its rich natural and cultural resources offers distinct openings for ecotourism activities.

Mizoram has nearly 88.93% of its land is enveloped in forests that supports various species of mammals, birds, reptiles, more than 2500 species of plants including 253 species of orchids (SFR 2022) and more than 300 species of medicinal plants. So, ecotourism provides a wider scope for the state to exhibit its exclusive natural and cultural assets to tourists while improving the economic conditions of the residents.

1.2 Rationale of the Study

Ecotourism as an academic field has received less attention in developing nations compared to that of developed nations (Yoon & Lee, 2023). In certain other cases, countries tend to promote ecotourism development because of exogenous market pressures (Boyd & Butler, 1996). Boyd and Butler (1996) further asserted that only places which are worthy of ecotourism be grown and that the criteria for ecotourism are complemented with the resource base attributes of the region.

Places that carry a mix of natural and cultural resources are usually chosen for the ecotourism activities. These places have tremendous opportunities to be developed as ecotourism destinations and to attract ecotourists (Briedenhann & Wickens, 2004). So, recognizing, preserving, and sustaining the distinct characteristics of these areas are of great significance in terms of progression of ecotourism practices. Undoubtedly, ecotourism is an integral subset of sustainable tourism and carries immense potential to be developed as a major segment in the tourism domain in general (Choi & Sirakaya, 2006). But, the inadequate comprehension of the concept of ecotourism has created a vagueness among scholars and practitioners in the field (Lee & Jan, 2017). These insights defend the conduct of this study.

2. Literature Review

2.1 Theoretical Underpinning

The term ecotourism has emerged as one of the most popular as well as contested themes in the last few years (Dimitriou, 2017). Numerous opinions, diverse notions, perspectives, and viewpoints have been manifested and documented about ecotourism, which demonstrates the lack of convergence in its terminology and definitions among the scholars (Lindberg, 1996; Dimitriou, 2000). However, the literature on tourism is full of terms that relate to this form of tourism: ‘small scale’, ‘alternative’, ‘green’, ‘nature’, ‘responsible’, ‘sustainable’ and so on (Dimitriou, 2017, p.27). Godfrey (1998) blames this conceptual ambiguity on the efforts of some to get rid of the mass tourism tag, and to do this they coined certain words and synonyms with the intent of establishing how different, novel, and finer ecotourism is in comparison to mass tourism. It is mainly described as a sustainable type of tourism, which is witnessing a phase of fast growth in the tourism industry (Sharpley, 2006; Yeo & Piper, 2011; Cobbinah, 2015). Moreover, it presents a window to know destination through the nature and indigenous culture; implements the

framework of sustainable tourism in terms of social, economic, and environmental nature (Pleșoianu et al., 2018), enabling sustainable development of the region (Pavlidis et al., 2022). The World Tourism Organization in its recent report emphasized the need to enhance accessibility in preserved locations by underpinning the competitiveness and sustainability of tourist places, bringing a change in tourist's attitudes, and uniting environmental intelligence into tourism via acute innovations and digital technology (UNWTO, 2021).

The term ecotourism has been interpretated as environmentally friendly journey to natural habitats with a preserved ecosystem, boosting the wellbeing of the local community, and incorporating explanation and education (The International Ecotourism, 2015). In this study, the term 'ecotourism' has been adopted as a form of tourism that promotes environment conservation, minimises the detrimental impacts of mass tourism, promotes tourism activities which are more sustainable, and makes local community economically independent. This operational definition is a synthesized genre of the term 'ecotourism' as recognized in the academic dialogue of various academicians (Marzouki et al., 2012; Dimitriou, 2017; Coghlan & Carter, 2020; Baloch et al., 2022).

2.2 Ecotourism Potential and its Determinants

Over the past 30 years of development, different dimensions of ecotourism have emerged globally (Liu & Li, 2020), such as framework development for evaluating the performance of ecotourism at a particular destination (Ross & Wall, 1999; Fennell, 2001), activities and valuation (Lee & Snepenger, 1992; He et al., 2008; Wendy & Jim, 2012), carrying capacity of the environment (Kang & Xu, 2010; Shi et al., 2015), community involvement (Jones, 2005; Stronza & Gordillo, 2008), and so on. Being a well-recognized tool for achieving sustainable tourism, ecotourism has been pursued not only in different kinds of natural habitats but also in various countries and regions (Liu & Li, 2020). In fact, there is no dearth of ecotourism-based publications, and the patterns of ecotourism studies have received persistent attention (Sun & Gao, 2012; Liu et al., 2013; Das & Chatterjee, 2015). Notwithstanding the extant literature on ecotourism witnessing a rapid growth, there still exists a need to have established standardized methods for "site-level assessment" of ecotourism (Ross & Wall, 1999). However, in their seminal work titled *"Ecotourism: Towards congruence between theory and practice,"* Ross and Wall (1999) presented and vindicated a framework for the growth and assessment of ecotourism. While delineating the proposed framework, they argued that ecotourism can contribute astoundingly to preservation as well as growth and it encompasses the generation of constructive synergistic relationship among tourism, biodiversity, and local communities via execution of suitable management policies and strategies.

While evaluating the ecotourism potential, Tseng et al. (2019), in their path breaking work, mainly focused on four determinants namely value of attractions, facility management, activities and community participation. On the other hand, Ocampo et al. (2018) claim that ecotourism has maximum potential when the phenomenon is directed towards nature friendly travel to natural destinations, enhancing standard of living of local populace, environmental awareness, and practicing activities that are necessary for tourist satisfaction. They further assert that ecotourism potential encompasses the outcome of sustainable development, which ultimately can usher into sustainable tourism.

While past studies have focused on providing theoretical underpin in the ecotourism research, some have concentrated on the aspects of ecotourism by employing a review of decisions. Bassey (2015) asserts that tourism potential is the pool of resources possessed by a community or a place that could be transformed and developed into tourist attractions or finished products. However, Yan et al. (2017) argue that tourism potential should not be evaluated solely from a resource-based perspective; operational factors in terms of facilities, services, and infrastructure to make attractions visitor-ready are important additions to the concerns about tourism potential. So, after realizing first the pertinent resources and the potential of various places the ecotourism potential of the destination can be encouraged, since an assessment of destination potential is the opening step in tourism development (Yan et al., 2017). Boyd and Butler (1996) put forth a framework for assessing the ecotourism potential with a comprehensive understanding of the subject. In their formative paper on ecotourism potential titled, *"Managing ecotourism: an opportunity spectrum approach,"* drawing on previous frameworks namely Recreation Opportunity Spectrum (ROS), the Tourism Opportunity Spectrum (TOS), Limits of Acceptable Change (LAC), Visitor Activities Management Planning (VAMP), and the Visitor Impact Monitoring Process (VIMP), they had developed a new framework which was termed as *Ecotourism Opportunity Spectrum (ECOS)* and involved eight potential determinants perceived to be critical to ecotourism. A narrative literature review has been carried out to examine the urgency of the determinants of accessibility, relationship of ecotourism to other resources, regional attractions, availability of tourism infrastructure, status of users' capability and knowledge, degree of social interaction, acceptable degree of effects and control on utilization, and type of management developed for long term protection of the area. Below is the elaboration of each of these eight determinants:

Accessibility ("ACC"). Boyd and Butler (1996) define access as the "level of difficulty in travelling to an area, the nature of the access system in place in the area, the type of transportation used to travel to and within areas, and the channels of information available to promote ecotourism within the region" (p.561). The term accessibility refers to the capacity of the operating environment to offer equal chance of use, in a direct, prompt, enduring, and as independent as possible (Gouveia et al., 2010; Gouveia et. Al., 2022). Based on these insights, the following hypothesis was formulated:

Hypothesis 1 (H1): The accessibility with the destination is positively associated with ecotourism potential in Reiek.

Relationship with other resources ("ROS"). Butler (1993, as cited in Boyd & Butler, 1996) asserted that in situations of incorporation of resource uses, the main aim is complementarity which means that "each use or activity is not only not in conflict or competition with the others, but by their presence and interaction add something to each other" (p.224). According to Boyd and Butler (1996), "the extent to which ecotourism should be congruent with other resource users and other tourism users is an important part of the definition for ecotourism within any area" (p.561). Relying on the literature, the hypothesis derived is as follows:

Hypothesis 2 (H2): The relationship of ecotourism to other resources is positively associate with ecotourism potential in Reiek.

Regional attractions ("RA"). The term attractions signify the kinds of experience a region may offer to the tourists within the features of its setting (Boyd & Butler, 1996). Fernie (1993) argued how the nature of past experiences related to ecotourism effect the ecotourism perception. Therefore, it is the attractions that work as the spirit of ecotourism destinations (Jainah et al., 2020). Based on this literature, the following hypothesis was formulated:

Hypothesis 3 (H3): The regional attraction is positively associated with ecotourism potential in Reiek.

Availability of tourism infrastructure ("ATI"). In the words of Boyd & Butler, (1996, p.562), tourism infrastructure refers to 'tourism plant.' The reason for replacing tourism plant with existing infrastructure is due to the prominence of provision of adequate accommodation facilities for ecotourists along with some changes in existing tourism infrastructure to cater to the demands of the ecotourists (Boyd & Butler, 1996). Drawing on this literature, the following hypothesis was derived:

Hypothesis 4 (H4): The availability of tourism infrastructure is positively associated with ecotourism potential in Reiek.

Status of users' capability and knowledge ("SUCK"). Boyd & Butler (1996) assert that ecotourists' degree of capabilities and their past understanding have implications for the openings that a region may present and the kind of experiences that may be acquired. Further, they posited that these capabilities and knowledge of the eco-specialists are a determining element for the survival in the scenario of a lower degree of interaction and limited communication with others. Considering these insights, the following hypothesis was formulated:

Hypothesis 5 (H5): The status of users' capability and knowledge are positively associated with ecotourism potential in Reiek.

Degree of social interaction ("DSI"). A considerable quantity of researched has been undertaken on the interplay between tourist, host (local population), and other guests (other tourists) tourist in the recent years (Boyd & Butler, 2019). Reisinger (2009) states that the primary aim of social interaction is to interact with different people in different contexts, take part in discussion, share opinions and thoughts, assimilate other's social and cultural background, build relationships among others. Taking this literature into account, the following hypothesis was derived:

Hypothesis 6 (H6): The degree of social interaction is positively associated with ecotourism potential in Reiek.

Acceptable degree of effects and control on utilization ("ADECU"). According to Boyd and Butler (2019), this refers to the "degree and prevalence of impact and the need for control to be exercised over impacts that occur" (p.563). They further asserted that with the increase in the number of tourists, there will an increasing severity of effect on the environment. Based on these insights, the following hypothesis was drawn:

Hypothesis 7 (H7): The acceptable degree of effects and control on utilization is positively associated with ecotourism potential in Reiek.

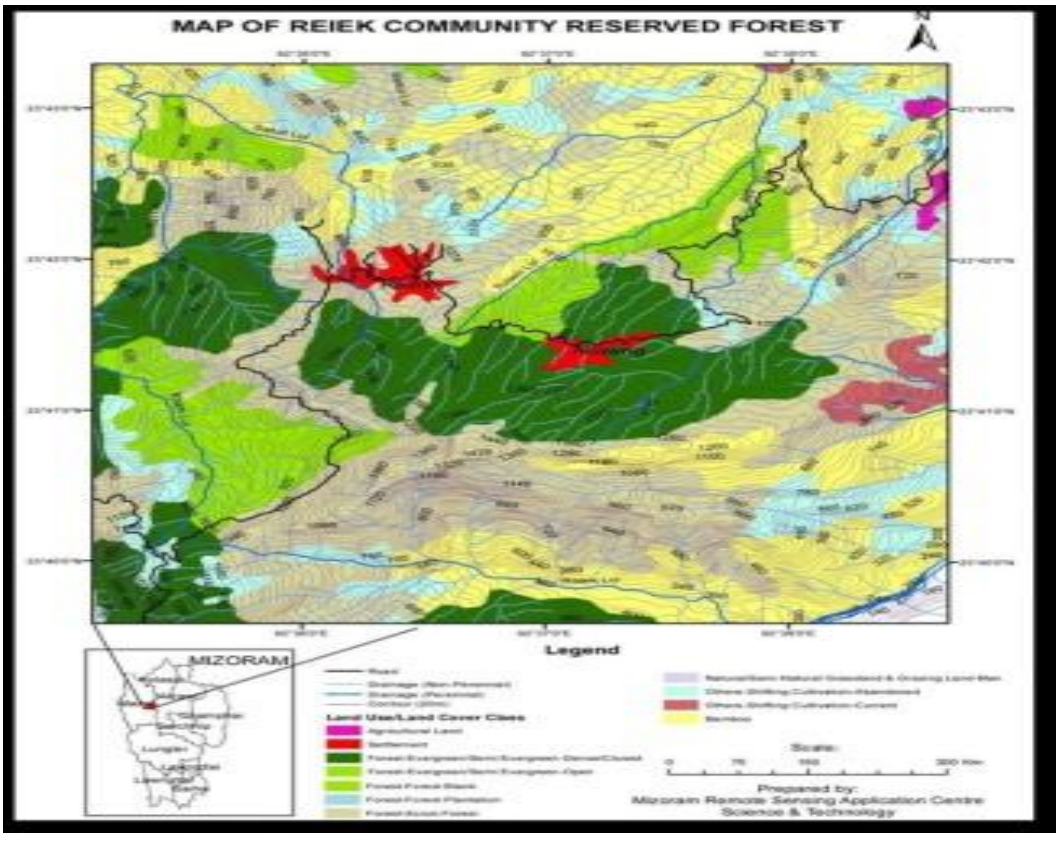
Type of management developed for long term protection of the area ("TMD"). Boyd and Butler (1996) emphasized on the need for discussion with various stakeholders about how ecotourism should be showcased and at the same time who should manage the ecotourism activities within the areas, as few of the elements within ECOS framework need to be run through management. This is in line with the findings of Butler and Waldbrook (1991), who indicated towards the necessity of control and responsibility over the tourism development within the region. Based on these insights, the following hypothesis was derived:

Hypothesis 8 (H8): The type of management developed for long term protection of the area is positively associated with ecotourism potential in Reiek.

3. Methodology

3.1 Study Area

The area for the current study was Reiek, a village and tourist destination located at 29 km from Aizawl, the capital of Mizoram. Fig. 1 below depicts the map of the Reiek community reserved forest.



Source: Muansanga & Lalremsanga (2020, p.9)

Fig. 1. The study area, Reiek

The altitude of the mountain above the sea level is 1,465 metres (refer to mizoram.nic.in). According to 2011 census of India, total Reiek population is 17,867. Out of 17,867 people living in this Block, 9,119 are male and 8,748 are female. So far as activities at Reiek are concerned, visitors can do many activities such as homestays, hiking, bird watching, sightseeing, camping and other activities in touch with nature.

The table below shows the total number of visitors in Mizoram from the year 2011 to 2021 (Table 1). Based on the table, the number of local visitors changed marginally from 2011 to 2021 except the year 2019, when the state witnessed a big jump in tourist arrivals.

Table 1. Number of visitors to Mizoram (2011-2021)

Year	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**
No of local visitors	62, 174	64, 249	63, 377	68, 203	66, 605	6,72 38	67, 772	76, 551	1,63 762	30, 890	87, 232
No of foreign visitors	658	744	800	921	798	942	1,155	967	2,249	265	234

Source: CEIC, Ministry of Tourism

3.2 Data Collection and Sample

The data collected in this study were based on 1) study area visit and observation i.e., physical visit of Reiek in order to have first-hand information about the place; 2) informal meeting with the tourism officials and residents of Reiek village and nearby areas; and 3) conducting surveys on site and adjoining places. Basically, the data were gathered from different group of respondents: local people, tourists, local travel agents, staff working at Reiek tourist site, and local residents' of the study area. However, respondents who have not visited Reiek and not living in areas within the vicinity of the study area were excluded from this study. So far as tourists are concerned, only those who had visited Reiek were considered as research targets. The researchers gathered the data physically by administering the questionnaire to the respondents. The questionnaire was drafted in both English and local language. Moreover, the help of a local resident was also taken to clarify doubts of the respondents. The convenience sampling technique was exercised in this study, and data were collected over four months from September 2022 to December 2022. Additionally, secondary materials including written and graphic materials related to the area, books, articles in magazines, local newspaper, local official documents such as published reports, maps, village layout among others were also used and discussed in order to collect more information on the topic.

Table 2 depicts the various demographic characteristics of the participants. In total, 250 questionnaires were administered among the participants, of which 201 were returned (response rate of 80.4%). All the returned questionnaires met the inclusivity criteria set for this study.

Table 2: Demographic profile of participants

Characteristics	**Category**	**Frequency**	**Percent**
Gender	Male	107	53
	Female	94	47
Age (Year)	18 - 30	139	69
	31 - 40	50	25
	40 - 50	9	4
	>50	3	2
Occupation	Student/Scholars	106	53
	Govt service	33	16
	Business/Self employed	56	28
	Others	6	3

Source: Authors' calculation

3.3 Instrument for Data Collection

The data were collected with the help of a structured questionnaire (both in English and Mizo languages). Based on the work of Boyd and Butler (1996), the questionnaire was developed to fulfil the defined research objective. Prior to using questionnaire for the final survey, several pre-tests were conducted to align it in the context of socio-cultural and environmental features of the study area. The participants indicated their degree of agreement with the items using a 5-point Likert-type scale ranging from 1 (=strongly disagree) to 5 (=strongly agree). In the questionnaire, 26 items were assigned to gauge all the eight latent constructs: accessibility (4 items), relationship of ecotourism to other resources (2 items), regional attractions (3 items), availability of tourism infrastructure (3 items), status of users' capability and knowledge (3 items), degree of social interaction (3 items), acceptable degree of effects and control on utilization (3 items), and type of management developed for long term protection of the area (5 items).

3.4 Data-analysis Tools

For the purpose of assessing the validity and reliability of the latent constructs, analyses such as factor analysis, composite reliability (CR), average variance extracted (AVE), Cronbach's alpha, and Spearman–Brown coefficient were estimated. Correlation analysis was carried out with the help of Spearman's rank correlation. To evaluate and differentiate the significance of the eight factors for ecotourism potential, the current study employed multiple regression analysis, with ecotourism potential (i.e., summary construct) as the dependent variable and the individual factors as independent variables. The Statistical Package for Social Sciences (SPSS) was employed for the purpose of data analysis.

4. Results and Discussion

4.1 Validity and Reliability Analysis

With the purpose of supplemental analysis and differentiation of the significance of each factor, the measurement items were grouped as latent constructs, also known as factors. After the conduct of factor analysis, 2 measurement items were omitted from the scale due to cross loadings. The results of the validity and reliability tests for the factors and the measurement items are depicted in Table 3.

The factor loadings of the latent constructs fall between values 0.54 to 0.85, which reflects allowable construct validity for the sample size under study (Hair et al., 2006). However, the internal consistency and validity of the prescribed latent constructs were examined with the help of Cronbach's alpha, CR, and AVE. The reliability coefficients (Cronbach's alpha, α) of the scales were found to be above 0.60 (Table 3), which are regarded as acceptable (Santos, 1999; Cakir & Adiguzel, 2020). Additionally, the table also shows that the values of CR were in the range from 0.73 to 0.86, advocating acceptable reliability (Hair et al., 2006). The AVE was found to cross the suggested minimum value of 0.50 for all eight constructs, demonstrating satisfactory internal consistency of the subscales (Hair et al., 2006; Taber, 2018). Based on Eisinga et al. (2013), the Spearman– Brown coefficient was also estimated for the two-item construct (relationship to other resources), the value of which could be adjudged as acceptable.

Table 3. Validity and reliability of the latent constructs

Latent constructs and items	FL	CR	AVE	Cronbach's α
Accessibility ("ACC")		0.79	0.54	0.76
1 It is very easy to travel to Reiek from Aizawl town.	0.69			
2 Local transportation facility to reach Reiek from Aizawl town is strong and adequate.	0.76			
3 Travel time to Reiek is very short from Aizawl town.	0.71			
Relationship with other resources ("ROS")		0.73	0.81	0.61[a]
4 The level of other tourism activities in Reiek have negative affect on its ecotourism.	0.74			
5 Presence of other resources users positively affect ecotourism in Reiek.	0.71			
Regional attractions ("RA")		0.86	0.67	0.79
6 The nature of experience in Reiek is extraordinary.	0.81			
7 Reiek is more inclined towards natural environment.	0.76			
8 Reiek is more inclined towards cultural and urban aspects.	0.79			
Availability of tourism infrastructure ("ATI")		0.81	0.59	0.73
9 Quality of accommodation is high in Reiek.	0.74			
10 Shopping and entertainment facilities are adequate in Reiek.	0.79			
11 Existing infrastructure for elements such as water, power and sewage are good in Reiek.	0.71			
Status of users' capability and knowledge ("SUCK")		0.84	0.63	0.69
12 Creating awareness among tourists to enhance their knowledge is necessary.	0.66			
13 Level of skills and prior knowledge of tourists toward ecotourism is high.	0.64			
14 Tourists show eagerness to know more about ecotourism in Reiek.	0.71			
Degree of social interaction ("DSI")		0.80	0.57	0.65
15 There is a high interaction between host community and tourists visiting Reiek.	0.69			
16 There is a high interaction among tourists visiting Reiek.	0.74			
17 The extent of social interaction opens ecotourism opportunities for Reiek.	0.73			
Acceptable degree of effects and control on utilization ("ADECU")		0.76	0.62	0.78
18 Increase in users' number cause increase in the range and severity of impact on Reiek.	0.61			
19 Visiting areas sensitive to human intrusion should be controlled.	0.65			
20 Overtourism causes erosion of resources available in Reiek.	0.70			
Type of management developed for long term protection of the area ("TMD")		0.83	0.67	0.69
21 Proper management is essential to control ecotourism activities in Reiek.	0.82			
22 Level of control of local communities over ecotourism activities is high in Reiek.	0.67			
23 The decision-making related ecotourism activities in Reiek should involve various stakeholders present in the area.	0.74			
24 It is necessary for local communities in Reiek to reach complete agreement always on any tourism related issue.	0.77			

Notes. [a]Spearman–Brown coefficient was also computed = .61
Source: Authors' calculation

4.2 Regression Analyses

At first, the data were examined to check the conformity with the Gauss-Markov assumptions, and no discrepancies were identified. Table 4 shows the descriptive statistics of the latent constructs (factors). All factors contained relatively moderate values over the middle of the scale (2.5). Hence, there are considerable degree of satisfaction with and effect on the individual variables.

Table 4. Descriptive statistics of the independent variables

Factors	**N**	**Min**	**Max**	**M**	**SD**	**Var**
ACC	201	1	5	3.2023	1.3456	1.8129
ROS	201	1	5	3.0796	1.2495	1.5615
RA	201	1	5	3.2587	1.3146	1.7297
ATI	201	1	5	3.0398	1.2741	1.6271
SUCK	201	1	5	3.1169	1.2489	1.5600
DSI	201	1	5	3.1567	1.2895	1.6628
ADECU	201	1	5	3.1294	1.2553	1.5764
TMD	201	1	5	3.8259	1.1164	1.2573

Source: Authors' calculation

With these scales of measurement for the data, the appropriate correlation coefficient to be employed is Spearman's correlation coefficient. Table 5 shows the Spearman's rank correlation matrix, and it indicates a significant positive association among all the factors. Correlation coefficient was used to assess the strength and direction of the linear relationships between a set of variables.

Table 5. Correlation analysis (Spearman's Rho)

Variables	ACC	ROS	RA	ATI	SUCK	DSI	ADECU	TMD
ACC								
ROS	0.435**							
RA	0.658**	0.367**						
ATI	0.409**	0.389**	0.413**					
SUCK	0.502**	0.353**	0.394**	0.356**				
DSI	0.509**	0.474**	0.383**	0.417**	0.411**			
ADECU	0.359**	0.461**	0.433**	0.328**	0.489**	0.413**		
TMD	0.479**	0.389**	0.545**	0.533**	0.339**	0.473**	0.513**	

Note: N is 201 for all the variables;
**Correlation is significant at the .01 level (2 tailed).
Source: Authors' calculation

In order to test the hypotheses, multiple regression analysis was done (Table 6), which is suitable for two or more predicting variables (Hee et al., 2020). The aim of this analysis is to understand to what extent the ecotourism potential of Reiek is influenced by the eight predicting variables (ACC, ROS, RA, ATI, SUCK, DSI, ADECU, TMD). A significant regression equation was drawn from the regression analyses, $F= 48.265$, $p < .001$, for prediction of the ecotourism potential built on the eight predicting variables. The coefficient of determination R^2 reveals that the the research model accounts for 84.7% of total variance in the dependent variable i.e., ecotourism potential. Moreover, this also signifies the high goodness-of-fit of the model (Cohen, 1988). All factors (except status of users' capability and knowledge, and acceptable degree of effects and control on utilization) account positively and significantly for variance in ecotourism potential as shown in Table 6. The said table also displays the coefficient, the standard error, and the t-test. The Beta (β) value highlights the significance of each factor for ecotourism potential.

The findings of Table 6 reveal that *availability of tourism infrastructure* has been the most dominating factor that influence ecotourism potential ($\beta= 0.381$, $p<0.001$). The respondents seemed to believe that better the existing tourism infrastructure, higher is the ecotourism potential. This finding endorses the significant referenced literature (Barrantes & Flores, 2013; Jovanović & Ilic, 2016). Hence, H4 is accepted.

Table 6. Multiple regression analysis

Model		**Unstandardized coefficients**		**Standardized coefficients**	**t**	**Sig.**
1		B	SE	Beta		
	(Constant)	0.029	0.019		0.392	0.715
	ACC	0.121	0.046	0.341	26.200	0.000
	ROS	0.135	0.037	0.122	21.017	0.000
	RA	0.187	0.061	0.279	21.191	0.000
	ATI	0.201	0.052	0.381	37.712	0.000
	SUCK	0.062	0.008	0.127	14.059	0.826
	DSI	0.105	0.021	0.219	19.526	0.000
	ADECU	0.134	0.019	0.119	18.211	0.315
	TMD	0.089	0.011	0.211	15.256	0.000
	F value	48.265				
	R^2	0.847				

a Dependent variable: Ecotourism potential.
Source: Authors' calculation.

In second place was the factor *accessibility* (β= 0.341, p<0.001). This shows that respondents identified accessibility as one of the determinants of ecotourism potential. This finding is in line with the important extant literature (Yen et al., 2021; Sica et al., 2022). Hence, H1 is accepted.

The factor coming third in relative importance was *regional attractions* (β= 0.279, p<0.001). It shows that presence of major tourist attractions is an important factor for evaluating ecotourism potential and this factor has been significant in several referenced literature (Liu et al., 2013; Forje et al., 2021). Hence, H3 is accepted.

The fourth contribution to ecotourism potential in the present study came from *degree of social interaction* (β= 0.219, p<0.001). The result reveals that interactions among various stakeholders of tourism industry have a positive and significant influence on ecotourism potential. This finding is consistent with the findings of previous studies (Girikallo et al., 2019). Hence, H6 is accepted.

The fifth factor that plays a major role in predicting ecotourism potential in the study area was *type of management developed for long term protection of the area* (β= 0.211, p<0.001). The result indicates that fixing responsibility and controlling tourism activities through management influence positively the ecotourism potential in Reiek. This finding agrees with Liu et al. (2013). Hence, H8 is accepted. Moreover, the discussions with the tourism officials and members of local communities reveal that

proper management guidelines and norms are essential for the effective development of potential ecotourism sites. According to them, guidelines should be directed toward protection and conservation of environment as ecotourism mainly deals with environmentally responsible form of tourism occurring mostly at unexplored or remoter areas (Boyd & Butler, 1996).

The smallest contribution to ecotourism potential in the context of the current study came from *relationship with other resources* ($\beta = 0.122$, $p<0.001$). This reveals that the linkage between ecotourism and other natural and cultural resources play a considerable role in determining the ecotourism potential in Reiek. This finding is in sync with (Mesencho, 2012). Hence, H2 is accepted.

5. Conclusion

Ecotourism can shape the environmental health as well as the growth of harmony between agents in the tourism industry, tourists, and the local residents. Although there are indisputable interests in undertaking research to determine the opportunities and potential in an area, very limited studies were carried out in Mizoram. However, based on the study findings, it can be concluded that the ecotourism potential of Reiek in Mizoram is vastly dependent on accessibility, relationship of ecotourism to other resources, regional attractions, availability of tourism infrastructure, degree of social interaction, and type of management developed for long term protection of the area, which mostly remained constrained in past studies. Moreover, the current study is regarded as innovative as it indicates the drivers of ecotourism potential as an aid to public administrators involved with the Mizoram tourism sector towards taking actions in creating ecotourist destinations.

Despite having tremendous ecotourism potential in Mizoram, the research is still at a nascent stage on the area of discovering the ecotourist sites as well as on how to how to develop them. One of the foremost reasons may lie with existing government policies or incompetence of the state to take itself from the regional level to national level. The absence of fitting mechanism to promote the eccentric feature of the destination is increasing becoming clear from the number of tourist arrivals in the state of Mizoram over the years compared to other hilly states in the North-eastern region. So, the information drawn from this study is expected to play a constructive role in framing new policies and modifying the existing one for promoting Mizoram tourism. Finally, researchers may pursue future studies with the same tools towards evaluating the ecotourism potential in different geographical territory.

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Conflicts of interest

The authors declare no conflict of interest.

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