

Gendered Perspectives in Ecotourism: Analysing the Constraints Faced by Local Women in Corbett Tiger Reserve

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Abstract *Ecotourism stands out as a potential avenue for enhancing the economic status of women involved in it. Women's active involvement in ecotourism is highlighted as a significant strategy for economic development, poverty reduction, and empowerment. Despite its potential, women encounter barriers that hinder their active participation in ecotourism, necessitating their identification and mitigation for sustainable development. With this background, this study aims to examine the barriers that women experience in the ecotourism site in the Corbett Tiger Reserve (CTR) region of Uttarakhand, India, using a quantitative approach. Results of the study analysed by using mean and factor analysis revealed that barriers to women's participation were more structural and operational than cultural and personal barriers. Key areas that have posed challenges to women's participation comprised a lack of information, coordination among stakeholders, elite domination, and unwillingness by ecotourism planners to include local women in decision-making. The findings further revealed that age, marital status, length of residence, and annual income through ecotourism influenced the barriers women encountered when participating in ecotourism. Overall, the findings provide valuable insights for government officials, ecotourism planners, and community stakeholders to be more sensitive towards women's participation.*

Keywords: Ecotourism, Women Participation, Barriers, Sustainability, Corbett Tiger Reserve

INTRODUCTION

Community Participation is one of the core components of successful ecotourism involving the active engagement of the local population in the benefit-sharing and decision-making process of tourism development in their locality (Cole, 2006). The lack of comprehensive involvement of local communities makes it difficult for ecotourism to survive and sustain itself in the long term (Pujar & Mishra, 2020). A community comprises of members from diverse categories, of which gender is a significant criterion. Therefore, in terms of community participation, it is imperative that both men and women are represented equally. In this context, women's participation is vital in ecotourism development projects to help promote inclusive development and ensure that women within the community equally enjoy the benefits of ecotourism development as their male counterparts.

The advent of ecotourism development provides women with the opportunities to leverage their skills, knowledge, and experience of their culture while fulfilling their domestic obligations. For instance, they can engage in activities such as handicraft making, running homestays, which will allow them to work from home while earning their livelihoods, achieving financial independence, and fostering self-development (McMillan et al., 2011). Moreover, including women in ecotourism activities can positively alleviate poverty and enhance household income, thus promoting economic growth (Dadvar-Khani, 2015). In addition, since women are more directly reliant on and interact with natural resources, involving them in decision-making and garnering their support for ecotourism initiatives will be more beneficial for sustainable tourism development. However, the reality is contradictory, with lesser representation of women in ecotourism projects leading to gender disparity

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in participation and the resulting benefits. Marginalising women and depriving them of benefits can hinder their support for ecotourism initiatives and make sustainability difficult to achieve (Scheyvens, 2000).

Like any other industry, tourism is dominated by males in terms of decision-making and resource management. Women are often overlooked as stakeholders in the growth of the tourism industry because of the many gender barriers that exist for visible engagement in tourism. Therefore, even in the tourism sector, women are found in low-skilled menial jobs that mirror domestic work. Despite their increased presence and contribution to the tourism industry, women still do not have equal access to resources and benefits (Sherpa, 2007). Particularly in developing countries, it is often seen that women are the most deprived group due to inequalities present in society.

Even though women's participation is paramount in ecotourism destinations, there appear to be significant barriers that deter their active participation, particularly in developing nations like India. In India, tourism is one of the growth sectors for the mountain economies, with successful examples including Himachal Pradesh, Jammu & Kashmir, and Sikkim. Similarly, tourism is also a vital economic sector of Uttarakhand state due to the state's captivating natural landscapes and profound religious significance. Although numerous schemes such as Veer Chandra Singh Garhwali Yojna, Deen Dayal Upadhyay Homestay Scheme, etc., implemented by the state to promote livelihood opportunities through tourism have yielded positive outcomes for the state's tourism sector, they have not been very successful in prioritising inclusion of women in tourism activities (Government of Uttarakhand, 2018). The female labour force participation rate in rural areas of Uttarakhand has declined by 28% over a span of 15 years (Kumar, 2022). Given this context, it becomes imperative to address the challenges hindering women's entry into the economic workforce. However, a lack of research addressing the significant challenges women face in India's ecotourism sector, particularly in Uttarakhand, is noticeable. Addressing these challenges faced by women and tapping their full potential is vital for their active participation in ecotourism and fostering a supportive attitude towards ecotourism objectives. To bridge this research gap, this study has been undertaken to examine the barriers that women face in the ecotourism sector in the CTR region of Uttarakhand, India.

Literature Review

The discourse on community participation in ecotourism ventures has traditionally overlooked the specific barriers

hindering women's active involvement in such initiatives. Therefore, if ecotourism is to be successful, it is important to understand the norms and constraints that limit women's ability to participate. Previous studies exemplified by Tosun (2000), Aref and Redzuan (2008), Kim et al. (2014), Gloria et al. (2018), Mustapha et al. (2013), and Aref (2011) have predominantly analysed limits to community participation without giving due emphasis to the challenges faced by women. For instance, Tosun (2000) attempted to discuss limits to community participation and suggested three types of barriers: operational, structural, and cultural. Operational barriers pertain to the communication of tourism development initiatives to destination residents. Structural barriers encompass institutional factors, including regional power dynamics, legislative bodies, and economic systems. Cultural barriers are associated with low competency levels of host community members in navigating the impacts of tourism development. Aref and Redzuan (2008) conducted a study using Tosun's typology in Shiraz, Iran and found that all three types of barriers are evident in tourism development. However, the most significant barriers identified include lack of information, lack of expertise, lack of financial & human resources, and low level of awareness.

However, recent scholars, exemplified by Nutsugbodo and Mensah (2020), have measured distinct barriers limiting women from participating in ecotourism development initiatives based on four aspects: operational, structural, cultural, using Tosun's typology, adding a personal barrier as a barrier particular to women. The findings highlight that the barriers constraining them to participate in ecotourism projects were more structural and operational rather than personal and cultural. Centralisation of tourism administration, lack of access to information, lack of coordination among various stakeholders, domination of the elite, and inadequate financial resources are a few prominent operational and structural barriers. In another study, Fathizadeh et al. (2022) classified barriers into macro-level and micro-level. Macro-level barriers are associated with village-level factors such as no socio-geographic proximity from the tourist attractions and the patriarchal structure of the village. In contrast, micro-level barriers are related to women and include no support from the family, lack of confidence, no financial assistance, and role conflict.

Many qualitative studies have also identified a plethora of factors across diverse contexts, which further underscore the multifaceted nature of barriers confronting women in the tourism industry. For instance, socio-cultural norms constrain women to have complete control over household income and, in some cases, intensify domestic violence and increase reproductive labour (Tran & Walter, 2014). These

norms specify the acceptable behaviour that women should adhere to and the conventional gender division of labour that denies women the same opportunities as men. Consequently, they are frequently relegated to vulnerable positions characterised by less-skilled, low-paid, and unstable jobs. They are expected to work in sectors that are an extension of their unpaid household work, like cleaning and cooking. For example, in the Cappadocia region of Turkey, the waitress job is considered unsuitable for women as it involves close interaction with guests when waiting at the tables and has connotations attached to prostitution (Elmas, 2007). Similarly, in the Pangadaram region of Indonesia, women involved in guiding is not seen as an appropriate job and is associated with 'prostitution' (Wilkinson & Pratiwi, 1995).

Moreover, women in patriarchal societies are also expected to fulfill household duties and take care of children. Therefore, maintaining a balance between family life and work life becomes difficult for them, creating a hindrance for these women entrepreneurs. For instance, a study by Tran and Walter (2014) found that ecotourism projects provided women access to education. Still, domestic responsibilities restricted their full participation in learning something meaningful, resulting in women dropping out of evening classes. A study by Sood et al. (2017) found that daily workload, which often includes household work, agriculture, and sometimes pastoralism and weaving, was the reason for women's non-participation in the homestay program. They also do not attend Panchayat meetings, which is why the information related to such progressive and beneficial schemes did not reach them.

According to the literature, numerous other factors impede women's involvement in the tourism sector. Pleno (2006) found that misunderstanding among group members, limited income, jealousy among members, and men not supporting their wives are some factors that may limit women's empowerment. According to Kinnaird and Hall (1996), cultural barriers, poor availability of government initiatives, and lack of organisation among women workers have restricted them from attaining leadership roles. Moswete and Lacey (2014) found that a lack of start-up capital, community control over tourism sites, limited publicity of tourism sites, and low level of education are some of the factors hindering women's participation in tourism. Rasanjali et al. (2021) reveal that language barriers and lack of knowledge about the tourism industry are some of the barriers that lead to the

non-participation of women in the tourism industry in Sri Lanka.

In the Indian context, Mrema (2015) outlined three themes explaining the non-participation of community members in the homestay schemes in the Kullu region: socio-cultural reasons (social beliefs and caste structures, clash of harvest and tourist season), practical reasons (lack of awareness, finance, and infrastructure) and apprehensions (inadequate skills, fear of erosion of cultural values, and safety issues). Kala and Bagri (2018) delved into the reasons behind the non-participation of local communities, particularly women in tourism development. The four main categories that emerged explain the barriers to community participation: practical, socio-cultural, apprehension, and institutional. They also point out that due to the strong male-dominating culture prevalent in such societies, the involvement of women in the decision-making processes is limited. Furthermore, lack of education is also one of the significant barriers to women's non-participation.

Women often face gender restrictions imposed by society since their birth, which limit their participation in the world economy. These limitations are often overlooked when discussing their status in the economic sector. Therefore, this study contributes to the tourism literature by bridging the gap using evidence from India.

Study Area

CTR, situated at the foothills of the Western Himalayas in the state of Uttarakhand, India, spans three districts: Nainital, Pauri, and Almora. It was established as India's first national park in 1936, initially named Hailey National Park. In 1948, it was renamed Ramganga National Park, which was finally rebranded as Corbett National Park in 1954 in memory of Jim Corbett, a renowned hunter and naturalist who aided in establishing the park's boundaries conservationist (Kandari & Singh, 1980). In 1973, it became the first tiger reserve in India under the pioneering conservation project 'Project Tiger.' The park covers a total area of 1288 sq. km. including 301.18 sq. km. of Sonanadi Wildlife Sanctuary and the buffer zone of 466.32 sq. km. According to the IUCN, it is a category II protected area set aside for the conservation of species, allowing limited human activity. Famous for Bengal tigers, CTR has the highest population of 231 tigers (Rallan, 2019).



Source: <https://corbettonline.uk.gov.in/>

Fig. 1: Map of Corbett Tiger Reserve (CTR)

CTR is one of the most popular tiger reserves among tourists because of its unique landscape and wildlife diversity. It is visited by around one million tourists annually and generates maximum revenue from all the protected areas in the state. The main stakeholders of tourism in CTR include hotel and guest house owners, tour operators, forest department, NGOs, and local communities. CTR has been repeatedly playing a vital role in the region's development (Kala, 2013). Tourism in CTR is one of the essential sources of income for villagers living in the vicinity of the park. Other important livelihood activities include agriculture, livestock, and utilising natural resources. Livelihood-based gender discrimination is seen in the region where women are primarily involved in agriculture work, and men carry out work based on the market requirements. However, shifts in livelihood patterns and evolving social aspirations contribute to gradual alteration in this traditional gendered division of labour, leading to increased involvement of women in the tourism sector (Pandya, 2022).

Materials and Methods

The study followed a quantitative approach, collecting data from the women from the fringe villages of Corbett Tiger Reserve. The questionnaire was designed based on

the limitations mentioned by Tosun (2000), Nutsugbodo and Mensah (2020), and Fathizadeh et al. (2022). The questionnaire comprised two sections with categorical and Likert scale questions. The first section focussed on attaining information on socio-demographic characteristics like village name, age, marital status, level of education, length of stay, area of occupation, and income. The second section focussed on barriers women faced using 15 items. A 5-point Likert scale was used to measure these items. Most items were taken from previous studies by reviewing the literature (Tosun, 2000; Nutsugbodo & Mensah, 2020; Fathizadeh et al., 2022). However, some items were added based on the qualitative interviews conducted within the study area to ensure alignment with the contextual nuances specific to that area. The questionnaire was initially designed in English and subsequently translated into Hindi to ensure comprehensibility for the respondents.

The sample respondents included 100 women from the fringe villages of CTR who were involved in ecotourism activities directly or indirectly. The sample size is decided based on the recommendations given by Bentler and Chou, 1987; Suhr, 2006, advising that the sample-to-item ratio should be at least 5:1 to perform robust Exploratory Factor Analysis (EFA). The convenience sampling method was used to collect the data. The samples were chosen based on

the set of criteria, which included that the women should be at least 18 years old and residing there continuously for a minimum of 10 years. Data for the study was collected between November and December 2022 through a scheduled questionnaire by the first author. SPSS software was used to analyse the data. Descriptive statistics were used to assess the socio-demographic characteristics of the female respondents. EFA and mean and standard deviation (S.D.) were used to measure the barriers that women had to face to work in ecotourism. To further determine whether significant differences exist between socio-demographic variables and barriers women encounter, an analysis of variance (ANOVA) test was conducted, and the following hypotheses were tested:

H: Age has an impact on barriers.

H: Marital status has an impact on barriers.

H: The length of residence has an impact on barriers.

H: Annual income through ecotourism has an impact on barriers.

Results

Demographic Profile of the Sample Respondents

To assess the barriers faced by women that hindered their active participation in ecotourism ventures, it was crucial

to understand and evaluate the demographic profile of the respondents. Table 1 presents the demographic profile of women respondents. More than half (54%) of the respondents engaged in ecotourism were between the age group 18-30. In addition, 39% of the respondents were between 31-50 years of age, and 7% were above 50. The marital status distribution shows that 57% of respondents were married, 35% were unmarried, and 8% were others (widowed or separated). In terms of education, the majority of the respondents (58%) had attained middle-level education (Secondary to Graduation), followed by lower-level education (32%) and higher-level (Post-Graduation and above) (10%). Moreover, only 2% of the respondents were uneducated. Regarding their length of residence, it can be seen that 40% of the women respondents had spent around 11-20 years in their community, 23% had spent 21-30 years, 19% had spent at least ten years, and 18% had spent more than 30 years living in their community. The occupational distribution reveals that 57% of the respondents were involved as employees providing service in the ecotourism sector, and 43% were engaged as entrepreneurs. Cumulatively, 30% were working in travel companies, 19% were working in hotels/resorts, 15% were involved as nature guides, 13% were running their restaurants/food stalls, 10% had their small-scale food production venture, 8% were running homestays, 3% were gypsy drivers, and 1% each were also found to be working in souvenir shops and other activities respectively.

Table 1: Demographic Profile of Women Respondents

Demographic Profile	Categories	Count	Column N %
Age	18-30	54	54.00%
	31-50	39	39.00%
	>50	7	7.00%
Marital Status	Married	57	57.00%
	Unmarried	35	35.00%
	Widow	8	8.00%
Education	formal	98	98.00%
	Informal	2	2.00%
Education	lower level	32	32.00%
	middle level	58	58.00%
	higher level	10	10.00%
Length of Residence	upto 10years	19	19.00%
	11-20 years	40	40.00%
	21-30 years	23	23.00%
	31 or more	18	18.00%

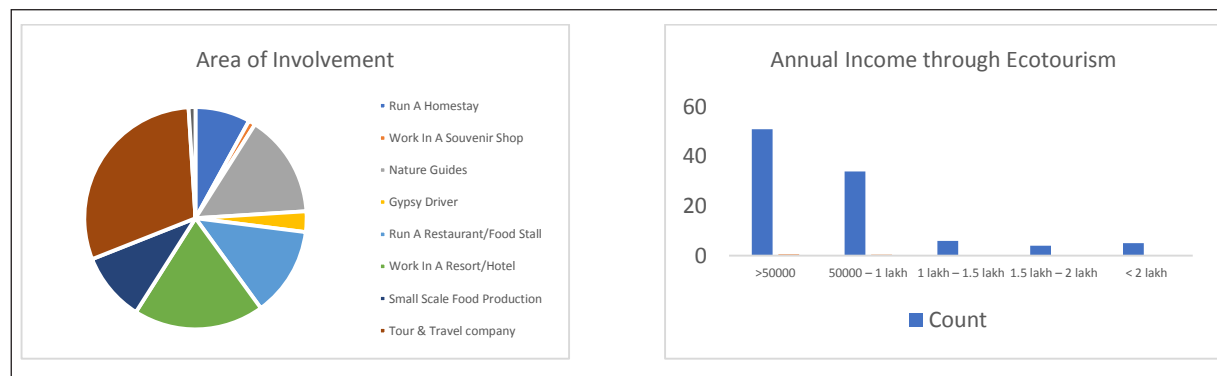


Fig. 2 and 3: Presents Area of Involvement in Ecotourism Projects and Their Annual Incomes Through Their Engagement in Ecotourism Activities

Factor Analysis

An exploratory factor analysis technique was employed for 15 variables to reduce data and enhance the clarity of findings. Principal Component Analysis (PCA) was the chosen extraction method, with varimax rotation used in the factor optimisation of the items extracted. Kaiser-Meyer-Olkin (KMO) and Bartlett test of sphericity was utilised to assess the adequacy and appropriateness of the sample and was based on the recommendations from Costello and Osborne (2005), as shown in Table 2. The KMO value obtained is 0.697, which is greater than 0.5, indicating adequate sample size. Furthermore, Bartlett's test of sphericity yielded a significant result ($p < 0.000$), showing sufficient correlations among the variables to conduct factor analysis. Components with Eigen values over one were retained, and 15 variables were reduced to four factors. These four factors represented

55.42% of the total variance. The items with correlations less than 0.3 were excluded from the analysis, ensuring a refined set of items for subsequent analysis.

Table 2: KMO and Bartlett's Test of Sphericity

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		.697
Bartlett's Test of Sphericity	Approx. Chi-Square	357.357
	Df	105
	Sig.	.000

As shown in Table 3, the factor loadings for each item were more than 0.3, which is the minimum requirement to be considered acceptable for the analysis, as Yosoff et al. (2011) suggested. Cronbach Alpha was calculated to assess the reliability of the scale, resulting in a value of 0.777, indicating a high level of internal consistency.

Table 3: Factor Loadings of the Items

Constructs	Items	Factor Loadings
Operational Barriers	Lack of information about ecotourism in the region.	0.635
	Lack of coordination among stakeholders for the development of ecotourism in their region.	0.754
	High level of centralisation of public administration towards ecotourism development.	0.726
Structural Barriers	Elite domination.	0.565
	Unwillingness of ecotourism planners to include local women in decision-making..	0.507
	Lack of trained human resources.	0.734
	Men dominate in most of the jobs available.	0.585
Cultural Barriers	Lack of interest in the ecotourism project.	0.700
	Lack of awareness regarding the issues concerning the ecotourism project.	0.862
	Traditional beliefs concerning women.	0.735
Personal Barriers	Inadequate support from home.	0.698
	Difficulties in managing household duties and work associated with their ecotourism enterprise.	0.639
	Lack of money to start a business.	0.627
	Lack of appropriate educational background.	0.610
	Gender issues (because I am a woman).	0.547

Barriers Faced by the Women Respondents

Table 4 presents the results pertaining to the obstacles encountered by women respondents within the ecotourism sector in CTR. Based on the findings shown in the table, most of the women expressed unanimous agreement regarding all the items related to barriers. However, it is worth noting that the operational ($m = 4.09$; $sd = 0.47$) and structural barriers ($m = 4.10$; $sd = 0.65$) emerged as the most pronounced barriers to their active participation in ecotourism projects, surpassing the influence of cultural ($m = 3.87$; $sd = 0.85$) and personal ($m = 3.86$; $sd = 0.80$) barriers.

Operational barriers occur during the implementation of participatory development approaches in ecotourism initiatives. The women respondents identified a 'high level of centralisation of public administration towards ecotourism development' ($m = 4.11$) and 'lack of coordination among stakeholders for the development of ecotourism in their region' ($m = 4.09$) as the main hindrances in this category, followed by 'lack of information about ecotourism in the region' ($m = 4.08$). Structural barriers pertain to impediments linked to institutional arrangements, power dynamics, and economic systems. In terms of these structural barriers,

women concurred that 'elite domination' ($m = 4.14$) and 'unwillingness by ecotourism planners to include local women in decision-making' ($m = 4.12$) stood out as principal barriers inhibiting their active participation, compared to 'Lack of trained human resources' ($m = 4.09$) and 'Men dominate in most of the jobs available' ($m = 4.06$). Cultural barriers encompass societal norms that obstruct women's involvement. Notably, women exhibited the highest level of agreement with the statement 'Traditional beliefs concerning women' ($m = 4.12$), followed by 'lack of awareness regarding the issues concerning the ecotourism project' ($m = 4.03$), and 'lack of interest in the ecotourism project' ($m = 3.46$). Personal barriers deal with individual challenges that restrict active participation and realisation of potential. Notably, 'lack of money to start a business' ($m = 4.25$) and 'gender issues' ($m = 4.01$) emerged as the primary personal barriers limiting women's active participation. Conversely, women identified 'difficulties in managing household duties and work associated with their ecotourism enterprise' ($m = 3.94$), 'inadequate support from home' ($m = 3.74$), and 'lack of appropriate educational background' ($m = 3.67$) as less hindering factors in their participation.

Table 4: Barriers Faced by Women in Ecotourism in CTR

Barriers	Mean	SD
Operational		
Lack of information about ecotourism in the region.	4.08	0.61
Lack of coordination among stakeholders for the development of ecotourism in their region.	4.09	0.40
High level of centralisation of public administration towards ecotourism development.	4.11	0.39
Average Mean	4.09	0.47
Structural		
Elite domination.	4.14	0.49
Unwillingness of ecotourism planners to include local women in decision-making.	4.12	0.64
Lack of trained human resources.	4.09	0.71
Men dominate in most of the jobs available.	4.06	0.78
Average Mean	4.10	0.65
Cultural		
Lack of interest in the ecotourism project.	3.46	1.08
Lack of awareness regarding the issues concerning the ecotourism project.	4.03	0.67
Traditional beliefs concerning women.	4.12	0.80
Average Mean	3.87	0.85
Personal		
Inadequate support from home.	3.74	1.03
Difficulties in managing household duties, and work associated with their ecotourism enterprise.	3.94	0.69
Lack of money to start a business.	4.25	0.55
Lack of appropriate educational background.	3.67	0.94
Gender issues (because I am a woman).	4.01	0.78
Average Mean	3.86	0.80

Scale: 1 = Strongly Disagree; 2 = Disagree; 3 = Indifferent; 4 = Agree; 5 = Strongly Agree

Impact of Socio-Demographic Variables on Barriers

Table 5 delves into examining the differences in the barriers across socio-demographic variables through the use of ANOVA. ANOVA determines whether a statistically significant difference exists between the means of three or more independent groups.

H: Age has an Impact on Barriers

The results show that age significantly impacts operational barriers, as the p-value is significant at 0.05. However, age

has no significant effect on structural, cultural, and personal barriers, as the p-value is above 0.05.

H: Marital Status has an Impact on Barriers

The findings indicate a significant impact of marital status on operational barriers, as the p-value is significant at 0.000. However, the analysis reveals no statistically significant impact of marital status for structural, cultural, and personal barriers, as indicated by p-values exceeding 0.05.

Table 5: Impact of Socio-Demographic Variables on the Barriers

Demographic Variable	N	Mean	Operational		Mean	Structural		Mean	Cultural		Mean	Personal	
			Statistic Value	p-Value		Statistic Value	p-Value		Statistic Value	p-value		Statistic Value	p-Value
Age													
18-30	54	11.87	5.560	0.005*	11.90	1.837	0.165	15.57	0.648	0.526	19.48	0.085	0.919
31-50	39	12.53			12.35			15.74			19.69		
>50	7	12.28			12.00			14.85			19.57		
Marital Status													
Married	57	12.47	8.258	0.000*	12.21	0.758	0.471	15.66	0.429	0.652	19.91	1.460	0.237
Unmarried	35	11.65			11.91			15.60			19.20		
Others	8	12.12			12.00			15.00			18.75		
Length of Residence													
upto 10years	19	12.15	0.278	0.841	11.94	0.581	0.629	15.31	0.160	0.923	18.57	3.099	0.030*
11-20 years	40	12.15			11.97			15.65			19.25		
21-30 years	23	12.04			12.30			15.65			20.60		
31 or more	18	12.16			12.22			15.66			20.00		
Annual Income through Ecotourism													
<50000	51	12.19	3.805	0.007*	11.98	1.509	0.206	15.54	1.786	0.138	19.49	1.725	0.151
50000-1 lakh	34	11.97			12.00			15.76			19.32		
1 lakh- 1.5 lakhs	6	13.50			13.00			16.33			21.66		
1.5 lakhs- 2 lakhs	4	12.00			12.75			16.00			20.75		
>2 lakhs	5	11.60			12.20			13.60			18.60		

*Represents significance level at 0.05.

H: The Length of Residence has an Impact on Barriers

The results reveal a significant impact of length of residence on personal barriers as the p-value is significant at 0.030. However, no significant impact was observed between the length of residence and operational, structural, and cultural barriers, as evidenced by the p-values surpassing 0.05.

H: Annual Income Through Ecotourism has an Impact on Barriers

The results show that the annual income through ecotourism significantly impacts operational barriers, as the p-value is significant at 0.007. However, no significant impact of annual income through ecotourism is found on structural, cultural, and personal barriers, as the p-values exceed a significance level of 0.05.

DISCUSSIONS

The involvement of local communities, particularly women, in ecotourism initiatives is crucial to ensure sustainable tourism development. Rasanjali et al. (2021) emphasise the importance of empowering women within the communities, highlighting their role as natural and cultural heritage stewards. However, despite their significance, women often face systemic barriers hindering their active participation in ecotourism projects. These barriers range from societal norms to personal and structural challenges.

In the context of CTR, various barriers hinder women's active involvement in ecotourism projects. Based on the findings of EFA, the study has identified four types of barriers impeding women's participation- operational, structural, cultural, and personal- consistent with the studies of Tosun (2000) and Nutsugbodo & Mensah (2020). The findings show that the barriers constraining them from participating in ecotourism projects were more structural and operational than personal and cultural, which is also evidenced in the study by Aref & Redzuan (2008).

Operational barriers, including centralisation of tourism administration, lack of information, and lack of coordination among stakeholders, pose significant challenges to women's involvement in ecotourism. Inadequate information about ecotourism and a highly centralized decision-making approach in ecotourism administration may constrain active participation among women, leading to no or limited awareness of potential economic opportunities, accessing resources, obtaining permits, training programs, or aided services available to them (Sood et al., 2017). Additionally, structural barriers, including institutional factors like elite domination and unwillingness by ecotourism planners to include local women in decision-making, further limit opportunities for women. This outcome may be linked to the lack of proactive measures by the Government and the forest department to promote gender inclusivity in ecotourism endeavors. For example, until recently, women in CNP fringe villages didn't have the opportunities to work as nature guides and gypsy drivers, with these positions predominantly filled by men. These results emphasize the necessity of addressing these operational and structural challenges in order to promote the development of gender-inclusive ecotourism.

Cultural barriers also play a role in impeding women's participation in ecotourism, albeit to a lesser extent in the case of CTR. The findings indicate cultural barriers are a less dominant type of barrier to women's participation in ecotourism projects, which were found to be consistent with the views of Yaja et al. (2023). Among all the cultural barriers, traditional beliefs concerning women and lack of awareness regarding ecotourism were identified as significant barriers. Aref (2011) also supported the lack

of awareness as a crucial barrier to effective participation. Notably, lack of interest in the ecotourism project has a lower mean value, which suggests that there is a gradual increase in interest among women of CTR but a low level of awareness about ecotourism opportunities and a fear of social scrutiny concerning their character if they engage in work outside the home may discourage them in pursuing opportunities outside traditional domestic roles.

Although personal barriers are slightly rated lower as compared to other barriers, they nonetheless present challenges to women's active participation. The lack of money to start a business and gender-related issues were identified as primary obstacles. Additionally, difficulties in managing household duties and inadequate support from home were noted as contributing factors. These findings are consistent with previous studies (Kala & Bagri, 2018; Nutsugbodo & Mensah, 2020; Panta & Thapa, 2018).

Significant differences were found between barriers and the socio-demographic profile of women respondents. Age, marital status, length of residence, and annual income through ecotourism were identified as crucial factors hindering women's ability to engage in ecotourism effectively. The study highlights that age and marital status significantly influence operational barriers. This could be attributed to the fact that young unmarried women possess distinct priorities and more flexibility in terms of time, resources, and decision-making compared to older married women. It enables them to prioritise professional development and pursue career advancement opportunities, thereby enhancing their access to information and collaborative prospects with relevant stakeholders.

Additionally, the annual income of women through ecotourism also accounted for operational barriers. Furthermore, the study reveals that the length of residence in a particular area significantly impacts personal barriers. This might be because women living in an area for more than 20 years are more ingrained in their existing social dynamics and community structures. While this can foster a sense of belongingness, it can create challenges for them when they seek to deviate from the traditional norms or pursue unconventional paths, such as work in ecotourism initiatives.

CONCLUSION

The study's comprehensive findings highlight the significance of understanding and addressing the multifaceted barriers to enhancing women's participation in ecotourism projects. By addressing operational, structural, cultural, and personal challenges, stakeholders can work towards fostering an environment conducive to women's active involvement in ecotourism projects. Moreover, recognising the importance of women's participation not

only contributes to economic advancement and poverty reduction but also enhances conservation efforts and fosters sustainable ecotourism growth in the long term.

One of the major barriers identified by women in CTR is the lack of money to start a business, which restricts them from fully participating in ecotourism programs. Efforts to overcome this barrier could encompass facilitating easy access to credit through the provision of microfinance programs tailored to the needs of women entrepreneurs, offering low-interest loans especially designated for ecotourism development. Additionally, the research emphasises the need to address structural and operational barriers to promote gender-inclusive ecotourism. It can be further concluded that the socio-demographic profile of women influenced the barriers they encounter when participating in ecotourism.

Therefore, establishing a decentralised decision-making mechanism is vital within ecotourism management to ensure more inclusiveness and active participation of women from the community. It is also equally critical to provide women with adequate information pertaining to ecotourism to increase their awareness about ecotourism opportunities and empower them to take an active part in these initiatives. Moreover, creating an enabling environment where women feel encouraged to pursue opportunities outside their traditional domestic spheres necessitates proactive governmental intervention. This could entail initiatives in terms of offering vocational training workshops, organising capacity-building programs, and providing financial support that could positively transform women's attitudes towards ecotourism development. The insights collected from this research hold considerable relevance for government officials, ecotourism planners, and community stakeholders.

Future research may conduct more extensive longitudinal studies to track changes in women's involvement over time and assess the effectiveness of interventions aimed at overcoming these barriers. Moreover, exploring additional barriers beyond those mentioned in this study could further enrich our understanding of the complex challenges obstructing women from participating in ecotourism projects.

Disclosure Statement

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REFERENCES

- Aref, F. (2011). Barriers to community capacity building for tourism development in communities in Shiraz, Iran. *Journal of Sustainable Tourism*, 19(3), 347-359. doi:<https://doi.org/10.1080/09669582.2010.517314>
- Aref, F., & Redzuan, M. B. (2008). Barriers to community participation towards tourism development in Shiraz, Iran. *Pakistan Journal of Social Sciences*, 5(9), 936-940.
- Bentler, P. M., & Chou, C.-P. (1987). Practical issues in structural modeling. *Sociological Methods & Research*, 16(1), 78-117.
- Cole, S. (2006). Information and empowerment: The keys to achieving sustainable tourism. *Journal of Sustainable Tourism*, 14(6), 629-644. doi:<https://doi.org/10.2167/jost6070>
- Dadvar-khani, F. (2015). The influence of tourism development on economic empowerment of rural women. *European Online Journal of Natural and Social Sciences*, 3(3), 900-910.
- Elmas, S. (2007). Gender and tourism development: A case study of the Cappadocia region of Turkey. *Tourism and Gender Embodiment, Sensuality and Experience*, 302-314. doi:<https://doi.org/10.1079/9781845932718.0302>
- Fathizadeh, F., Azizpour, F., Sharghi, N. S., & Mair, H. L. (2022). Boolean analysis of factors affecting women's participation in rural tourism. *Sustainability (Switzerland)*, 14(9), 1-17. doi:<https://doi.org/10.3390/su14095305>
- Gloria, O. S., Baaba, B., & Collins, T. B. (2018). Residents views on benefits and costs of ecotourism projects: A study of bobiri forest and butterfly sanctuary in Ghana. *International Journal of Hospitality and Tourism Systems*, 11(1), 14-25.
- Government of Uttarakhand. (2018). *Human Development Report of Uttarakhand*.
- Kala, C. P. (2013). Ecotourism and sustainable development of mountain communities : A study of Dhanolti Ecopark in Uttarakhand State of India. *Applied Ecology and Environmental Sciences*, 1(5), 98-103. doi:<https://doi.org/10.12691/aees-1-5-5>
- Kala, D., & Bagri, S. C. (2018). Barriers to local community participation in tourism development: Evidence from mountainous state Uttarakhand, India. *Tourism*, 66(3), 318-333.
- Kandari, O. P., & Singh, T. V. (1980). Corbett National Park: Studying impact of tourism & developmental activities. *Tourism Recreation Research*, 5(1), 33-38. doi:<https://doi.org/10.1080/02508281.1980.11014997>
- Kim, S., Park, E., & Phandanouvong, T. (2014). Barriers to Local Residents' Participation in Community-Based Tourism: Lessons from Houay Kaeng Village in Laos. *SHS Web of Conferences*, 12, 01045. <https://doi.org/10.1051/shsconf/20141201045>
- Kinnaird, V., & Hall, D. (1996). Understanding tourism processes: A gender-aware framework. *Tourism Management*, 17(2), 95-102. doi:[https://doi.org/10.1016/0261-5177\(95\)00112-3](https://doi.org/10.1016/0261-5177(95)00112-3)

- Kumar, R. (2022). *Declining female labour force participation rate in Uttarakhand: Issues and way forward*.
- McMillan, C. L., O’Gorman, K. D., & MacLaren, A. C. (2011). Commercial hospitality: A vehicle for the sustainable empowerment of Nepali women. *International Journal of Contemporary Hospitality Management*, 23(2), 189-208. doi:https://doi.org/10.1108/09596111111119329
- Moswete, N., & Lacey, G. (2014). Women cannot lead: Empowering women through cultural tourism in Botswana. *Journal of Sustainable Tourism*, 23(4), 600-617. doi:https://doi.org/10.1080/09669582.2014.986488
- Mrema, A. A. (2015). Tourism and women empowerment in Monduli District, Arusha-Tanzania. *African Journal of Hospitality, Tourism and Leisure*, 4(42). Retrieved from www.ajhtl.com
- Mustapha, N. A., Azman, I., & Ibrahim, Y. (2013). Barriers to community participation in tourism development in island destination. *Journal of Tourism, Hospitality & Culinary Arts*, 5(1), 102-124. Retrieved from http://www.jthca.org/Download/pdf/V5 IS1/chap 5.pdf
- Nutsugbodo, R. Y., & Mensah, C. A. (2020). Benefits and barriers to women’s participation in ecotourism development within the Kakum Conservation Area (Ghana): Implications for community planning. *Community Development*, 51(5), 685-702. doi:https://doi.org/10.1080/15575330.2020.1825977
- Pandya, R. (2022). An intersectional approach to neoliberal environmentalism: Women’s engagement with ecotourism at Corbett Tiger Reserve, India. *Environment and Planning E: Nature and Space*, 1-18. doi:https://doi.org/10.1177/25148486221082469
- Panta, S. K., & Thapa, B. (2018). Entrepreneurship and women’s empowerment in gateway communities of Bardia National Park, Nepal. *Journal of Ecotourism*, 17(1), 20-42. doi:https://doi.org/10.1080/14724049.2017.1299743
- Pleno, M. J. L. (2006). Ecotourism projects and women’s empowerment: A case study in the province of Bohol, Philippines. *Forum of International Development Studies*, 32, 137-155.
- Pujar, S. C., & Mishra, N. (2020). Ecotourism industry in India: A review of current practices and prospects. *Anatolia*, 1-14. doi:https://doi.org/10.1080/13032917.2020.1861040
- Rallan, P. (2019). *Study to develop an integrated framework to boost wildlife tourism in India Case study of Jim Corbett National Park*. University of Mumbai.
- Rasanjali, C., Sivashankar, P., & Mahaliyanaarachchi, R. P. (2021). Women participation in rural tourism: A case of Ella, Sri Lanka. *Agraris: Journal of Agribusiness and Rural Development Research*, 7(2), 256-269. https://doi.org/10.18196/AGRARIS.V7I2.11294
- Scheyvens, R. (2000). Promoting women’s empowerment through involvement in ecotourism: Experiences from the Third World. *Journal of Sustainable Tourism*, 8(3), 232-249. doi:https://doi.org/10.1080/09669580008667360
- Sherpa, Y. (2007). *Impacts of Tourism on Himalayan Women*.
- Sood, J., Lynch, P., & Anastasiadou, C. (2017). Community non-participation in homestays in Kullu, Himachal Pradesh, India. *Tourism Management*, 60, 332-347. doi:https://doi.org/10.1016/j.tourman.2016.12.007
- Suhr, D. D. (2006). *Exploratory or confirmatory factor analysis*. In SAS Institute Cary.
- Tosun, C. (2000). Limits to community participation in the tourism development process in developing countries. *Tourism Management*, 21, 613-633.
- Tran, L., & Walter, P. (2014). Ecotourism, gender and development in northern Vietnam. *Annals of Tourism Research*, 44(1), 116-130. doi:https://doi.org/10.1016/j.annals.2013.09.005
- Wilkinson, P. F., & Pratiwi, W. (1995). Gender and tourism in an Indonesian village. *Annals of Tourism Research*, 22(2), 283-299. doi:https://doi.org/10.1016/0160-7383(94)00077-8
- Yaja, M., Kumar, A., & Swamy, A. G. (2023). Barriers to tourism participation: A case of first-generation local community service providers. *International Social Science Journal*, 73(247), 103-119.