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## Article

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## Community Knowledge and Support of Ecotourism in the World Heritages Sites of Simien Mountain National Park

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### ABSTRACT

**Purpose:** An in-depth investigation into locals' familiarity with and support for ecotourism development is necessary to ensure the long-term viability of responsible and sustainable tourism. This study aimed to assess the protected area communities' knowledge and level of support for eco-tourism and its development in the Semien Mountain National Park, North Gondar, Ethiopia.

**Design/methodology/approach:** The study employed a mixed research approach and an explanatory design. A multi-stage sampling was used to select 397 samples of respondents from three districts. As methods for gathering data, surveys, interviews and focus group discussions were all employed. Percentages, averages, t-tests, analysis of variance, regression models and thematic analysis were used to analyze the data.

**Findings:** More than half of the respondents (57.2%) were unable to know what tourist is, even though the study found that 93.5% of respondents had a fair understanding of what tourism involved. Nearly three-quarters of the respondents said that their main sources of tourism-related information were their friends and the government. In the multiple regression model, all independent variables together account for about 38.7% of the total variance in the dependent variable. Only three factors significantly contributed to the prediction of the variation in ecotourism support: ecotourism benefit ( $\beta = 24$ ,  $p = 0.001$ ), gender ( $\beta = 0.47$ ,  $p = 0.000$ ), and family size ( $\beta = 0.12$ ,  $p = 0.005$ ).

**Research limitations/implications:** Variables, time, and space were limitations on this study. All elements influencing local communities' support for ecotourism development were not exhaustively considered. This research may not apply to other places with differing social, cultural, and environmental settings. This study is also cross-sectional, which means it does not provide information on how local understanding and support for ecotourism may evolve over time.

**Originality/value:** Many studies have examined the consequences of tourism on host communities and tourist attitudes toward ecotourism, but few have examined local understanding and support of ecotourism development. As a result, this study can provide novel perspectives and knowledge that can enhance comprehension of this phenomenon, influence policymaking and practical applications, and ultimately foster the progression of the field.

*Keywords: Ecotourism, Protected area, Knowledge, Support of ecotourism, Park households*

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## I. Introduction

Ecotourism has been recognized as a sustainable form of tourism that offers economic, social, and environmental benefits to host communities. Ecotourism is based on the principles of sustainability, responsible tourism, and community participation, where tourism activities are designed to minimize environmental impact and maximize benefits to local communities (Kuka et al., 2021; Luštický & Bednářová, 2018). However, ecotourism is not without its challenges, and the success of ecotourism destinations is often dependent on the support and participation of local communities. The support of local residents is critical for the sustainable development of ecotourism destinations, as they play a vital role in shaping visitors' experiences and promoting the local culture and heritage (Alemayehu et al., 2015; Cho, 2021; Luštický & Bednářová, 2018).

Several studies have investigated local residents' attitudes towards ecotourism development and identified factors that influence their support. According to research, there are a number of factors that affect local residents' support for ecotourism, including economic advantages, environmental effects, social and cultural effects, and involvement in decision-making processes. Studies have also identified that local residents' knowledge and understanding of ecotourism and its benefits are essential for their support. In the context of ecotourism development, local residents' support and knowledge have been found to be critical for its success (Almeida-García et al., 2016; Bayer et al., 2017).

In recent years, ecotourism has gained significant attention as a sustainable alternative to traditional forms of tourism. Ecotourism emphasizes responsible travel to natural areas while conserving the environment and promoting local communities' welfare. The concept of ecotourism highlights the interaction between tourists, host communities, and the environment, and the need for all three components to benefit mutually. Local residents' support and knowledge of ecotourism development play a vital role in the success of ecotourism destinations. The support of local residents

is essential for the effective implementation of ecotourism, as they play a crucial role in shaping visitors' experiences, and their willingness to participate and contribute positively to the local economy (Alemayehu et al., 2015; Almeida-García et al., 2016; Štumpf et al., 2018; Taylor et al., 2015).

Despite the growing importance of local residents' support for ecotourism development, few studies have investigated this area's specific topic. Although several studies have examined local residents' attitudes towards ecotourism, most have focused on tourists' perspectives and the impacts of tourism on host communities (Cho, 2021; Luštický & Bednářová, 2018; Mazhenova et al., 2016). Little attention has been given to exploring local residents' knowledge and support for ecotourism development in Ethiopia. Therefore, this study aims to address this research gap by exploring local residents' knowledge and support for ecotourism development. This study's findings will be useful for policymakers, tourism practitioners, and destination managers, who can use the information to design effective strategies for promoting ecotourism destinations and enhancing local residents' support.

## II. Literature

Ecotourism growth in protected areas is an effective way to connect community development and preservation. Many governments and environmentalists consider ecotourism to be a successful strategy for advancing conservation, generating revenue, and adding jobs in the nearby communities of protected areas (Belsoy et al., 2012; Berhanu & Teshome, 2018; Hizmi & Said, 2019). Community-based ecotourism has gained popularity in many countries as a way to protect and improve the sources of income in protected areas. Community-based ecotourism is becoming more and more well-liked in Asian countries like Cambodia, the People's Republic of China, the Lao People's Democratic Republic, Myanmar, Thailand, and Vietnam as one of the best ways to protect biodiversity and alleviate

local poverty in protected areas (Teshome et al., 2002) and Tao (2006). A conservation management tourism strategy developed in Nepal involves paying residents of buffer zones a portion of the money they earn from protected areas. PA ecotourism has been promoted to integrate biodiversity conservation with community livelihoods on the premise that conservation and development can be accomplished concurrently. According to several studies (Lamsal et al., 2015; Tame et al., 2019; Toko, 2019), locals are more likely to support conservation efforts when the benefits of protected areas outweigh the costs.

Since its inception, ecotourism has generated enough interest from researchers and policymakers due to its ability to strike a balance between growth and conservation by fostering connections between the local population, the natural world, and the tourism industry (Harun et al., 2018; Abuhay et al., 2019, Berhanu & Teshome, 2018, Holladay & Ormsby, 2011, and Harun et al., 2018). It offers an opportunity to create goods that can improve socioeconomic conditions, local livelihoods, and visitor experiences while safeguarding cultural traditions, biodiversity, and ecological benefits (Admasu, 2020; Chang et al., 2018; Harun et al., 2018; Teshome et al., 2021; Wanyoike et al., 2015). People are likely to be motivated to avoid external threats to biodiversity because ecotourism-based livelihoods provide chances to gain directly from the natural world (Huang & Chen, 2021; Jairus N. Koki, 2017; Mbaiwa & Stronza, 2010; Torquebiau & Taylor, 2009).

According to numerous studies, the success of tourism depends on how prepared a community is to support it. Over the past 30 years, a great deal of knowledge has been gained about local attitudes toward and support for tourism. In areas with an abundance of natural resources, scientific research that strikes a balance between biodiversity preservation, ecotourism growth, and local livelihoods has a significant impact on society (Amogne, 2014; Biru et al., 2017; Fandik, 2004; Holladay & Ormsby, 2011; Moshi & Rskaf, 2016). Understanding communities' awareness of and attitudes toward ecotourism is essential for the effective development of ecotourism and

environmental management at destinations (Holladay & Ormsby, 2011; Nor et al., 2018; Teshome et al., 2021; Yehuala, 2020). It also assists in the development and implementation of plans that address the concerns of the local populace and achieve sustainable biodiversity conservation and environmentally friendly livelihood options (Abukari & Mwalyosi, 2020; Liu et al., 2012). Because it is directly related to community sentiments, researchers typically accept the social exchange hypothesis as an adequate hypothetical framework to understand how communities view the effects of tourist development (Campón-Cerro et al., 2017; Teshome et al., 2022; Wang et al., 2006).

According to social exchange theory, how park communities feel about tourism and how much they support its development depend on what they anticipate in terms of advantages or disadvantages (Andereck et al., 2005; Lew, 2007). For example, when the exchange of resources is high for the host community in either the adjusted or disturbed exchange relationship, tourist impacts are seen favorably, whereas they are seen adversely when the exchange of resources is low (Abukari & Mwalyosi, 2020; Lew, 2007; Nsukwini & Bob, 2016). According to Vincent and Thompson (2002) and Wang et al. (2006), the majority of perception studies focus on analyzing local discontent in the context of socioeconomic and demographic factors. This study sought to learn more about the park communities' understanding of and support for the growth of ecotourism in the study area.

## A. Objectives of the study

The main objective of this study is to investigate protected area's community knowledge and support of ecotourism in Simien Mountain National Park, North Gondar, Ethiopia.

Specifically, it has the following objectives

- To ascertain the park adjacent communities knowledge and awareness about ecotourism in the study area
- To identify the level of local residents support of ecotourism development in the study areas

- To identify the determinant factors for the support of ecotourism by park communities in the study area

## **B. Contribution and Limitation of the research**

This study delves into the vital role that local community knowledge and support play in the development of ecotourism within protected areas. By highlighting gaps in understanding and comprehension of ecotourism development, the research serves as a guide for policymakers, informing policy decisions and creating more effective strategies that receive support from local communities. This, in turn, fosters the long-term prosperity and sustainability of ecotourism in protected areas.

However, the research has limitations. It may not capture the diverse perspectives and experiences of local communities or consider the larger socioeconomic and political contexts that influence their attitudes towards ecotourism. It may also overlook environmental impacts, cultural shifts, and the unequal distribution of benefits. Distinguishing ecotourism from conventional tourism in protected areas is challenging and requires careful consideration of the specific context, stakeholders involved, and criteria for sustainable and responsible tourism. This difficulty hampers the research's ability to differentiate between ecotourism and conventional tourism.

Despite these limitations, the study remains significant, serving as a stepping stone for future research and informing policymakers about the importance of local community knowledge and support in ecotourism development. By addressing these limitations, future studies can ensure that policymakers have the necessary information to make informed decisions regarding ecotourism development.

## **III. Materials and Methods**

### **A. Description of the study area**

The research will take place in the Simien Mountains National Park (SMNP). The park is one of nine national parks established to protect wildlife and habitats with exceptional scientific, educational, and recreational significance. The management of the park is under the responsibility of the park office of Debark and is administered by Ethiopian Wildlife and Conservation Agency (EWCA). The Simien Mountains National Park (SMNP) is situated in the northern portion of the Amhara National Regional State North Gondar Zone, which is a portion of the high mountain massif in northern Ethiopia. Between 130 9'57" and 130 19'58" north latitude and 370 54'48" and 380 24'43" east longitude is the location. The park's current total area is approximately 23,178 hectares. The park is located in the five districts or woredas of the zone, which include 42 villages or kebeles: Debark, Adarkay, Beyeda, Telemt, and Janamora (Admasu, 2020; Hurni & Ludi, 2000)

The Simien Mountain inhabitants have survived on a crop-focused mixed agricultural strategy. Many own goats, sheep, and cattle. Horses and oxen plough. The park office and report residents cultivating 1,161 hectares. Muslim minorities cultivate and weave. Weaving generates most household income. Most social services in the study zone are outside the park. Churches and mosques rule local society. The previous administration established Keble Administrations (KAs) in 1976 (Admasu, 2020; Alemu & Umeta, 2016; Hurni & Ludi, 2000; Teshome et al., 2021)

The five districts or woredas surrounding the Semien Mountain National Park (SMNP) have 190,188 people and 43,224 homes (CSA, 2013). Rural households are larger than the regional average of 4.6 (CSA & WB, 2013) and the national average of 5.0 (CSA, 2014). Population growth has averaged 2% since 1979 (FZS and ADC, 2009). Ludi (2005) anticipated that the human population would double every 35 years at 1.5-2% annually. From 1964 to 1975, growth was 2.6%; from 1975 to 1994, 1.6%

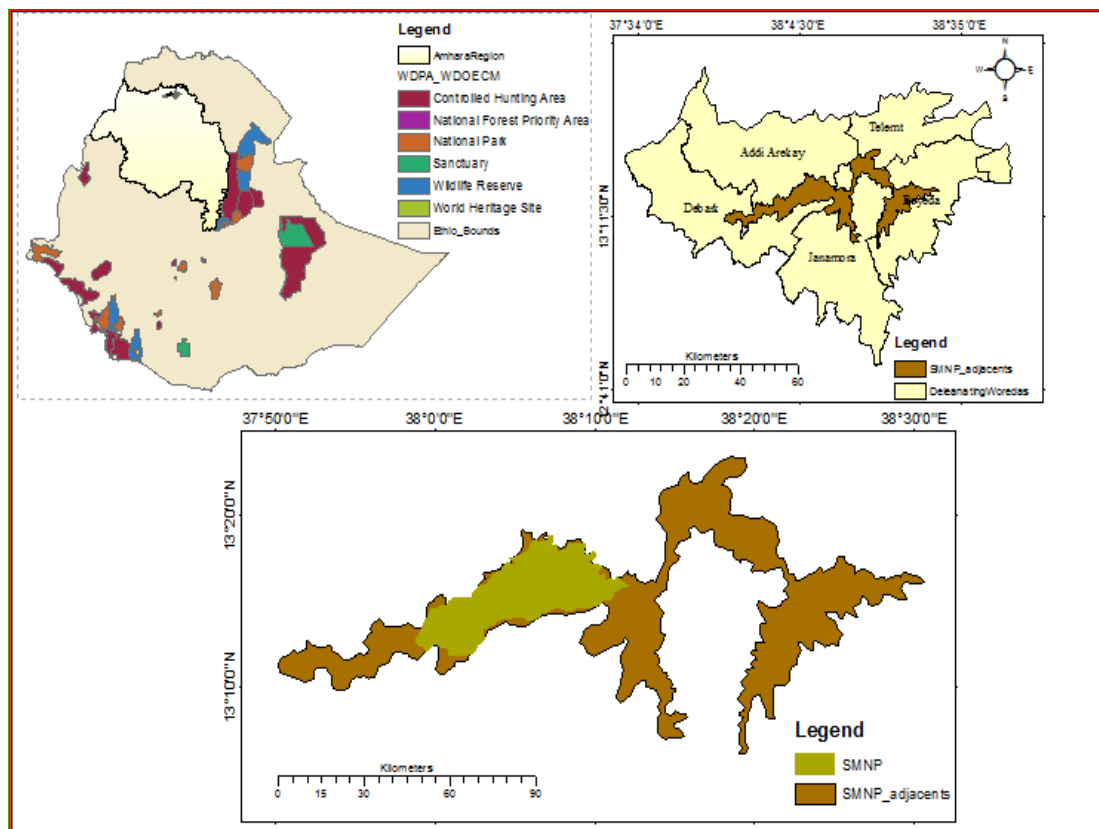


Figure 1. Location map of the study area

(Hurni and Ludi, 2000). Expect 2% growth. From 1994 through 2006, many KAs or villages grew. The long rainy season isolates the park villages and communities on volcanic plateaus. The settlements extend up to 3,800 meters, and the steep slope terrain, including altitudes up to 3,900 meters, is used as farmland (barley and wheat), while the plateaus above 4,000 meters are still used as grazing land for their livestock, whose overpopulation causes severe soil erosion (EWCA, 2015)

**Research approach and design:** This study used a mixed method to supply both qualitative and quantitative data. The rationale for choosing a mixed approach for this study is especially attributable to the character of the matter under study and therefore the stakeholders involved in it. Of course, employing a mixed-methods approach has the advantage of allowing researchers

to triangulate findings by incorporating data from various sources. It helps to overcome some barriers with the utilization of just one approach and to extend the validity of the result expected. This, in turn, aids in the collection of suitable and relevant data and also increases the validity of the conclusions drawn from the analyses of the whole set of knowledge. The study used a sequential embedded mixed method, which uses one type of data to support research that is primarily based on a different type of data. In most cases, the supportive data set, or qualitative data, is used to comprehend the research context, participants, and to create survey instruments. They are then used to follow up on and explain quantitative results. Thus, quantitative and qualitative research strands were integrated during the data collection,

analysis, and interpretation stages.

**Sampling design and procedures:** The study area and research participants were selected using a multi-stage probability and non-probability selection technique. The following techniques were used to identify the households that took part in the study: The five districts that border the Semien Mountain National Park (SMNP) were first deliberately chosen because they are directly impacted by protected area governance. Three of the five districts (woredas) that make up the sample and border the park were randomly chosen in the second stage. Three representative villages or kebeles (a total of 9s) were randomly selected from each districts' (woreda) in the third stage. At fourth stage, 397 samples of households were determined using the Yemane formula (1967). The sample households were then randomly chosen by systematic and proportional random selection from among the total target population of 41,438 households in each villages.

**Data collection methods:** The study aimed to gather both quantitative and qualitative data on community support and knowledge of ecotourism in the study area. To achieve this, a questionnaire was developed with open-ended, yes-or-no, and rating scale questions. Data collection was conducted between February and April 2022, and respondents were required to rate each item on a Likert scale of 1 to 5 to show their comprehension of and support for ecotourism. Additionally, their level and sources of knowledge regarding ecotourism were measured using multiple types of open and closed-ended questions. A pilot test was conducted to ensure the questionnaire's clarity, dependability, and comprehensiveness, and a reliability analysis was used to further investigate the scale items' dependability. Interviews and focus group discussions were also used to gather qualitative data to support the quantitative data.

The questionnaire was developed following an analysis of the literature on ecotourism development, and the primary purpose of this tool was to make

quantitative data collection easier. By adding together all of the items on each scale, a total score was determined for each question. Each variable's Cronbach's alpha is greater than 0.70, a level of dependability considered adequate, and a Cronbach alpha coefficient of 0.728 indicates the questionnaire may be trusted as a valid instrument because it is greater than the necessary minimum of 0.7.

**Data analysis methods:** For each variable, the frequency distribution as well as the fundamental descriptive statistics (mean, standard deviations) were computed. The Statistical Package for the Social Sciences version 25 (SPSS) was used to evaluate and explain the results. The data were statistically analyzed using descriptive techniques like mean and standard deviation as well as inferential techniques like the T-test and multiple regression. The multiple regression was conducted to predict the extent of local resident support to ecotourism development based on the value of different socio-demographic variables namely sex, education level, occupation and locations of residence. Data gathered using a variety of strategies, such as key informant interviews, were used to support the quantitative findings. The qualitative findings from the key informant interviews were used to support the quantitative findings.

## IV. Results and Discussions

### A. Park community's perception about ecotourism

Assessing park households' perceptions is a valuable component in identifying and measuring ecotourism local support since it is an important factor for future ecotourism planning, management, and development that links the economic, social, and environmental components of sustainable development. The low level of ecotourism development in the destination starts from the lack of knowledge about what ecotourism is among the local communities. Therefore, it is important to know how the local

communities understand what ecotourism is and its importance as a revenue generator. Hence, below, the park households' knowledge on ecotourism and tourists and their perceptions towards ecotourism support were analyzed using the opinions of household communities.

The data results obtained from sample households in the above Table 1 indicated that the dominant sections of the local communities in Semien Mountain National Park(SMNP) and its adjacent areas were aware of what ecotourism and tourists meant. In the first item, the highest respondents (294, or 74%) said ecotourism is visiting and enjoying attractive and beautiful landscapes, followed by recreation, which accounted for 35 (8.8%) respondents. There were also 33 (8.3%) respondents who said ecotourism is research. In general, of the total respondents, 372 (93.5%) knew what ecotourism meant. According to the study, 35 (6.4%) respondents did not know what ecotourism means. That is, they had no experience learning about or participating in ecotourism activities, or both.

As it is shown in Table 1, the majority of the respondents in the study area, i.e., 173 (43.6%), said a tourist is a white person who visits a certain place. The next highest choice regarding the question was who replied a tourist is every one (both nationals

and whites) who visits a certain place (42.8%). Relatively fewer respondents (7.6 percent) reported that tourists are nationals. There were also 24 (6%) people who replied that they did not know what a tourist was. Therefore, excluding those who replied everyone, 227 (57.2%) of them did not have adequate knowledge about what a tourist is. It has been observed from the study that the majority of the respondents believed tourists were only white. As it can be seen in the table, the respondents from Debark had better knowledge about tourists than Janamora and Beyeda. In general, information dissemination about tourists among park local communities is very rare.

Besides this, a result of the focus group discussion confirmed that the household respondents had very little awareness and knowledge about ecotourism. An interview result with responsible ecotourism heads also indicated that the reason why ecotourism remained underdeveloped was due to a lack of awareness about ecotourism among local communities because knowledge of what to do in the industry has played an immense role in boosting tourism development in the destination.

As it is indicated in the Table 2, the respondents have been asked whether they have come across teaching on ecotourism or not. 84 (21.16%) respondents replied that they have never participated in any kind

**Table 1.** Knowledge of respondents about tourism and tourists

Respondents	Statement answers	Debark	Janamora	Beyeda	Total	Percent
Knowledge about tourism	Visiting	62	151	81	294	74
	Picnic	4	0	6	10	2.5
	Research	10	8	15	33	8.3
	Recreation	13	8	14	35	8.8
	I do not know	7	2	12	21	5.4
	Others	0	2	2	4	1
Total		96	171	130	397	100
Knowledge of respondents about tourists	Whites only	51	55	67	173	43.6
	Nationals(domestic) only	7	8	15	30	7.6
	Both whites and nationals	30	105	35	170	42.8
	I do not know	8	3	13	24	6
Total		96	171	130	397	100

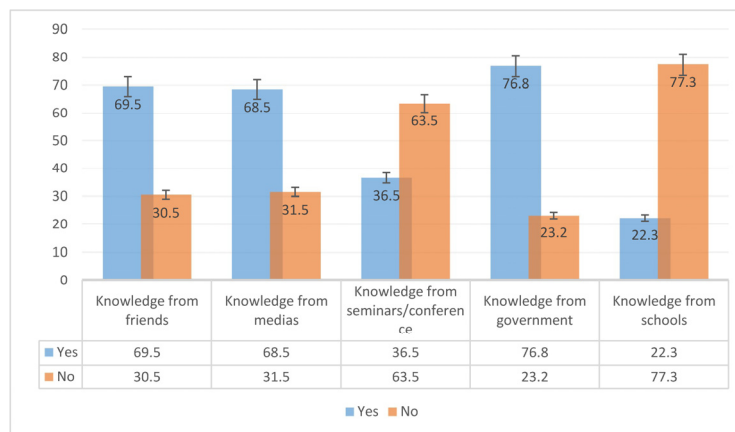
Source: (Own survey data, 2022)



**Table 2.** Respondents learning experience about tourism

Question	Answer	Frequency	Share in %
Do you have any learning experience about ecotourism	Yes	313	78.84
	No	84	21.16
Total		397	100

Source: Own field survey, 2022

**Figure 2.** Respondent's source of knowledge

of teaching on ecotourism, while the remaining 313 (78.84%) respondents said they did get teaching. This figure indicated that there is a gap in the creation of awareness and teaching about tourism or ecotourism.

Those respondents who learned about ecotourism were asked to identify the source of their knowledge as it is depicted in the above Figure 2. As a result, the source of teaching for the majority of respondents (76.8%) was the government, followed by a friend and the media, which were cited by 69.5% and 68.5% of respondents, respectively. There were also 36.5% and 22.3% of respondents that acquired their knowledge from media and schools, respectively.

Regarding participation in ecotourism activities, the majority of the respondents (67.9%) reported that they were not involved in the park. Only a slightly smaller percentage of respondents (32.1%) claimed to have benefited from ongoing ecotourism and associated activities. Of the respondents who stated they are benefiting, 29% mentioned collective benefits like infrastructure and facilities that take habitat

conservation into account, and 24% reported exemption from land tenure taxes, indicating that they wish to compensate society by protecting natural resources.

## B. Local support for ecotourism development

This section is aimed at evaluating the perceptions of park-household communities towards ecotourism development in their area. To measure their attitudes, the respondents were given Likert scale items, which range from strongly disagreeing (1 point) to strongly agreeing (5 points). The results of the study present as follows:-

The responses to each of these statements were displayed in Table 3, which is arranged from highest to lowest mean. When the results are carefully examined, it is clear that all variable means are higher than 4, indicating that the overall responses are evenly distributed between agree and strongly agree. Furthermore, the fact that the means do not differ

**Table 3.** Respondents view on the support of ecotourism

Items	Mean	SD
Benefit from ecotourism should be widely shared by local people	4.55	0.62
The number of flow of tourists to Simien Mountains National park need to be increased	4.52	0.56
The government should increase its efforts to provide infrastructure to support tourism development	4.48	0.59
I support ecotourism having a vital role in the community	4.45	0.62
Additional tourism activities have to be extended in my community	4.42	0.60
Average of 397 respondents	4.48	.60

Source: Own survey data, 2022

significantly suggests that people's views on the effects implied by the statements are generally similar.

The statements "I would like to see more tourists in Simien Mountains National Park" and "Benefits from ecotourism should be widely shared by local people" appear to have generated the greatest level of agreement based on the mean and standard deviation scores. The mean and standard deviation scores for these two claims were 4.55 and 0.61 and 4.52 and 0.56, respectively, and they both received the highest marks. It implies that locals are conscious of and grateful for the contribution tourism makes as a source of income and that money needs to be distributed fairly among many facets of the community.

The statement "The government should strengthen its efforts to create infrastructure to assist tourism development" received the third-highest score (mean = 4.48, SD = 0.59). The study discovered that the government plays a crucial role in the growth of the tourism industry in general and the advantage of communities in particular by creating and facilitating essential ecotourism destination attributes. The government must actively take part in crucial tasks like educating the public, building human resources, upholding peace, and planning for the future.

The fourth (mean = 4.45, SD = 0.62) and fifth (mean = 4.42, SD = 0.60) average scores were earned by the statements 'I favor ecotourism playing a critical role in this community' and 'I support greater ecotourism initiatives in my community', respectively. These results showed that ecotourism must benefit local communities since it is they who welcome visitors to their area. The community is also primarily

responsible for the proper use and maintenance of tourist sites for future generations because everything done to the environment has an impact on community life either directly or indirectly.

A one-sample t-test was also used on the support for ecotourism development to determine if the mean score of the ecotourism development support was significantly different from a hypothesized test value of 3, a neutral response. The sample mean of 4.48 and SD of 0.49 were significantly different from 3.  $t(396) = 59.59$ ,  $p = 0.00$ . This shows the existence of differences among socio-demographic variables towards the support of ecotourism. The independent sample t-results also showed significant differences in the mean support of ecotourism development between gender,  $F(2, 395) = 8.87$ ;  $p = 0.003$ . Post hoc comparisons indicated males ( $M = 4.55$ ;  $SD = 0.43$ ) rated the support of ecotourism more strongly than female participants ( $M = 3.49$ ;  $SD = 0.34$ ).

The perceived education level of respondents was another socio-demographic factor that demonstrated a positive significant difference on support for the growth of ecotourism. According to the post hoc comparison results, respondents who have completed a diploma program or higher have a statistically greater positive attitude toward ecotourism development ( $M = 4.68$ ,  $SD = 0.36$ ) than those who have not begun formal education or are illiterate ( $M = 4.38$ ,  $SD = 0.54$ ), can read and write ( $M = 4.54$ ,  $SD = 0.43$ ), and have completed secondary school ( $M = 4.42$ ,  $SD = 0.45$ ). Support for ecotourism development activities increases proportionally to education level, and vice versa, according to the findings for education level.

The ANOVA results also showed significant differences in the mean of support for ecotourism development between different places of residence,  $F(2, 394) = 9.8, P = 0.001$ . Post hoc comparisons indicated household residents in Debark ( $M = 4.57, SD = 0.48, P = 0.00$ ) and Janamora district or woreda ( $M = 4.53, SD = 0.41, P = 0.01$ ) as supporting ecotourism more strongly than Household residents in Beyeda district or woreda ( $M = 4.33, SD = 0.54, P = 0.01$ ). Another last socio-demographic category observed in the study to evaluate the perception of respondents to the support of ecotourism was age, marital status, residence year, religion, and family size. The results of the ANOVA showed that respondents had no significant differences in the aforementioned variables.

### C. Predictors of local support for tourism development

Another section of the result is to determine the relationship between independent variables and the perception of local support for ecotourism development in Semien Mountain National Park (SMNP). A multiple regression was run to predict support for ecotourism development in the park using independent variables like benefit from ecotourism, attachment, age, gender, education, location, and others as well. The data obtained met the assumptions of linearity, independence of errors, homoscedasticity, unusual points, and normality of residuals. The results of the multiple regression analysis are depicted here below in Table 4.

The above Table 4 shows the cumulative and independent effects on the dependent variable. Before undertaking the analysis of the regression model, the presence of multicollinearity was examined, and the model's accuracy in predicting data behavior was evaluated using goodness-of-fit statistics, which showed that the model accurately describes the data. The model explained 37.4 percent of the variance in support for ecotourism development in Semien Mountain National Park (SMNP). The results of the multiple regression analysis indicated that there was a significant relationship between variables like sex, study area, family size, and benefit from the park, park good governance, and local support for ecotourism development.  $F(5, 397) = 30.61, p = 0.05$ . The results indicated that benefit ( $B = .24, p = 0.00$ ), sex ( $B = .47, p = 0.00$ ), family size ( $B = .12, p = .04$ ), study area ( $B = 118, p = 0.05$ ), age ( $B = .117, p = .019$ ), and park governance ( $B = .162, p = 0.04$ ) are significant factors contributing to the prediction of overall ecotourism development support. The variables, like residence year and education, had no significant relationship with support for ecotourism development.

A multiple regression analysis indicated that there was a significant difference in perception of local support for ecotourism development depending on benefit obtained, park good governance, age, sex, and family size variables. From a gender perspective, males perceived more support for ecotourism development compared to females. From an age perspective, younger communities supported ecotourism development more than older ones. Age was a significant predictor of one's perception towards ecotourism. This

**Table 4.** Analyses on predictors of local support for ecotourism development (N=397)

Variables	B	SEB	$\beta$	Sig.
Woreda of households' residence	-.078	.27	-.118	.005
Sex of respondents	-1.018	.86	.479	.000
Family size	.59	.021	.129	.04
Park good governance	.06	.211	.162	.04
Community benefit from the park	.216	.036	.249	0.00
Age of respondents	.084	.036	.117	.019

Source: Own survey data, 2022

Note.  $F(5, 397) = 30.61, R = .622, R^2 = .387, \text{Adjusted } R^2 = .374$ .

is mainly because they had grown up at a time when ecotourism and environmental conservation issues were at the forefront. With respect to location, the findings of this research have revealed that respondents from villages closer to the ecotourism zone had benefited more from ecotourism and therefore were more positive towards ecotourism. Many authors acknowledge that location can play a significant role in determining the level of benefit and support that local communities have towards ecotourism development. Communities located near areas where ecotourism activities are carried out tend to benefit more from the economic and cultural opportunities that ecotourism provides. Additionally, these communities may have a more positive attitude towards ecotourism development due to their direct experience with the benefits and impacts of ecotourism. With respect to this, the communities of Debark district is relatively closer to the main ecotourism activities than other two districts. Hence, from three districts, debark district respondents had more support for ecotourism than other woredas. This may be due to the nearness of the area to the ecotourism zone. The most significant variable that made a great contribution to the overall support was the benefit gained from ecotourism. The perceived local support for the development of ecotourism was positively correlated with the benefits of ecotourism. This indicates that the park's local communities saw more advantages from ecotourism. It is more likely to see greater benefits if involved in ecotourism.

## V. Discussion

Considering locals' support as well as their perceptions and attitudes toward tourism's impact is essential for its growth, successful operation, and sustainability because tourism heavily relies on their goodwill (Ap, 1992; Gursoy, et al., 2002). The perspectives of sample families were used to assess how much the local population understood and

supported the growth of ecotourism. The 397 household survey investigation discovered that the park's locals were aware of tourism and supported its expansion. The majority of respondents (372, or 93.5%) understood what tourism meant but struggled to distinguish between different tourist types. The majority of survey respondents believe that the government is the most important source of information. Many people also noticed that seminars and educational institutions provided scant or no information. But the post hoc comparison noticed the influence of education level to the support of ecotourism development. This is because although educational institutions may not have specific courses or programs dedicated to teaching about ecotourism, if individuals can still learn about this ecotourism and its benefit by seeking out and reading various written materials related to it as far as they can read and write. These resources can include books, articles, websites, and other written materials that provide information and insights about ecotourism. By doing so, they can gain knowledge and insights that they may not have otherwise acquired through formal education. This may help them to develop positive attitude and a deeper understanding of the concept and its underlying principles.

Since fostering sustainable ecotourism depends on local communities' understanding of it, many academics have focused on and studied it. The findings of this study are consistent with research conducted in other protected areas, such as the Norwegian Parks, Lake Wanchi, and Donkoro Forest (Abebe, et al.; 2022; Eshetu, 2014). In the aforementioned study, local communities were fully aware of what ecotourism or tourism meant, but they found it difficult to comprehend what tourists actually meant.

The locals and communities near the Semien Mountain National Park (SMNP) were very supportive of the development of ecotourism in the region. According to the item average ( $M = 4.48$ ;  $SD = 0.59$ ), the level of agreement in the community was between agree and strongly agree. This implies that the respondents, who were households, expressed a willingness to support ongoing ecotourism efforts.

In this study, the degree of support for the development of ecotourism has been compared with other independent variables. So it was shown that the dependent variable, support for ecotourism development, had a favorable correlation with community tourist benefit, sex, age, and excellent park governance. Other factors like marital status, level of education, and time spent living in the park had no effect on the dependent variable. The socio-demographic variables do not exhibit a clear pattern in predicting support for development, according to a thorough examination of these links in the area of community perceptions about supporting ecotourism. Across all variables, benefit was found to be an accurate predictor of support for ecotourism. Additionally, there was a link between how the local communities viewed the advantages of ecotourism and how supportive they were of the protected area. This is consistent with the theory put forth by Stem et al. (2003) that those who benefited from ecotourism were more likely to support it.

In accordance with this study, other studies have found that utility, gender, and location reliably predict support for tourism growth (Wang & Pfister, 2008). Considering the personal benefits of tourism, the authors found no correlation between tourism growth promotion and length of stay. However, Jurowski and Gursoy (2004) discovered links between the two factors when considering proximity to tourist locations and support for tourism development. According to the results, there was a strong relationship between location, occupation type, household size, and those who saw ecotourism benefits. Hunt et al. (2015) found that additional factors such as age, gender, and marital status were also significant. In contrast to the findings of the present study, there was a positive correlation between support for tourism growth and both educational level and length of stay. However, associations between two factors were found in supporting ecotourism development and distance from tourist attractions, which is similar to this study (Wang & Pfister, 2008).

## VI. Conclusions

Tourism encourages intercultural interaction between tourists and locals and supports local infrastructure, economic growth, and employment. The understanding of and attitudes toward tourists among the local populace in tourist areas are taken very seriously for the smooth operation of tourism-related activities. The degree to which tourist destinations are able to satisfy the region's steadily increasing demand depends heavily on how well visitors and the tourism sector are treated. According to this report, there is limited understanding of what tourists are, and so little information about them is being shared by pertinent institutions. The study's local communities were shown to support the growth of ecotourism, according to the report. According to the total average score ( $M = 4.48$ ;  $SD = 0.59$ ) for all categories, communities are largely in support of the ongoing ecotourism operations. The dependent variable in this study, which promoted the growth of ecotourism, was found to be positively correlated with the advantages of community tourism, sex, age, and good park governance.

## Recommendation

The researcher recommends the following actions based on the major conclusions of the study: Numerous challenges brought on by ignorance face the tourism industry. The Semien Mountain National Park (SMNP) office, Tourism and Culture Authority, and other organizations ought to have taken the proper actions to increase community understanding of what the sector entails, what the community's obligations toward tourists are, and how to regard tourism as a source of income. As a result, there is a particular need for public education and localized tourism-related training. One of the fundamental requirements the community sought to promote ecotourism was a

benefit from the sector. The responsible organizations, such as the Semien Mountain National Park (SMNP) Office and the Culture and Tourism Office, are therefore required to promote an environment that encourages the local communities to participate in and profit from the area's tourism.

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## Declaration of conflict of interest

The author(s) declare(s) that there are no conflicts of interest regarding the publication of this paper.

## Data availability

The study is a part of PhD dissertation. Hence, the data used to support the findings of this study are available from the corresponding author upon request.

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