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Residents' empowerment for sustainable ecotourism: insights from Ghana

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ABSTRACT

Ecotourism can be sustainable and contribute to environmental preservation if community members are empowered. However, few studies have investigated the empowerment of community members for sustainable ecotourism, particularly in developing countries. To address this knowledge gap, this study employs a mixed-method approach to investigate the extent of residents' empowerment in four communities at two ecotourism destinations in Ghana. The study looked at six aspects of empowerment which are social, political, psychological, environmental, human, and economic. The findings indicate the need to build the human empowerment of and enact ecotourism policies to regulate ecotourism practices. The inclusion of human empowerment in the empowerment framework proved useful in analysing the strengths and weaknesses in the delivery of sustainable ecotourism objectives.

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Sustainability; empowerment; livelihoods; resources; biodiversity conservation

1. Introduction

Tourism is among the fastest-growing industries in the world that provides income to the greatest number of countries across the globe (UNWTO, 2018). However, COVID-19 has had devastating effects on the tourism industry as a sector that depends heavily on travel within and across borders (Ivanova et al., 2021; Yeh, 2021). International tourism arrivals reduced drastically from January to May 2020 with Europe recording −58%, the Middle East −52%, and Africa −47% (World Tourism Organization [UNWTO], 2020). The tourism sector is greatly affected by the COVID-19 pandemic and requires strategies to reduce the impact and ensure sustainability at destinations. Sustainable practices to ensure the conservation of biodiversity in natural areas to continuously attract tourists and provide the needed benefits for residents are critical to achieving sustainable tourism.

Ecotourism as an aspect of sustainable tourism, emphasizes the preservation of natural areas at destinations and encourages tourists to be environmentally conscious (Beall et al., 2020; Chiu et al., 2014). Sustainability in ecotourism in developing countries is receiving greater attention in the literature (Eshun & Tichaawa, 2020a). One of the tenets of ecotourism is to empower local communities to ensure sustainable ecotourism (Boley & McGehee, 2014; TIES, 2015). Residents' empowerment here denotes that the majority of community members are benefiting from the various forms of tourism/ecotourism. Some authors have emphasized that attaining sustainability in ecotourism destinations has become a challenge and if not addressed, could destroy the very foundation on which ecotourism is built (Boley et al., 2016; Boley & McGehee, 2014).

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The vital role of residents' empowerment in achieving sustainable ecotourism has however received little attention in the literature (Boley et al., 2016; Boley & McGehee, 2014). This needs to be addressed to pursue the sustainable tourism agenda. Other authors have looked at three levels of empowerment which are psychological, social, and political empowerment of residents (Aleshinloye et al., 2021; Joo et al., 2020; Mody et al., 2020), and Ramos and Prideaux (2014) added the environmental and economic empowerment of residents. However, most of these studies have focused on areas other than Africa and non-ecotourism destinations.

Without adequate research to broaden our knowledge base and provide the needed guidelines, the achievement of ecotourism objectives at most destinations would be a mirage. To address these knowledge gaps, this research assesses the extent of residents' empowerment towards sustainable ecotourism using Kakum National Park (KNP) and Bobiri Forest Reserve and Butterfly Sanctuary (BFRBS) as study areas in Ghana. KNP is the most visited destination and BFRBS is moderately visited in Ghana (Eshun et al., 2015). Results from these two destinations would build our understanding of residents' empowerment at various ecotourism destinations, and also provide directions for policy to strengthen residents' empowerment through ecotourism in developing countries. This could also serve as COVID-19 surviving strategies and build resilient communities. This study builds on the existing literature on social, economic, psychological, environmental, and political empowerment and also adds human empowerment drawn from the human assets in the sustainable livelihood framework.

2. Literature review

2.1. Empowerment

Empowerment is "the ability of people, organizations, and communities to gain mastery over their affairs" (Rappaport, 1987 as cited in Boley & McGehee, 2014, p. 87). It is a process by which individuals and groups gain power, access to resources, and control over their lives. Empowerment is the capability of local members to be in authority, exercise choice, and have power over decisions and resources. Aghazamani and Hunt (2017, p. 335) opine that empowerment is "a multidimensional, context-dependent, and dynamic process that provides humans, individually or collectively, with greater agency, freedom, and capacity to improve their quality of life as a function of engagement with the phenomenon of tourism". Aspects of empowerment include psychological, social, economic, political, environmental, and human.

2.1.1. Psychological empowerment

Psychological empowerment in tourism refers to a situation where ecotourism can raise the self-esteem of community members (Regina Scheyvens, 1999). Where outsiders or tourists recognize the community because of their natural environment and rich culture, residents can increase their confidence (Asiedu, 2002; Regina Scheyvens, 1999). It is where community members "feel unique", have increased "self-esteem" and "feel special" and believe that they have essential skills and resources to share with tourists (Boley & McGehee, 2014, p. 87). On the other hand, psychologically disempowered results where residents show disinterest in sustainable ecotourism (Asiedu, 2002; Regina Scheyvens, 1999). Ramos and Prideaux (2014) affirm that psychological disempowerment results when local members lose interest in tourism development, fear losing control over local planning and decision making, and feel inferior about their way of life.

2.1.2. Social empowerment

Social empowerment is attained when community members work together to improve cohesion and connectedness (Scheyvens, 2002). Asiedu (2002) asserts that social empowerment is where community members increase their sense of cohesion, self-integrity, and reliance through ecotourism. Local members could be socially disempowered where ecotourism development does not

conform to social norms and leads to social vices such as prostitution, crime, drug trafficking, and loss of land, culture, and tradition (Asiedu, 2002). Also, Ramos & Prideaux (2013) assert that social disempowerment results when tourism creates disharmony and social decay, there is competition and conflict regarding benefits from ecotourism and fear of losing local control of resources.

2.1.3. Economic empowerment

Economic empowerment is where there are programmes to ensure that economic benefits trickle down to community members and most members are employed. Community members are economically empowered if ecotourism can bring prolonged economic gains and cash earned is shared among many households (Regina Scheyvens, 1999). According to Ramos & Prideaux (2013), community members are economically empowered when the greater number of local members have control of economic resources from ecotourism, benefit economically from ecotourism, in the short, medium, and long term. Economic disempowerment arises where the economic benefits from ecotourism are concentrated in the hands of few elites (Asiedu, 2002). Scheyvens (2002) asserts that economic disempowerment arises where cash benefits from ecotourism are small and irregular and most often fall in the hands of elites, foreign operators, government agencies, and also when few community members benefit from ecotourism.

2.1.4. Political empowerment

Political empowerment is achieved when a greater proportion of community members are involved in all aspects of the decision-making process that affects their well-being (Afenyo & Amuquandoh, 2014). It also requires traditional authorities, youth organizations, religious and women groups to have avenues to air their views regarding ecotourism development (Asiedu, 2002). Political empowerment would be achieved when community members can vote, be part of the decision-making process, and have outlets to share their concerns regarding ecotourism development (Boley & McGehee, 2014; Joo et al., 2020; Strzelecka et al., 2017). Political disempowerment occurs where leadership in ecotourism is autocratic and self-centred, power and ownership fall in the hands of governments and private institutions and there is a lack of appropriate institutions to develop the skills and train community members in ecotourism (Ramos & Prideaux, 2014).

2.1.5. Environmental empowerment

According to Ramos and Prideaux (2014), assert that environmental empowerment is where communities have habitat rehabilitation for tourism such as reforestation, nursery plants, orchards, fire brigades, monitoring of communal areas, and residents can improve their physical environmental conditions. Environmental disempowerment occurs when community members are not able to protect the environment, are not aware of impacts of ecotourism on the environment, the necessary ways to mitigate the problems, and are engaged in unsustainable environmental practices such as hunting, logging, and littering (Ramos & Prideaux, 2014).

2.1.6. Human empowerment

Central to the various types of empowerment is human empowerment. Hewitt and Anderson (2015) assert that empowerment requires human services to apply different techniques such as increasing self-efficacy and skills, improving awareness about the links between personal struggles and bigger public issues, forming a coalition with others, and taking steps to build personal, interpersonal or social change. Pigg (2002, p. 112) equates human empowerment to self-power and believes it is the "first face" of empowerment and the important personal efficacy factor which could be defined as "personal power" and that efficacy can be increased when people gain control over their destiny. Kullenberg (2010) asserts that human empowerment denotes the provision of education, skills, and training to community members. Human empowerment is mostly about the

self-empowerment of the individual concerning the social group (Hewitt & Anderson, 2015). However, human disempowerment occurs when individuals lack efficacy and may have unproductive attitudes and behaviours and there is a lack of training and skills development (Eshetu, 2014).

2.2. Conceptual framework

The indicators for the framework are drawn from a review of the literature and it is a combination of DFID Sustainable Livelihood Framework (SLF) and issues of empowerment (Boley et al., 2015; DFID, 1999; Ramos & Prideaux, 2014; Regina Scheyvens, 1999). The vulnerability context denotes the disempowerment signs people show as a result of inadequate or limited interactions with residents. The issues of empowerment include the six aspects of empowerment and their indicators (Environmental, social, political, economic, human, and psychological). The structures and processes are the strategies employed by public and private institutions to interact with residents on the various aspects of empowerment. This could be laid down rules, mechanisms, policies, regulations to support the specific involvement of residents to be empowered. Where there are adequate interactions, it will yield empowered outcomes which include improvement in all the activities that could result in sustainable tourism. This is shown in Figure 1.

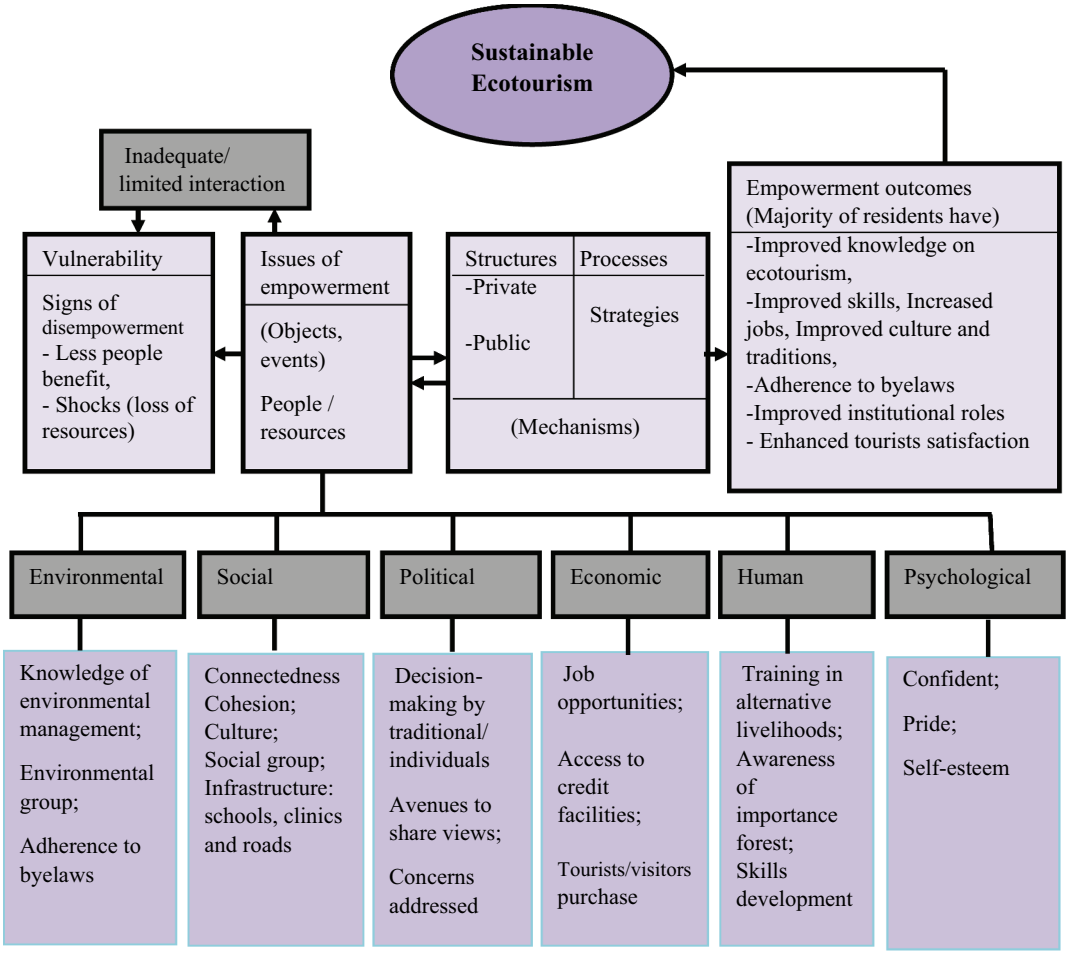

Figure 1. Conceptual framework for residents' empowerment. Source: Adapted from (Asiedu, 2002; Boley et al., 2015a; DFID, 1999; Ramos & Prideaux, 2014; Regina Scheyvens, 1999).

The framework for residents' empowerment suggests that when the various private and public institutions interact with the people and resources to provide the various forms of benefits, the majority of residents would be empowered. This would occur when the majority of residents have improved knowledge on ecotourism, improved skills, adhere to laws and there are increases in job opportunities which will result in sustainable ecotourism. Sustainable ecotourism is a goal that could be achieved when residents are empowered. On the other hand, when there is less interaction with residents, they are likely to be vulnerable and show signs of disempowerment. Furthermore, residents show signs of disempowerment when there are shocks (loss of resources) and fewer people are benefiting.

Human empowerment is added to the various components of empowerment because when residents acquire knowledge, skills, and training, they stand a better chance of achieving the other forms of empowerment which is critical for achieving sustainable development goals. As mentioned earlier, Pigg (2002) opines that the first face of empowerment is the individual and it is the individual who is at the centre of the various forms of empowerment. The inclusion of human empowerment in the existing framework is to provide a holistic approach to our understanding and assessment of residents' empowerment for sustainable tourism. This study investigates six aspects of residents' empowerment through tourism and the conceptual framework is useful in assessing the six aspects of empowerment.

3. Study areas

This was conducted at KNP and BFRBS in Ghana. KNP was gazetted as a National Park and Resource Reserve by the Wildlife Reserves Regulation (LI 1525) in 1992 to protect the watersheds of the Kakum River, other rivers around the communities surrounding the Park (Cobbinah et al., 2015), and reduce biodiversity loss (Appiah-Opoku, 2011). The Park covers a total land area of about 360 km^2 and lies between latitudes 5°20′ and 5°40′North and longitude −1°51′ and −1°30′ West (Binlinla et al., 2014). The park is located about 30 km north of Cape Coast (Appiah-Opoku, 2011; Cobbinah et al., 2015). KNP is the most visited ecotourism destination in Ghana (Eshun et al., 2015). The rich biodiversity resources provided by KNP offer opportunities for ecotourism development. Ecotourism was developed in KNP in 1995 to assist with the development of the communities and the construction of a 333 m canopy walkway in the western part of the Park by Conservation International and the Government of Ghana (GoG) greatly enhanced visitation to the park (Cobbinah et al., 2015; Eshun, 2008).

Two communities, thus Mesomagor and Abrafo are surrounding the KNP. Abrafo serves as a gateway to the forest along a major road. Most community members are farmers who engage in the sale of food items to passengers who stop by to participate in tourism and other activities. The community is rural with a total population of 833. Mesomagor is at the remote side of the tourism destination with no primary road or regular transportation to the area. It used to have a tree platform as a community-based tourism attraction but this has collapsed. The economic activities undertaken by residents are farming and they depend on this for survival. It is a rural community with a total population of 406.

The BFRBS falls within the Ejisu Juaben Municipality and was created in 1939 when it was an unexploited primary forest. It lies between latitude 6° 40" and 6° 44" North of the equator and longitudes 1° 15" and 1° 22" West of the Greenwich (Mensah & Ernest, 2013). The size of the reserve is about 54.6 sq. Km (Eshun & Tichaawa, 2020b) and is about 35 km South-east of Kumasi, the Ashanti Regional capital. It has about 340 butterfly species and 120 birds which are the main attractions to the sanctuary. These destinations are ecotourism sites located in two different regions. Two communities that were selected for the survey are Kubease and Krofofrom. Kubease serves as the gateway to the forest and is located along a major road with a toll where some of the residents sell food items to passengers who stop to engage in tourism or other activities. The major economic activity is farming. Krofofrom is at the remote side of the attraction without regular transport and

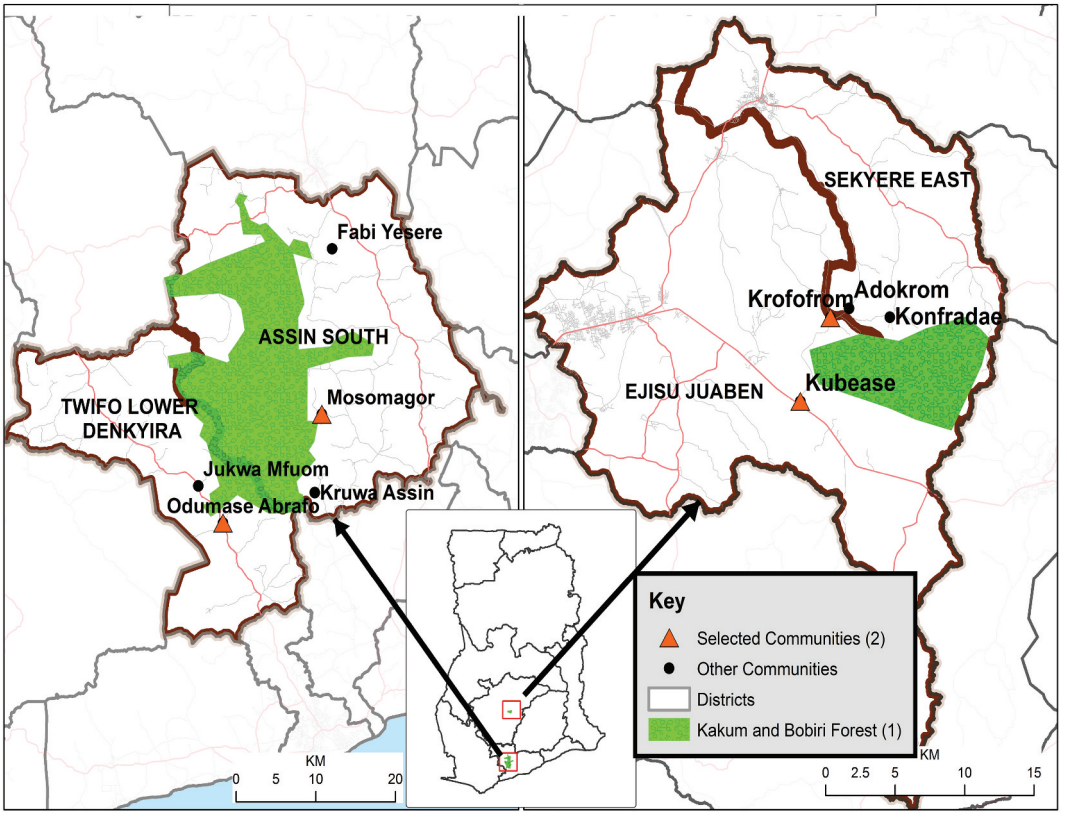

Figure 2. Map of study areas.

most community members engage in farming as their primary economic activity. These communities are rural with a population of 1,798 for Kubease and 316 for Krofofrom. These study sites are important because they will help the researcher to understand the empowerment conditions and needs of residents at the major tourism road and those that are at the remote side of the attraction. This can inform appropriate policies for residents at all areas of the tourism attraction. The map for the study areas is shown in Figure 2.

3.1. Methodology

3.1.1. Sampling size and procedure

Two communities around the two reserves were chosen for the survey. From KNP the communities selected were Abrafo and Mesomagor whereas Kubease and Krofofrom were selected from BFRBS. The population of the communities that were selected based on the 2010 population census GSS (2012) in Kubease is 1,798, Krofofrom is 316, Mesomagor is 406, and Abrafo is 833. The proportional sampling of 10% was applied and an additional 10% was applied to the sample to cover those the researcher could not be able to reach (Isreal, 2013). From Kubease (199) residents were selected, Krofofrom (36), Mesomagor (46), and Abrafo (92). A total of 373 residents were surveyed. A systematic sampling technique was used to sample study communities. According to Zhang (2008), systematic sampling brings balance to the sample. The equal probability systematic technique was employed which is N = nk where n is the sample size, N is the population, and k is the integer for the interval (Zhang, 2008). A house was picked at random as the starting point and the interval was calculated by (k = N/n) to pick subsequent houses. Based on this, every ninth house was

picked for the survey in each of the communities until all the households were duly represented. Five (males) and five females in each community were interviewed and two FGDs were conducted in each of the communities. One for male groups of seven and another for female groups of seven members to allow both sexes to express themselves freely.

3.1.2. Data collection

The study employed both quantitative and qualitative methods of data collection using questionnaires and an interview guide. Primary data collection was collected using questionnaires, interviews, Focus Group Discussions (FDGs), and observation whilst secondary data were mainly through the review of the literature. The constructs used to design the questionnaire were adapted from the literature with additions based on the characteristics of the study areas. The questionnaire was designed to cover the six aspects of empowerment thus human, political, psychological, social, economic, and environmental. The questionnaire consisted mostly of a point 5-grade Likert scale ranging from highly agree (5) to highly disagree (1). The sources of the measure were adapted from the literature. The measures from political, social, and psychological empowerment were mostly drawn from (Boley & McGehee, 2014). The environmental and economic empowerment measures were drawn from (Ramos & Prideaux, 2014).

That of human empowerment was adapted from (DFID, 1999). The items on the questionnaires measured the aspects of empowerment so for social empowerment, respondents were required to indicate their levels of agreement to statements like ecotourism connects them to their community. Political empowerment measures include levels of agreement in making decisions concerning ecotourism. Since there could be benefits from other sources, it was important to know those that emanate from ecotourism-related activities. Such measures have been used by other authors (Boley et al., 2015; Ramos & Prideaux, 2014). The questionnaire was administered at the household levels as a door-to-door survey with about a 95% response rate. The questions which were taken from the literature apply to Ghana and the destination. This was evident in earlier works in Ghana and at the destinations such as (Asiedu, 2002), (Cobbinah et al., 2015), (Edusah, 2011), and (Eshun & Tichaawa, 2020b).

Data collection was done within three months period starting from Kubease, Krofofrom, Abrafo, and Mesomagor. Households were picked at random and the heads of households who were considered to be 18 years and above were engaged in the survey. The survey was face-to-face and residents were introduced to the purpose of the survey and were interviewed when they consent to it. Most of the respondents could not read and write, so the researcher has to translate the items on the questionnaire to them and record their responses. Since most of the respondents were farmers, the researcher had to pay several visits to the various houses before getting them to participate in the survey. Face-to-face interviews with individuals and FDGs were held for members to contest their views and aid the researcher to cross-check the information received at the household levels.

3.1.3. Data analysis

Exploratory Factor Analysis was performed to determine whether the constructs constitute a better representation of the various aspects of empowerment (Timmerman, 2005). According to Williams et al. (2010), to proceed to EFA, series of tests need to be performed to ensure the suitability of the data for EFA. These tests include the Kaiser-Meyer-Olkin Measure of Sampling Adequacy (KMO) which should be above 0.5 and Bartlett's Test of Sphericity should be significant at $p < .05$. The KMO was carried out to test the suitability of the data for EFA (Attua et al., 2014). Cronbach's alpha reliability test was performed to measure the internal consistency of the items and also to know how the items or indicators that measure each of the aspects of empowerment are closely related (Tavakol & Dennick, 2011). All the measures passed these tests with KMO loadings of more the 0.5 and Barlett's Test was significant at $p < 0.5$. The procedure used to run the EFA followed that of Boley and McGehee (2014) where items loading less than 0.5 were deleted after the first round of rotation. The purpose of using EFA was to reduce and refine the constructs that measure the various

aspects of empowerment and determine whether the constructs constitute a better representation of the various aspects of empowerment (Watkins, 2018). CFA was then performed to test for reliability and validity of the constructs (Boley and McGehee (2014).

To explore the relationship further, a Structural Equation Model (SEM) was conducted in SPSS Amos Graphics version 21 to model the relationship between the factors (indicators) and the constructs (various aspects of empowerment). Data from the two destinations were run separately with n = 235 for Bobiri and n = 138 for KNP. The sources were adapted from the literature and were used to examine the construct reliability and validity of the indicators that measure the various aspects of empowerment (Tang, 2013). This was performed by drawing covariances from the Plugins menu and calculating the estimates with necessary modifications.

To assess the psychometric measures of the items and the constructs they measure, construct validity was assessed. According to Hair et al. (2010), it is the best measure of validity. Construct validity was assessed to examine whether the indicators or items that set out to measure the various aspects of empowerment are true and reflect on the constructs (Boley et al., 2015; Boley & McGehee, 2014; Hair et al., 2010). Convergent validity was assessed by examining the strength of an item's factor loadings on its latent, the amount of variance extracted and the construct validity of the constructs (Boley et al., 2015, 2014; Huang et al., 2011).

Discriminant validity was further assessed to determine the distinctiveness of each construct by comparing the AVE for two constructs with the square correlations between the two constructs (Boley et al., 2015; Boley & McGehee, 2014; Boley et al., 2014). Also, nomological validity was assessed to examine how the constructs in the empowerment model relate to theory (Boley et al., 2015, 2014; Liu et al., 2012). Content validity was assessed to ensure that the constructs measure what they set out to measure and that they make sense. According to Boley et al. (2015), content validity is about judgement and whether the items in a construct make sense. The content validity was assessed by relating the content of the constructs with the conceptual issues in the empowerment literature.

The status of community empowerment or disempowerment was ascertained by constructing a scale ranging from 1–5 with 1 as the very disempowered, 2 as disempowered, 3 as neither disempowered nor empowered, 4 as empowered, and 5 as very empowered. The mean of means for the various constructs measuring empowerment was calculated and depending on the value obtained, the community is assessed (Boley et al., 2014; Ramos & Prideaux, 2014). The means for the two destinations thus KNP and BFRBS, as well as the various communities around the destinations, were computed separately to compare the extent of empowerment between destinations and communities.

Qualitative information was grouped into themes and in line with the conceptual framework for the study. Veal (2011) supports that in analysing qualitative data, the information collected should be organized and sorted according to the terms of reference or conceptual framework. This was done by transcribing results from the interviews and FGDs. Field observations were used to support the qualitative information. Content analysis was applied to analyse the content of the text. The study employed a mixed-method design to understand the complex nature of sustainable ecotourism and empowerment issues. The use of quantitative data collection and analysis was to help perform statistical techniques to evaluate quantifiable data and establish correlations among diverse variables (Teye, 2012). Scale construction using quantifiable data helped in assessing the status of residents' empowerment. The use of qualitative data collection and analysis was to understand the views, beliefs, experiences, and behaviour of residents to support the quantitative analysis (Creswell, 2014) and provide a better understanding of the status of residents' empowerment at the destinations.

4. Results

4.1. Demographic characteristics

The data consists of diverse groups of community members. In Abrafo, the males were 61% and females 39%. In Mesomagor, males were 41% and females 59%, Kubease recorded 48% males and 52% females, and Krofofrom recorded 56% males and 44% females. Most of the respondents have had basic education with the highest education being Junior High School. Residents in Abrafo with basic education were 71%, Mesomagor 63%, Kubease 85%, and Krofofrom 81%. This was followed by those who have not had any form of formal education. The greater number of residents are farmers followed by traders. About 61% of the samples in Abrafo are farmers, 98% of the samples in Mesomagor are farmers, 32% farmers in Kubease, and 89% of farmers were recorded for the samples in Krofofrom. With this background, building their human capacities, and enhancing their knowledge in tourism is very important for sustainable tourism to be achieved.

4.2. Scores of residents on various issues of empowerment

Residents in various communities showed different levels of scores for the various empowerment aspects. This is shown in Table 1

Table 1. Residents' scores on various issues of empowerment.

Scale of empowerment	Item description	Mean (Bobiri n = 235)	Mean (Kakum n = 138)	R	AVE	CR
Social	Ecotourism makes me feel connected to my community	2.6	3.9	0.78	44%	0.63
	Ecotourism helps me to preserve local culture	2.5	3.8	0.83*		
	Ecotourism helps me to improve my relationship with people	2.6	3.8	0.79*		
	Ecotourism helps to improve social infrastructure	2.0	3.5	0.75*		
	Infrastructure from ecotourism	1.2	3.6	0.40*		
	Land own connect me to my community	3.2	4.3	0.24*		
Human	Engage in alternative livelihoods	1.5	1.3	0.30*	26%	0.61
	Acquired skills	1.1	1.1	0.61*		
	Children trained in alternative livelihoods	1.0	1.1	0.40*		
	Trained in alternative livelihoods	1.4	1.5	0.50*		
Environmental	Adhere to traditional practices	4.4	5.0	0.44*	55%	0.81
	Adhere to byelaws	4.8	5.0	0.96*		
Economic	Family member whose income is related to ecotourism	1.0	1.6	0.40*	25%	0.40
	Able to access loans from bank	1.3	1.5	0.44*		
	Visitors buy from community	1.3	2.4	0.75*		
	Will receive benefits from ecotourism	3.0	3.6	0.30**		
Political	Avenues to share concerns	2.0	4.8	0.96*	74%	0.83
	Traditional authorities have avenues to share concerns	2.0	4.7	0.84*		
	Attend social meetings	2.0	4.3	0.94*		
	Engage in decision-making	1.8	4.3	0.94*		
	My concerns are addressed	1.3	2.2	0.55*		
Psychological	I am happy about ecotourism in my community	3.8	4.1	0.40*	33%	0.70
	I am proud about ecotourism in my community	4.5	4.6	0.60*		
	My confident has increased because of ecotourism in my community	4.8	4.9	0.63*		
	My self-esteem has increased because of ecotourism	4.7	4.7	0.70*		

Chi-square = 634.5, NFI = 0.841, CFI = 0897, PCFI = 0.759, RMSEA = 0.063, R = Standardized Regression Coefficient, AVE = Average Variance Extracted, CR = Construct Reliability.
*p = 0.000, **p = 0.001. Scale: 1 = very disempowering to 5 = very empowering.

The convergent validity of the indicators is assessed using the loadings of the items on the construct (standardized regression coefficient, R), and the Construct Reliability (CR). Convergent validity was performed to test how much common variance the indicators share with the latent construct (Boley & McGehee, 2014). The standardized regression coefficients of the indicators for most of the constructs are more than 0.5 demonstrating that most of the constructs have convergent validity (Hair et al., 2010). However, the loadings are not that strong since the percentage of loadings of most of the items fall below (50%). According to Gliem and Gliem (2003), the Cronbach alpha reliability test usually ranges from 0–1 and there is no lower boundary to it, what is important is that the closer the value of Cronbach's alpha to one, the stronger the internal consistency of the items to the scale. This suggests that the internal consistency in the results is not that strong.

The Construct Reliability of all the various constructs is above 50% except for economic empowerment (40%). That of social empowerment is (63%), human empowerment (61%), environmental empowerment (81%), political empowerment (83%), and psychological empowerment (70%). These indicate that there are higher internal consistencies between the indicators and the constructs that they measure. The indicators measuring economic empowerment show some form of internal consistency but that the internal consistency is not that strong.

4.3. Extent of residents' empowerment

The empowerment for residents varies from community to community. On a scale of 1 to 5 with 1 being very disempowered to 5 being very empowered for the various aspects of empowerment, human empowerment recorded very disempowering (1) conditions for communities around KNP and disempowering (2) conditions for those around BFRBS. Mesomagor which is around KNP, recorded very empowering (5) conditions for environment, political, psychological, and social indicating that tourism can empower them in these areas but economically disempowered (2). These varying statuses of empowerment among the communities could be attributed to their geographical location and the extent of interaction with management and tourists/visitors. The extent of residents' empowerment at the two ecotourism destinations is shown in Figure 3.

It is evident from the face value that there are similarities and differences among the status of empowerment for the four communities. The qualitative information explains the similarities and differences. As far as their geographical locations are concerned, Abrafo and Kubease are located on a major road and share some similarities and differences regarding their empowerment status. The majority of residents from Abrafo for instance, during the qualitative studies said tourists/visitors buy from their communities whilst those from Kubease said tourists/visitors do not buy from their communities. Although they are all located near a major road, tourists/visitors to KNP can stop at Abrafo to buy items whereas those going to BFRBS do not stop by to purchase items from the community. This phenomenon was also observed. Mesomagor and Krofofrom, on the other hand, are located in remote areas without regular transportation. Unlike Mesomagor which used to have a Community Based Ecotourism Project, Krofofrom cannot boast of such a facility, hence these communities are economically disempowered.

The qualitative information supports the extent of residents' empowerment and provides details on the differences and similarities between the destinations. For instance, all residents are psychologically very empowered and the interviews suggest that most of them believe that tourism in their communities makes them proud:

> Even though all is not well, at least when I hear people talk about Abrafo and the fact that tourists/visitors from outside can even come here, it makes me proud and it gives me courage when talking to others about Abrafo (Female respondent, Abrafo).

> The fact that tourists/visitors come to this place to see the forest makes me proud and I can confidently tell people about Mesomagor (Male respondent, Mesomagor).

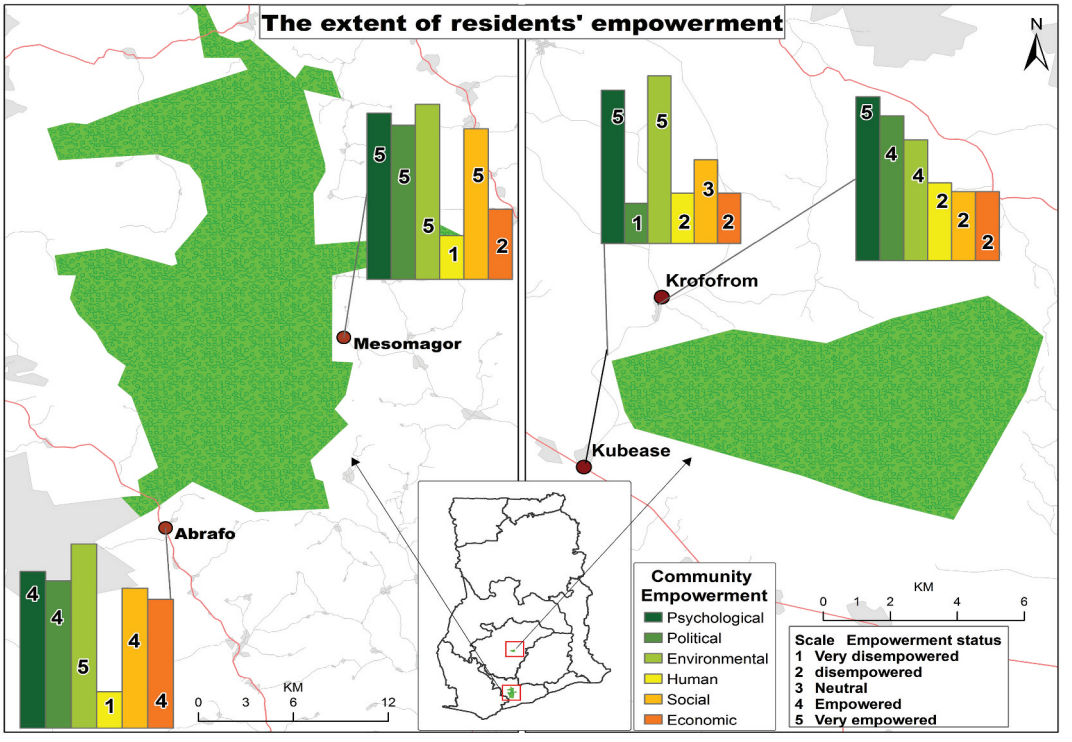

Figure 3. The extent of residents' empowerment at KNP and BFRBS. Scale: 1 = very disempowering – 5 = very empowering

> I am proud of my community because tourists from far and near come here (Female respondent, Kubease).

Furthermore, the qualitative data supports the political empowerment of Mesomagor and the environmental empowerment of all residents. Residents during the interviews said that they can attend meetings to share their concerns about tourism activities. Such interactions would not have been possible if not for the tourism activities in their communities. Those from Mesomagor expressed that:

> We meet occasionally to discuss matters relating to the community and ecotourism and I can put my views across (Female respondent, Mesomagor).

> We have laws that prevent us from going to the forest to hunt and lumber. We also have traditional rules which prevent us from engaging in some activities on certain days. We are not supposed to burn haphazardly. (Women FGDs, Krofofrom).

Moreover, the interviews support the human disempowerment of residents. Most of them said that the management of the park has not engaged them in training programs to build their skills or capacities to enhance their livelihoods. Most of the residents are farmers whose activities are affected by the conservation of the park and want management to engage them in alternative livelihood programs for their subsistence which they said have not happened:

> I do not have any special skills. I have not had any training myself. I do not know of any other skills but will be happy to learn some skills. I also do not even know what ecotourism is all about (Female respondent, Mesomagor).

> It was in 2004 when some selected people within the community were trained in grasscutter rearing but it was difficult to get funds to sustain it so most of us could not continue (Men FGDs, Abrafo).

This statement cut across the various communities suggesting that most of them have little or no knowledge about ecotourism activities, and the few who did had the training over 17 years ago which has implications on the human empowerment of residents for sustainable tourism as a child born around 2004 would not have witnessed any human empowerment related to ecotourism.

4.4. Links between various aspects of empowerment

The six constructs model of residents' empowerment suggests a link between certain aspects of empowerment. This is shown in Figure 4

The model in Figure 4 shows that there is a link between human empowerment and social empowerment as well as human empowerment and economic empowerment. It also suggests a link between psychological and social empowerment. Building the capacities of individuals (human

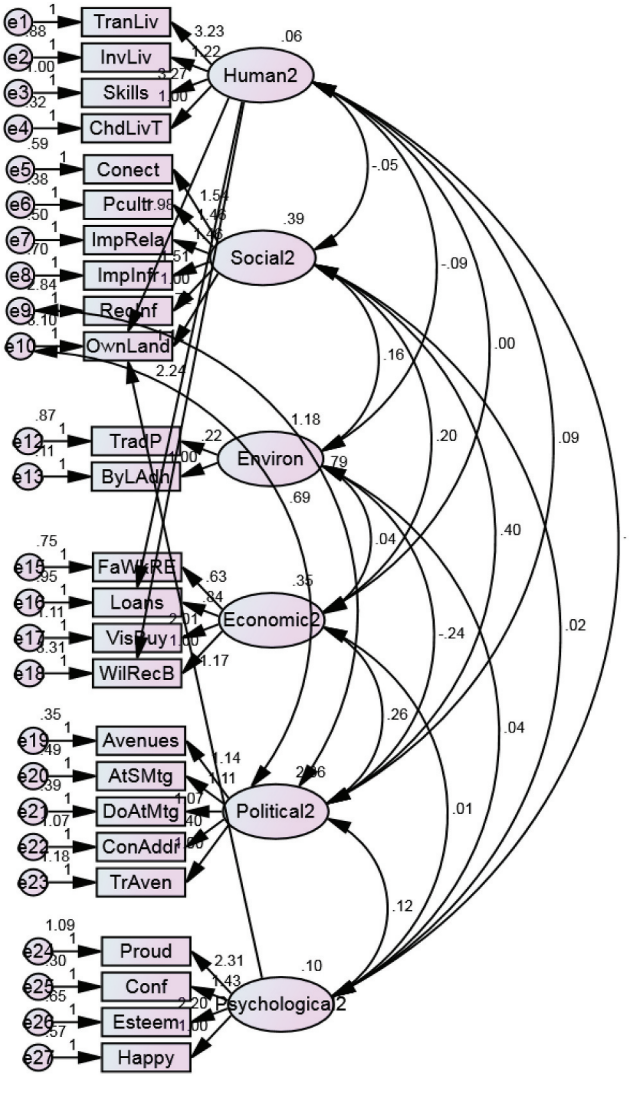

Figure 4. Six construct model of empowerment for KNP and BFRBS. Source: Author's construct/fieldwork

empowerment) can have implications on the other aspects of empowerment and this model suggests that when people gain knowledge, skills and improve their abilities, they can apply these abilities to become economically and socially empowered. This suggests that the model has nomological validity. This means that some of the constructs are related to others.

5. Discussion

The literature on sustainable tourism supports that residents' empowerment is critical to ensuring sustainability in tourism (Aleshinloye et al., 2021; Boley & McGehee, 2014). Boley and McGehee (2014) emphasize that where there are social networks and local groups, it improves social connection and cohesion. This study revealed that communities around KNP are socially empowered whilst those at BFRBS are disempowered. This has been stressed by many authors who believe that ecotourism can socially empower residents by promoting local culture and improving social facilities (Cobbinah et al., 2015; Ramos & Prideaux, 2014). In determining the level of place attachment and empowerment through tourism, Strzelecka et al. (2017) found a good fit for their SEM strengthening the notion that residents can be socially empowered through tourism.

The majority of residents at KNP, that is Abrafo and Mesomagor felt that ecotourism connects them to their community, preserves the local culture, improves their relationship with people, and improves their infrastructure. On the other hand, the social disempowerment situation in Kubease could prevent community members to be interested in the conservation of biodiversity which can affect their degree of involvement in ecotourism activities (Eshun & Tonto, 2014; Mensah & Ernest, 2013).

Political empowerment is crucial for sustainable ecotourism. For instance, residents can share their views on how social, economic, environmental, and other aspects of empowerment should be maintained. The signs of political empowerment of residents in the study areas support a study at TAMS where there exists a vibrant TMT that provides a platform for residents to share their concerns and ensure that they benefit from all angles (Afenyo & Amuquandoh, 2014). The political disempowerment situation of Kubease has implications for the sustainability of ecotourism in the area. Furthermore, most of the residents at both destinations share the same situation, as they believe that their concerns are not addressed. This could further lead to a loss of interest in members to participate in the decision-making process (Eshun & Tonto, 2014; Mensah & Ernest, 2013) and eventually affect the political empowerment of residents.

Ramos and Prideaux (2014) maintain that economic empowerment is attained when the majority of residents are employed and there are programs to guarantee that economic benefits trickle down to residents. This study shows that one community around KNP, thus Abrafo is economically empowered. This suggests that tourists to KNP can stop at Abrafo and purchase items from the residents. According to Eshun et al. (2015), KNP is the most visited tourist attraction in Ghana which is important for sustainable ecotourism in the area. More opportunities need to be created around the KNP especially Abrafo to raise their economic empowerment situation to very empowering conditions.

The economic empowering situation of residents in Abrafo supports the literature that ecotourism can provide economic benefits to residents (Afenyo & Amuquandoh, 2014). This includes reducing leakage and providing jobs for residents. The residents at Kubease, Krofofrom, and Mesomagor who are economically disempowered gave reasons that they are unable to access credit facilities to engage and expand their business. This is consistent with the literature that communities show signs of economic disempowerment when they are unable to access credit facilities and their work is not related to ecotourism (Ramos & Prideaux, 2014; R. Scheyvens, 2002). Furthermore, Eshun and Tichaawa (2020b) found that the economic benefits of residents around BFRBS are not achieved.

The environmental empowerment of residents of Kubease and Krofofrom where residents have abandoned their farms in the forest to give way to ecotourism support research conducted by Stem et al. (2003) in Costa Rica on ecotourism benefits which revealed that residents abandoned their farmlands in the forest because they recognized the importance of ecotourism. This supports the literature that residents resort to positive environmental practices when they recognize the importance of ecotourism (Mbaiwa & Stronza, 2010). This also shows that human empowerment has a link with environmental empowerment for ecotourism sustainability. When residents are educated on the importance of ecotourism, they can engage in positive environmental practices.

Hewitt and Anderson (2015) assert that empowerment requires human services to apply different techniques such as increasing self-efficacy and skills, improving awareness, and steps to build personal and interpersonal skills. The human disempowerment status of residents denotes that less attention is given to human empowerment issues. This provides support to the literature that where there is a lack of training and knowledge, community members become disempowered (Eshetu, 2014; Stone & Rogerson, 2011; Sweeting, 2012; Yeboah, 2013). Human empowerment is essential for the attainment of ecotourism sustainability however, more residents in Kubease have little knowledge and entrepreneurial training to benefit from ecotourism activities (Eshun & Tichaawa, 2019).

Moreover, the development of ecotourism relies on the hospitality of residents. Community members would be hospitable when they are happy that they have a resource that can attract visitors to their community. This can make residents proud, raise their self-esteem and confidence (Boley et al., 2015; Ramos & Prideaux, 2014). The psychological empowerment of community members confirms a study conducted by Eshun and Tonto (2014) at BFMS and Mensah and Ernest (2013) at BFRBS in Ghana which revealed that residents are proud of their community because it can draw tourists.

6. Conclusions and implications

The inclusion of human empowerment in the empowerment framework has been successful in analysing the strength and weaknesses in achieving ecotourism objectives. The study revealed that most of the residents are very environmentally empowered. This shows the kind of attention given by management when it comes to the delivery or implementation of ecotourism objectives. More emphasis is laid on protecting the environment where residents are not supposed to go to the forest and residents comply with these directives. However, the kind of skills and training required to improve their livelihood objectives are inadequate leading to their human disempowerment. There is therefore the need to provide human empowerment to residents to achieve the tenets of sustainable development. Human empowerment through skills acquisition, knowledge, and training could help in attaining the other forms of empowerment when properly implemented.

This has implications for managers of ecotourism destinations. Managers have to develop the skills and capacities of residents at the destinations. They can identify the alternative livelihood programs that residents could be trained to help them become humanly empowered. Managers can also assist community members to become economically empowered by organizing homestays and other programs that could boost the economic empowerment of residents.

The study adds to the limited literature on residents' empowerment for sustainable ecotourism and emphasizes that human empowerment is critical for achieving ecotourism sustainability at destinations. The study advances the literature by developing six aspects of empowerment for ecotourism development. This helped in identifying the strengths and weaknesses in ecotourism development and provided the lens through which ecotourism can be strengthened in developing countries. This study has provided the lens through which residents can be empowered by unveiling the status of their empowerment and areas where they can be empowered. Besides, the study

contributes to ecotourism and sustainable development debates. The study recommends the development of ecotourism policy, framework, and strategies to regulate the practices of ecotourism to empower residents to ensure ecotourism sustainability.

6.1. Limitations and further research

Limitations of this study include the use of Exploratory Factor Analysis which is subjective and was also used to reduce and refine the items in the constructs. This led to the deletion of items that had loadings of <0.5 even though they could have explained some behaviours. Some constructs also showed low internal consistencies. Also, the study employed both quantitative and qualitative but drew heavily on quantitative approaches. Future studies can employ other objective methods to investigate the phenomenon. The study recommends the development of an ecotourism framework which can be the domain for future studies to uncover the components of the framework with a local perspective to harmonize the practices of ecotourism to empower residents.

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Geolocation

KNP lies between latitudes 5°20′ and 5°40′North and longitude −1°51′ and −1°30′ West.

BFRBS lies between latitude 6° 40” and 6° 44” North of the equator and longitudes 1° 15” and 1° 22” West of the Greenwich.

ReferencesReferences

Afenyo, E. A., & Amuquandoh, F. E. (2014). Who benefits from community-based ecotourism development? Insights from Tafi Atome, Ghana. *Tourism Planning & Development*, *11*(2), 179. https://doi.org/10.1080/21568316.2013.864994

Aghazamani, Y., & Hunt, C. A. (2017). Empowerment in tourism: A review of peer-reviewed literature. *Tourism Review International*, *21*(4), 333–346. https://doi.org/10.3727/154427217X15094520591321

Aleshinloye, K. D., Woosnam, K. M., Tasci, A. D., & Ramkissoon, H. (2021). Antecedents and outcomes of resident empowerment through tourism. *Journal of Travel Research*, 004728752199043. https://doi.org/10.1177/0047287521990437

Appiah-Opoku, S. (2011). Using protected areas as a tool for biodiversity conservation and ecotourism: A case study of Kakum National Park in Ghana. *Society & Natural Resources*, *24*(5), 500–510. https://doi.org/10.1080/08941920.2010.495108

Asiedu, A. (2002). Making ecotourism more supportive of rural development in Ghana. *West African Journal of Applied Ecology*, *3*(1), 1–16. https://doi.org/10.4314/wajae.v3i1.45579

Attua, E. M., Annan, S. T., & Nyame, F. (2014). Water quality analysis of rivers used as drinking sources in artisanal gold mining communities of the Akyem-Abuakwa area : A multivariate statistical approach. *6*, 24–41. Ghana Journal of Geography.

Beall, J., Boley, B. B., Landon, A. C., & Woosnam, K. M. (2020). What drives ecotourism: Environmental values or symbolic conspicuous consumption? *Journal of Sustainable Tourism*, 1–20. https://doi.org/10.1080/09669582.2020.1825458

Binlinla, J. K., Voinov, A., & Oduro, W. (2014). Analysis of human activities in and around protected areas (PAs): Case of Kakum conservation area in Ghana. *International Journal of Biodiversity and Conservation*, *6*(7), 541–554. https://doi.org/10.5897/IJBC2014.0691

Boley, B. B., Ayscue, E., Maruyama, N., & Woosnam, K. M. (2016). Gender and empowerment: Assessing discrepancies using the resident empowerment through tourism scale. *Journal of Sustainable Tourism*, 25(1), 1–17. https://doi.org/10.1080/09669582.2016.1177065

Boley, B. B., Maruyama, N., & Woosnam, K. M. (2015). Measuring empowerment in an eastern context: Findings from Japan. *Tourism Management*, *50*(2015), 112–122. https://doi.org/10.1016/j.tourman.2015.01.011

Boley, B. B., & McGehee, N. G. (2014). Measuring empowerment: Developing and validating the Resident Empowerment through Tourism Scale (RETS). *Tourism Management*, *45*(2014) 85–94. https://doi.org/10.1016/j.tourman.2014.04.003

Boley, B. B., McGehee, N. G., Perdue, R. R., & Long, P. (2014). Empowerment and resident attitudes toward tourism: Strengthening the theoretical foundation through a Weberian lens. *Annals of Tourism Research*, *49*(2014), 33–50. https://doi.org/10.1016/j.annals.2014.08.005

Chiu, Y. T. H., Lee, W. I., & Chen, T. H. (2014). Environmentally responsible behavior in ecotourism: Antecedents and implications. *Tourism Management*, *40*(2014), 321–329. https://doi.org/10.1016/j.tourman.2013.06.013

Cobbinah, P. B., Black, R., & Thwaites, R. (2015). Ecotourism implementation in the Kakum Conservation Area, Ghana: Administrative framework and local community experiences. *Journal of Ecotourism*, *14*(2–3), 223–242. https://doi.org/10.1080/14724049.2015.1051536

DFID. (1999). Sustainable livelihoods guidance sheets. Department for International Development, London UK. https://www.livelihoodscentre.org/documents/114097690/114438878/Sustainable+livelihoods+guidance+sheets.pdf/. https://doi.org/10.1002/smj

Edusah, S. (2011). The impact of forest reserves on livelihoods of fringe communities in Ghana. *Journal of Science and Technology (Ghana)*, *31*(1), 10–22. https://doi.org/10.4314/just.v31i1.64882

Eshetu, A. A. (2014). Development of community-based ecotourism in Borena-Saynt National Park, North- Central Ethiopia: Opportunities and challenges. *Journal of Hospitality and Tourism Management*, *5*(1), 1–12. https://doi.org/10.5897/JHMT2013.0103

Eshun, F. (2008). *Community Participation in the management of forest resource: A means to reduce poverty for sustainable development* , University of Oslo, (Issue May) [Oslo], Norway. www.duo.no

Eshun, F., Owusu, B. A., Owusu, G., & Amankwaa, E. F. (2015). A missed opportunity? Unravelling the marketing potentials of tourism in Ghana through GIS. *International Journal of Leisure and Tourism Marketing*, *4*(3–4), 260–278. https://doi.org/10.1504/IJLTM.2015.072120

Eshun, G., & Tichaawa, T. M. (2019). Reconsidering participation for local community well-being in ecotourism in Ghana. *Geojournal of Tourism and Geosites*, *27*(4), 1184–1200. https://doi.org/10.30892/gtg.27406-425

Eshun, G., & Tichaawa, T. M. (2020a). Community participation, risk management and ecotourism sustainability issues in Ghana. *GeoJournal of Tourism and Geosites*, *28*(1), 313–331. https://doi.org/10.30892/gtg.28125-472

Eshun, G., & Tichaawa, T. M. (2020b). Towards sustainable ecotourism development in Ghana: Contributions of the local communities. *Tourism*, *68*(3), 261–277. https://doi.org/10.37741/t.68.3.2

Eshun, G., & Tonto, J. N. P. (2014). Community-based ecotourism: Its socio-economic impacts at Boabeng-Fiema Monkey Sanctuary, Ghana. *Bulletin of Geography. Socio–Economic Series*, *26*(26), 67–81. https://doi.org/10.2478/bog-2014-0045

Gliem, J. A., & Gliem, R. R. (2003). Calculating, interpreting, and reporting Cronbach ' s Alpha reliability coefficient for likert-type scales. *Midwest Research-to-Practice Conference in Adult, Continuing, and Community Education*, *1992*, 82–88. http://www.ssnpstudents.com/wp/wp-content/uploads/2015/02/Gliem-Gliem.pdf

GSS. (2012). *2010 Population & Housing Census Summary report of Final results*. Ghana Statistical Service, Accra, Ghana.

Hair, J., Black, W. C., Babin, B. J., & Anderson, R. E. (2010). *Multivariate data analysis: A global perspective*. Pearson.

Hewitt, N. M., & Anderson, J. A. (2015). A vehicle for empowering frontline human service workers: Family development credentialing—It's not just training! *Journal of Progressive Human Services*, *26*(1), 1–21. https://doi.org/10.1080/10428232.2015.977374

Huang, G., Zhou, W., & Ali, S. (2011). Spatial patterns and economic contributions of mining and tourism in biodiversity hotspots: A case study in China. *Ecological Economics*, *70*(8), 1492–1498. https://doi.org/10.1016/j.ecolecon.2011.03.010

Isreal, G. D. (2013). *Determining Sample Size*. University of Florida. https://doi.org/10.4039/Ent85108-3

Ivanova, M., Ivanov, I. K., & Ivanov, S. (2021). Travel behaviour after the pandemic: The case of Bulgaria. *Anatolia*, *32*(1), 1–11. https://doi.org/10.1080/13032917.2020.1818267

Joo, D., Woosnam, K. M., Strzelecka, M., & Boley, B. B. (2020). Knowledge, empowerment, and action: Testing the empowerment theory in a tourism context. *Journal of Sustainable*, *28*(1), 69–85. https://doi.org/10.1080/09669582.2019.1675673

Kullenberg, G. (2010). Human empowerment: Opportunities from ocean governance. *Ocean & Coastal Management*, *53*(8), 405–420. https://doi.org/10.1016/j.ocecoaman.2010.06.006

Liu, L., Li, C., & Zhu, D. (2012). A new approach to testing nomological validity and its application to a second-order measurement model of trust a new approach to testing nomological validity and of trust. *Journal of the Association for Information Systems*, *13*(12), 950–975. https://doi.org/10.17705/1jais.00320

Mbaiwa, J. E., & Stronza, A. L. (2010). The effects of tourism development on rural livelihoods in the Okavango Delta, Botswana. *Journal of Sustainable Tourism*, *18*(5), 635–656. https://doi.org/10.1080/09669581003653500

Mensah, I., & Ernest, A. (2013). Community participation in ecotourism: The case of Bobiri Forest Reserve and Butterfly Sanctuary in Ashanti Region of Ghana. *American Journal of Tourism Management*, *2(1A)*, 34–42. doi: 10.5923/s.tourism.201304.04

Mody, M., Woosnam, K. M., Suess, C., & Dogru, T. (2020). Hapless victims or empowered citizens? Understanding residents' attitudes towards Airbnb using Weber's theory of rationality and foucauldian concepts. *Journal of Sustainable Tourism*, 28(1), 1–23. https://doi.org/10.1080/09669582.2020.1834567

Pigg, K. E. (2002). Three faces of empowerment: Expanding the theory of empowerment in community development. *Journal of the Community Development Society*, *33*(1), 107–123. https://doi.org/10.1080/15575330209490145

Ramos, A. M., & Prideaux, B. (2014). Indigenous ecotourism in the Mayan rainforest of Palenque: Empowerment issues in sustainable development. *Journal of Sustainable Tourism*, *22*(3), 461–479. https://doi.org/10.1080/09669582.2013.828730

Rappaport, J. (1987). Terms of empowerment/exemplars of prevention: Toward a theory for community psychology. Psychology. *American Journal of Community*, *15*(2), 121–148. http://doi.org/10.1007/BF00919275.

Scheyvens, R. (1999). Ecotourism and the empowerment of local communities. *Tourism Management*, *20*(2), 245–249. https://doi.org/10.1016/S0261-5177(98)00069-7

Scheyvens, R. (2002). *Tourism for development: Empowering communities*. Prentice Hall.

Stem, C. J., Lassoie, J. P., Lee, D. R., Deshler, D. D., & Schelhas, J. W. (2003). Community participation in ecotourism benefits: The link to conservation practices and perspectives. *Society & Natural Resources*, *16*(5), 387–413. https://doi.org/10.1080/08941920309177

Stone, M., & Rogerson, C. M. (2011). Community-based natural resource management and tourism: Nata bird sanctuary, Botswana. *International Tourism Review*, *15*(1), 159–169. https://doi.org/10.3727/154427211X13139345020570

Strzelecka, M., Boley, B. B., & Woosnam, K. M. (2017). Place attachment and empowerment: Do residents need to be attached to be empowered? *Annals of Tourism Research*, *66*(2017), 61–73. https://doi.org/10.1016/j.annals.2017.06.002

Sweeting, A. (2012). *Integrating business skills into ecotourism operations*. IUCN and Kuoni.

Tang, Y. (2013). Travel motivation, destination image and visitor satisfaction of international tourists after the 2008 Wenchuan earthquake: A structural modelling approach. *Asia Pacific Journal of Tourism Research*, *19*(11), 1–18. https://doi.org/10.1080/10941665.2013.844181

Tavakol, M., & Dennick, R. (2011). Making sense of Cronbach's s alpha. *International Journal of Medical Education*, *2* (2011), 53–55. https://doi.org/10.5116/ijme.4dfb.8dfd

TIES. (2015). *What is Ecotourism*? The International Ecotourism Society. http://www.ecotourism.org/what-is-ecotourism

Timmerman, M. E. (2005). *Factor analysis*. Heymans Institute for Psychology, Rijksuniversiteit Groningen Groningen.

UNWTO. (2018). *Tourism highlights 2018*. United Nations World Tourism Organization. https://www.e-unwto.org/doi/pdf/10.18111/9789284419876

Veal, A. J. (2011). *Research methods for leisure & tourism: A practical guide* (4th ed.). Pearson Educational Ltd.

Watkins, M. W. (2018). Exploratory factor analysis: A guide to best practice. *Journal of Black Psychology*, *44*(3), 219–246. https://doi.org/10.1177/0095798418771807

Williams, B., Onsman, A., & Brown, T. (2010). Exploratory factor analysis: A five-step guide for novices. *Australasian Journal of Paramedicine*, *8*(3), 1–14. https://doi.org/10.33151/ajp.8.3.93

World Tourism Organization (UNWTO). (2020). *UN Tourism Policy Brief Visuals*. United Nations World Tourism Organization. https://webunwto.s3.eu-west-1.amazonaws.com/s3fs-public/2020-08/UN-Tourism-Policy-Brief-Visuals.pdf

Yeboah, T. (2013). Ecotourism development in Ghana: A case of selected communities in the Brong-Ahafo Region. *Journal of Hospitality and Management Tourism*, *4*(3), 74–77. https://doi.org/10.5897/JHMT2013.0091

Yeh, S. S. (2021). Tourism recovery strategy against COVID-19 pandemic. *Tourism Recreation Research*, *46*(2), 188–194. https://doi.org/10.1080/02508281.2020.1805933

Zhang, L.-C. (2008). On some common practices of systematic sampling. *Journal of Official Statistics*, *24*(4), 557–569. http://eprints.soton.ac.uk/id/eprint/345172