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Role Of Public Awareness And Perception On Community Participation In Tourism; Case Of Musanze District; Rwanda (Period: 2020-2025)

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Abstract: This research explores the influence of awareness and perception of the public on participation in tourism with special focus on the Musanze District, Rwanda. Although tourism is very crucial in the development of any economy, community participation in decision making and benefit sharing still poses great challenges due to lack of information. This research tries to determine the levels of awareness and perception of the public in relation to the development of tourism, participation of the community, and the interrelationship between the variables. The methodology applied for this research involves the use of descriptive research designs whereby both qualitative and quantitative approaches were used. A total of 399 households were chosen through Yamane Taro formula and stratified sampling to ensure representation from three different sectors including Nyange, Kinigi, and Shingiro based on their levels of tourism activities and community participation. Further purposive sampling was used to choose key informants including three local leaders and three tour operators (RDB Marketing Officer, Tourism Warden, Tour guide). These results show that there are very high awareness levels (Mean = 4.35, Std = 0.8917) and positive community perceptions (Mean = 4.335, Std = 0.92525) towards tourism development. Community participation levels are relatively high, especially in sense of ownership (Mean = 4.425) and conservation (Mean = 4.31) while there are variations in other areas including job creation (Std = 0.980) and personal attachment (Std = 0.996). There are also high institutional trust levels (Mean = 4.18) and motivation (Mean = 4.23), which show that there are favorable conditions for participation. More importantly, the study shows that there is very strong and statistically significant relationship between public awareness and perception and community participation ($r = 0.988$, $p < 0.01$). The conclusion from the results is that public awareness and perception have an impact on community participation in tourism but there are problems of accessibility to information, inclusiveness and equitable distribution of benefits.

Keywords: Public awareness; Community perception; Tourism participation; Conservation & Sustainable tourism.

1. Introduction

Tourism has become an essential driver for socio-economic development, poverty alleviation, and culture conservation [1].The sustainability and inclusivity of tourism development to a large extent depend on community perceptions of tourism and its impact and benefit. In Indonesia, community-based tourism development shows that the community will be more inclined to participate in planning and service delivery if they are aware of such benefits as employment and better infrastructure [2]. In Iran, research proves that positive perceptions of the community of tourism will greatly help the support of destination planning and management. In Malaysia, especially in rural ecotourism destinations, research findings reveal that although the potential benefits of tourism are known to the community, there are limitations in terms of capacity building and financial and institutional

constraints [3]. Tourism plays an important role in economic diversification and rural upliftment in Sub-Saharan Africa, though the effects of community participation vary greatly from one place to another [4]. Community participation in tourism initiatives is observed to be greater in Tanzania, particularly in coastal areas and those with wildlife tourism attractions, as studies have shown people get involved due to their perceived socio-economic gains, including job creation, improved infrastructure and revenue sharing [5]. On the other hand; in Ethiopia, the lack of knowledge about tourism governance and low levels of participation in decision making have been shown to hinder community participation.

Tourism contributes greatly to foreign currency earnings and is a major aspect of the development strategies of countries in East Africa. However; the extent to which local communities participate in the tourism initiatives depends greatly on their perceptions about these activities [6]. It has been shown through studies in Kenya, especially in conservation areas such as Lewa wildlife conservancy, that community participation increases where there are visible benefits such as revenue sharing and job creation. Similarly, studies done on Rimoi national reserve show that community attitude plays an important role in participation whereby positive attitudes increase chances of collaboration in tourism and conservation planning [7].In Uganda, community-based tourism projects associated with protected areas such as Bwindi impenetrable national park have shown that proper awareness campaigns and benefit sharing mechanisms improve community support for conservation activities. Community members who understand the connection between tourist revenues from gorillas and improvements in schools, health facilities, and infrastructures are likely to be involved in tourism and conservation projects [8].

In Rwanda, tourism is considered one of the key sectors that play a role in transforming the economy particularly high value and conservation-based tourism approaches [9].The protected areas such as Akagera national park have been instrumental in earning money as well as employment creation. However, literature shows that while the locals earn economically, their involvement in decision-making process may be minimal in some cases [10].This implies that knowledge on governance system and involvement mechanisms is not yet fully developed. Moreover, urban ecotourism projects such as Nyandungu urban wetland Ecotourism Park indicate Rwanda's commitment in merging environmental restoration with tourism development [11]. In the case of Musanze district which includes significant tourism sites like volcano eco-tourism, community participation is important for sustaining conservation gains and enhancing the livelihoods of people living in the area [12]. While tourism development has continued to grow; public awareness, perceptions about benefit sharing and knowledge of tourism policies affect the level of community participation. Hence; it is important to investigate the influence of public awareness and perception on community participation in the development of tourism in the district of Musanze.

The best situation in terms of tourism development would be a situation where there is high community participation [13]. Here, the local community has full knowledge of the importance of the tourism sector, the rights they have, and the chances of participating in community-based tourism activities, local supply chains and conservation [14].The public has a very good perception regarding tourism since locals see tourism as a key means of economic empowerment, infrastructural development and preserving cultural heritage. Thus; community members are involved in the process of planning, decision making and service delivery leading to a sustainable model of tourism which spreads benefits widely. However, where Musanze district is concerned, there are notable differences between the theoretical expectation and the reality concerning the issue of awareness and perception of the community. Though tourism provides a major channel for earning foreign money, people living around important sites such as Volcanoes National Park (VNP) usually lack engagement in it [15]. Research has shown that the lack of understanding and awareness of the local people makes the participation in tourism difficult. Perception of the local community is always uncertain about development policies and lacks awareness of benefits [16].The major barriers include poor skills, access to finances, and the lack of public awareness campaigns.

Furthermore, research on revenue sharing reveals that despite having a revenue sharing scheme which helps allocate revenues of tourism for the development of the community and their participation; the effectiveness of this scheme has been limited due to poor awareness, lack of transparency, and low participation of the community. Reveals that despite improving the development and attitude of the community, this scheme has faced some barriers including the lack of capacity, unequal benefit sharing, and poor community participation. Further; Uwera established that while the revenue-sharing system aids in community development, its effectiveness is hampered by lack of awareness, lack of involvement and poor communication of the allocation and

management of the funds. From the above discussions it is clear that despite the fact that the scheme plays an important role in community development, its effectiveness is hindered by lack of awareness, poor community involvement and poor communication of the system of allocation and management of the fund.

Researchers have thus advised that there should be more awareness programs; better communication of the processes involved and community capacity building [17]. However; there are still many gaps in Musanze district on how awareness and perceptions of the people can impact their participation in tourism activities. It is for this reason that this study has been carried out with the aim of exploring the extent to which awareness and perceptions impact community participation in tourism activities.

The study will seek to answer three questions; namely; extent and variations of public awareness and perceptions; community participation and the link between awareness, perceptions and community participation in Musanze district within the set 2020–2025 period.

1.1 Related literature and analytical framework

Theory of Planned Behavior (TPB) was formulated by Icek Ajzenas an elaboration of an earlier Theory of Reasoned Action (TRA), which had been put forth by Martin Fishbein and Ajzen in 1975. According to TRA, behavior is motivated by behavioral intention, which in turn is affected by attitudes towards the behavior as well as subjective norms. But the model assumed complete control by the individual over his/her behavior and thus had limited application where the external factor was at work. This lacuna was overcome by Ajzen who incorporated the factor of Perceived Behavioral Control (PBC), thus formulating TPB [18]. In this way, TPB managed to take into account those cases where behavior was motivated not only by internal drives but also by external factors. The Social Exchange Theory (SET) emerged in sociology and social psychology towards the end of the 1950s. The first formulation of the SET was by George C. Homans in 1958 and further developed by Peter Blau in 1964. The theory suggests that social interaction occurs as an exchange process and individuals act rationally to maximize rewards and minimize losses [19]. Therefore, interpersonal relationships between people can be characterized by rational choice regarding the calculation of potential benefits from the exchange. Later on, the SET was adapted for the analysis of tourism phenomena in the 1990s.

Stakeholder Theory was formulated in 1984 by R. Edward Freeman in the field of strategic management through the stakeholder approach. The key principle of the Stakeholder Theory is the following: in addition to the interests of shareholders and authorities, organizations and projects should take into account the interests of all those who can be affected or influence by the activity of an organization. Stakeholder Theory became widely recognized in management, governance and sustainable tourism [20].Local communities are among key stakeholders in tourism development. Their awareness and perceptions as well as level of participation have a considerable impact on sustainability of tourism development initiatives. In this regard, Stakeholder Theory is regarded as the dominant theory in this study owing to its ability to offer an all-rounded view in terms of management and governance issues concerning community participation in tourism [21]. In contrast with Theory of Planned Behavior (TPB), which is limited to individual attitude, intention and perceived control; or Social Exchange Theory (SET) that focuses on the rational cost benefit considerations, Stakeholder Theory brings into focus the role of the community in the context of a larger web of individuals who impact on the tourism development and vice versa. In this respect, it becomes important to note that the stakeholders including the residents, government, tourism operators, NGOs and others have a stake in the process of tourism development, whose involvement and awareness is very important [22].

Furthermore, stakeholder theory includes both the psychological and economic theories represented by TPB and SET, but places them in a broader framework of participatory governance and sustainable development. TPB tells us why an individual would choose to participate depending on attitudes, norms, and control while SET tells us why an individual would participate based on the benefits versus the cost of participation, but neither of them includes the organizational and institutional context within which participation is possible. Within the Musanze District case, public perception and awareness are relevant only insofar as they are connected to real opportunities for participation and benefit-sharing, which are core components of Stakeholder Theory [23].Hence, it becomes the dominant theory here due to its multiple-level approach towards participation.

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1.2 Related research underpinning the study

Development through tourism has been found to play a vital role in fostering social and economic growth, conservation, and empowerment. Nevertheless, how much it contributes to sustainable development is contingent on the degree of community participation in the tourism enterprise. In this regard, [24].Assert that sustainable tourism plays a crucial role in empowering the local community and ensuring the conservation of natural resources. The concept of community participation includes participation in tourism planning and decision making, employment, entrepreneurship, and conservation. On the other hand, underscore the importance of cooperation between the local community and stakeholders of tourism in fostering sustainable community development [25]. Awareness of the public and perception of the community are key elements that affect the readiness of people to engage in tourism development. Availability of information about tourism helps the community to have knowledge about tourism opportunities, their environmental obligations, as well as possible benefits from the activities of tourism. The significance of tourism on the issue of environmental awareness, participation in conservation efforts, as well as improving local livelihoods [26]. Likewise, Focuses on the impact of participation of local community on responsible tourism activities in ecotourism destinations. However, positive perceptions do not always ensure effective participation especially in case when there is no sufficient money, lack of skills, inadequate institutions or non-involvement in decision-making process.

Another approach to analyzing the connection between public awareness, perceptions, and community involvement is offered by the behavioral and institutional theories. According to the Theory of Planned Behavior, attitudes, subjective norms, and perceived behavioral control affect individual decisions about their actions. The theoretical background of this theory is provided by Ajzen [5]. In addition, Social Exchange Theory implies that individuals weigh up costs and benefits of taking part in social and economic interactions. This theory and its development in terms of social relationships and exchanges are analyzed by [Ahmad et al.3]. Furthermore, Stakeholder Theory pays attention to the role of the identification and consideration of the interests of various parties involved in development processes. The theoretical grounds of stakeholder relations are discussed. All these approaches can be helpful in the analysis of the link between awareness, perceived benefits, institutional relations, and community attitudes and participation in tourism development. Sustainable tourism development requires an integration of economic, social, and environmental goals to make sure that tourism activities create long-lasting impacts on the host communities. Issues like governance, transparency, environmental sustainability, and equitable tourism opportunities are among those which need to be considered when achieving these goals. They emphasize the importance of tourism governance when dealing with issues of justice, ethics, and equity in community-based tourism. Likewise, study legal instruments that contribute to sustainable tourism as a balance between environmental sustainability and economic growth [27]. These theoretical perspectives offer a starting point to analyze the role of public awareness and perception in the relationship between community engagement and tourism. They can also be used to argue that tourism development needs to be considered in terms of economic impacts as well as residents' participation in decision making, ownership, and conservation efforts.2. Materials and Methods

2.1 Study setting and population

The district of Musanze situated in the Northern Province of Rwanda has a surface area of about 1,199 sq km, with 13 sectors. Some of which include Nyange sector known for having rich agricultural practices, with many farmers living in the region.There have been notable developments within the community-based tourism programs in this sector where the local farmers are able to showcase their agricultural produce to tourists, and at the same time earn an income as well as create pride within the community on their traditions.

The Kinigi sector considered as the gate to the volcanoes draws quite a number of tourists who want to enjoy adventurous activities in this beautiful part of the country. Local communities get benefit from tourism through employment opportunities in hospitality and guiding services. On the other hand; the Shingiro sector, although not being visited by many tourists, has a calm atmosphere and culture. Cultural tourism programs have been taking place in the sector where members of the community showcase cultural dances and arts in order to attract tourists. The research design can be seen as the overall structure of organizing all the components of a research project in a systematic way. In this research project, descriptive research design was used and incorporated both qualitative and quantitative methods in answering the first two objectives of the research while using

correlation research design to answer the third objective of the research for the purpose of understanding the role of public awareness and perception on community involvement in tourism [28].The quantitative part dealt with the statistical analysis of sampled households from the three sectors (Nyange, Kinigi, and Shingiro) of Musanze district due to their closeness to the volcanoes national park attracting many tourists in the district.

On the other hand, qualitative part dealt with the semi structured interview of key informants including 3 local leaders and 3 tourism operators from RDB (Rwanda Development Board) namely; marketing officer, tourism warden and tour guide with an aim of getting their experiences in relation to tourism. The interviews focused on challenges such as lack of policies and the role of public awareness and perception in tackling reliability challenges [29]. According to the national population census of 2022, the population of the Musanze district stood at 476,522. The population density stood at 898.6 per kilometer squared. For this study, three tourism operators from RDB (Marketing officer, Tourism warden, and Tour guide) and three local leaders were selected from Musanze district's three sectors (Nyange, Kinigi, and Shingiro sectors). This ensures relevance for the study and usefulness of the research in relation to the areas of interest that have been identified. Within the Musanze district study area, these three tourism operators from RDB and three local leaders were selected on the basis of certain criteria. In addition to that; the population categories and their sizes within the specified region will be provided. This implies that three local leaders and tourism operators were selected, making sure that the leadership structures are included in the research. The most significant part is the number of households in the sectors of Nyange, Kinigi, and Shingiro sectors. This shows a considerable size of population that would enjoy different services including economic engagement programs. The selected sectors are regions characterized by diverse socio-economic and environmental factors in addition to their proximity to the Volcanoes national park.

Sample size is the number of people or observations included in the research study or survey conducted among a larger population. Sample size is significant because it affects the validity of the study. Therefore, in this study, the researcher uses the Yamane Taro formula for calculating sample size from the entire population of 88297 households.

In this study, a stratified sampling technique was applied to give everyone an equal chance of being picked to provide quantitative data [30]. Meanwhile, tourism operators in RDB and local leaders were intentionally selected to provide qualitative data [31]. Stratified sampling is a form of probability sampling that involves categorizing the population into various strata according to their common characteristics and thereafter selecting a random sample from each stratum. This ensures that all groups of interest within the population are properly represented in the sample, hence improving the validity of the results obtained. It is particularly useful in a situation where the population is heterogeneous and the researcher wants to evaluate differences between particular groups [32]. In this study; this sampling approach involved 399 participants who were taken from 88297 households in Nyange, Kinigi and Shingiro sectors ensuring that each participant has an equal chance of being included in the provision of quantitative information in the targeted sectors. Purposive sampling refers to the use of non-probability sampling technique where the researcher purposefully selects the respondents depending on certain characteristics, knowledge and experience about the research. Purposive sampling technique is usually used in qualitative studies where the objective is to gain deeper insight as opposed to generalizing the results to the whole population. The respondents in the study are selected on account of the particular knowledge or experience that they have on the research subject [33].This helps the researcher to focus on the key informants that can provide relevant information. In this research, the researcher purposefully selected three local leaders and three tourism operators from RDB (Marketing Officer, Tourism Warden, and Tour Guide).

2.2 Data collection, validity and ethics

The term "primary data" means that the data is gathered directly by the researcher from the source itself for the purpose of carrying out his research work. Primary data can be collected by using some techniques like interviews, questionnaires, focus group discussions, or by direct observations. The main advantage of this type of data is that it is always fresh, relevant to the study, and quite reliable as well. Primary data collection allows the researchers to use methods tailored to their needs, but it takes more time and costs money [34]. However, despite these difficulties; it allows getting very valuable first-hand data that will be useful for making conclusions and taking decisions. In this case; the researcher used questionnaires, interviews, and observations to get first-hand data from the field.

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Questionnaire is the data collection method that is used to collect the data from a large number of people by asking them some questions usually in the form of survey. Questionnaire is widely used in quantitative research as a tool for understanding people's views, attitudes, behavior or characteristics. In this case; the structured questionnaire was used to collect the data from the representative sample of households. The interview is a qualitative data gathering technique where a researcher puts forward questions to the respondents to get detailed information and insights or opinions on a particular issue. This method gives the researcher an opportunity to explore deeply into an individual's feelings, emotions and motives and therefore it is suitable for research whose aim is to understand the complexities of human behavior. Interviews give an opportunity for further questioning and clarification giving more precise and accurate data. In this research, the key informants identified were three tourism operators from RDB (Marketing officer, Tourism warden, and Tour guide) and three local leaders from the Nyange, Kinigi and Shingiro sectors of Musanze District.

Documentation is a data collection method which entails analysis and review of existing written, audiovisual and digital material relating to the research topic. This provides the researcher with secondary data which will be used along with primary data gathered through questionnaires, interviews, and observation. Validity means the extent to which the test, measure or research process captures the concept it seeks to examine. Before conducting the survey through questionnaires, the questionnaires were evaluated by the supervisor to assess their validity and appropriateness for research [35]. In order to evaluate content validity of the questionnaires, the following equation was applied: Content Validity Index = Relevant questions/Total questions Content Validity Index is seen as valid since the CVI of 0.89 is greater than 0.60

Cronbach's Alpha is an appropriate statistical measure in research that evaluates the internal consistency of items in a particular measurement tool such as surveys. This helps in determining whether the different items included in a measurement scale are correlated with each other and whether they reflect the same concept. The range of Cronbach's Alpha varies from 0 to 1, where the higher the value, the better the internal consistency. Generally, a Cronbach's Alpha value of 0.70 and above is seen as acceptable, while 0.80 and above is very good, and 0.90 and above is excellent. Low values could suggest that there is a lack of consistency in what the variables are measuring and therefore require the researchers to either modify the scale or make improvements. Cronbach's Alpha test is very important in guaranteeing the reliability of the research instruments and enables the researchers to determine whether they should trust the obtained results or not.

The interview data gathered in a qualitative study about community participation in tourism activities in Musanze District were analyzed using thematic analysis where the researcher transcribed the interviews, coded them based on awareness, perceptions, and participation and grouped them according to various themes such as benefits, challenges, and attitudes; which are later studied and the findings interpreted based on the research objectives using the participants' quotes. In observation, a data collection method, the researcher carefully watches and observes the behaviors of people or occurrences in the actual environment where they take place [36]. It is used in both qualitative and quantitative studies to obtain direct information without relying on the self-reports of participants. The process of observation can either be structured with a set checklist or unstructured. It is quite helpful in collecting real time actions and interactions. It is helpful in analyzing behaviors, social processes, and even physical environments. In this study, the researcher observed different aspects of life in Musanze District in order to establish how public awareness and perception have shaped community participation in tourism.

Researchers are responsible for social obligations when handling ethical issues. In this study, both primary and secondary data will be taken into consideration. All proper procedures were followed in the collection of the primary data, where an official request was sent by the Dean of the Faculty of Environmental Studies for conducting data collection in Musanze District. A proper introduction was done to the leaders of the district to show proper respect prior to any engagement. The purpose of the study was clearly outlined to the leaders and their consent was sought by respecting their knowledge and experience to make sure that the study not only contributes to academic research but also the welfare of the community.

Limitations are factors which make it difficult for a researcher during his/her research process. In this particular research, data collection faced various limitations. At times, books and journals had to be accessed through the internet by purchasing them; hence making it difficult for the researcher to access information. Moreover, the language barrier might also be experienced

during data collection. To counteract this problem, the researcher translated the questionnaire in the local language of Kinyarwanda in order to make sure that the respondents give relevant answers concerning the study.

2.3 Analytical strategy and limitations

Data analysis applies statistical or logical methods to interpret the data, identify patterns, explore relationships, and draw meaningful conclusions. Descriptive statistics including frequencies, percentages and measures of central tendency; were utilized to evaluate the influence of public awareness and perception on community participation in tourism. Regression analysis was employed to investigate the relationship between public awareness perceptions and community involvement. Additionally; correlation analysis assessed the strength of the relationship between these perceptions and community participation. The combination of these methods offered an understanding of how public awareness and perception affect community involvement in the selected sectors. Data analysis was conducted using SPSS (Version 20) with each item on the questionnaire examined independently upon completion, and the total of the responses generated a score for the entire set of items. The researcher established five ordered levels of response starting with the highest level (very large) and ending with the lowest level (not at all) as detailed in Table 3.3. The value range assigned to each level is from 1.0 to 1.80 for the very low level and from 4.2 to 5.0 for the very high level. The responses for each variable were summed and the mean or average which may fall within any of the value ranges specified in the table, were calculated and interpreted appropriately. This means the results can indicate a high mean with a very significant extent or a very low mean with no extent at all.

The standard deviation helps assess how far or near values are to the mean. A measure of central tendency alone is insufficient to describe a distribution adequately. It provides insight into how the data is distributed. Generally, when $\sigma = 0$; it indicates that all samples have the same values; σ represents the typical range from the mean, and larger σ values indicate a greater spread in the data. In relative dispersion terms; the standard deviation is interpreted alongside the mean using the coefficient of variation. A low coefficient of variation indicates that responses are tightly clustered around the mean, reflecting homogeneity; while a high coefficient of variation suggests greater dispersion and heterogeneity. Therefore; although a threshold (such as standard deviation greater than 0.5) may suggest limited variability, a more accurate assessment of response consistency is achieved by examining the proportional spread of the data through coefficient of variation, ensuring that t

The study evaluated the impact of public awareness and perception on community participation in tourism, focusing on the Nyange, Kinigi, and Shingiro sectors of Musanze District. The independent variables include the level of awareness, community perception and educational campaigns. The results of the correlation analysis were represented by a correlation coefficient (r) which ranges from -1 to 1. A value close to +1 indicates a strong positive regression, meaning both variables increase together, while a value near -1 indicates a significant negative correlation where one variable increases as the other decreases. A value close to 0 indicates no or a weak linear relationship. The analysis aims to determine whether increases in public awareness and perception have a positive or negative influence on community participation in tourism. The questionnaire results are cross-sectional self-reports. They identify statistical associations, not causal effects or longitudinal changes over the entire study period. The manuscript retains the thesis's published summary statistics; the original respondent-level dataset was not supplied for independent precomputation.

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3. Results

3.1 Respondent profile

Table 1. Respondent characteristics

Table 4.1: Gender of respondents	**Table 4.1: Gender of respondents**	**Table 4.1: Gender of respondents**	**Table 4.1: Gender of respondents**	**Table 4.1: Gender of respondents**	**Table 4.1: Gender of respondents**
		Frequency	Percent	Valid Percent	Cumulative Percent
	Male	146	36.6	36.6	36.6
	Female	252	63.1	63.1	100.0
	Total	398	99.7	100.0	
Missing	System	1	.3		
Total	Total	399	100.0		

Source: NTIHEMUKA Prince, field survey (2026).

Table 2. Respondent characteristics

Table 4.2: Age of respondents	**Table 4.2: Age of respondents**	**Table 4.2: Age of respondents**	**Table 4.2: Age of respondents**	**Table 4.2: Age of respondents**	**Table 4.2: Age of respondents**
		Frequency	Percent	Valid Percent	Cumulative Percent
	18-29 years	112	28.1	28.1	28.1
	30-39 years	126	31.6	31.6	59.7
	40-49 years	97	24.3	24.3	84.0
	50 and above	64	16.0	16.0	100.0
	Total	399	100.0	100.0	

Source: NTIHEMUKA Prince, field survey (2026).

Table 3. Respondent characteristics

		Frequency	**Percent**	**Valid Percent**	**Cumulative Percent**
	No education	38	9.5	9.5	9.5
	Primary	243	61.0	61.0	70.5
	Secondary	74	18.5	18.5	89.0
	University	44	11.0	11.0	100.0
	Total	399	100.0	100.0	

Source: NTIHEMUKA Prince, field survey (2026).

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Table 4. Respondent characteristics

Table 4.4: Years of residence in Musanze district	Table 4.4: Years of residence in Musanze district	Table 4.4: Years of residence in Musanze district	Table 4.4: Years of residence in Musanze district	Table 4.4: Years of residence in Musanze district	Table 4.4: Years of residence in Musanze district
		Frequency	Percent	Valid Percent	Cumulative Percent
	1-10 years	17	4.3	4.3	4.3
	11-20 years	88	22.1	22.1	26.4
	21-30 years	82	20.5	20.5	46.9
	31 and above	212	53.1	53.1	100.0
	Total	399	100.0	100.0	

Source: NTIHEMUKA Prince, field survey (2026).

The tables below describe the demographic profile of the participants in Musanze District.

In the total of 399 participants, 398 have responded to questions on gender; out of them, more than half of the respondents were females (63.1%). The highest number of respondents were aged 30-39 years (31.6%) followed by age 18-29 years (28.1%). As for education, the highest number of respondents had attained primary education (61.0%), while most of the respondents had been living in Musanze District for more than 30 years (53.1%).

3.2 Awareness, perceptions and educational campaigns

Table 5. Awareness levels

Awareness level	N	Mean	Std. Deviation	Mean interpretation
I am aware of the tourism initiatives taking place in the Musanze District	399	4.41	.807	Homogeneous
I understand the benefits that tourism can bring to my community	399	4.33	.917	Homogeneous
I believe that local residents receive sufficient information about tourism development projects in Musanze	399	4.31	.951	Heterogeneous
Valid N (listwise)	399			
Total mean		4.35		

Source: NTIHEMUKA Prince, field survey (2026).

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Table 6. Community perceptions

Community perception	N	Mean	Std. Deviation	Mean interpretation
I believe that tourism development positively impacts the local community in Musanze	399	4.31	.966	Heterogeneous
I think that local community members have a say in tourism-related decisions that affect them	399	4.31	.957	Heterogeneous
I feel that tourism projects are aligned with the needs and interests of local residents	399	4.35	.893	Homogeneous
I perceive tourism as a sustainable economic opportunity for Musanze District	399	4.37	.885	Homogeneous
Valid N (listwise)	399			
Total mean		4.335		

Source: NTIHEMUKA Prince, field survey (2026).

Table 7. Educational campaigns

Educational campaign	N	Mean	Std. Deviation	Mean interpretation
I believe that educational campaigns about tourism would increase community awareness in Musanze	399	4.31	.974	Heterogeneous
I think that local authorities effectively communicate the benefits of tourism through educational initiatives	399	4.33	.954	Homogeneous
I am aware of any recent educational campaigns focused on tourism in my community	399	4.32	.941	Homogeneous
Valid N (listwise)	399			
Total mean		4.32		

Source: NTIHEMUKA Prince, field survey (2026).

The data presented in Tables 4.5 to 4.7 indicate that there is high level of public awareness (Mean = 4.35), positive community perceptions (Mean = 4.335), and positive attitudes towards educational campaigns (Mean = 4.32) regarding tourism development in Musanze District. Most of the respondents were aware about tourism projects, knew the socioeconomic advantages of these projects, and appreciated the significance of educational campaigns. There are some differences in answers about the availability of information, community participation in decisions making process, and effectiveness of awareness campaigns that require additional attention.

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3.3 Community participation indicators

Table 8. Support for tourism and conservation

Support for tourism and conservation	N	Mean	Std. Deviation	Mean interpretation
I believe that tourism development can coexist with environmental conservation in Musanze	399	4.30	.961	Heterogeneous
I am supportive of tourism activities that help protect local wildlife and natural resources	399	4.32	.950	Homogeneous
I feel that local communities should support tourism initiatives that also promote conservation efforts	399	4.31	.941	Homogeneous
Valid N (listwise)	399			
Total mean		4.31		

Source: field survey (2026).

Table 9. Sense of ownership

Sense of ownership	N	Mean	Std. Deviation	Mean interpretation
I feel a personal connection to the tourism development initiatives in Musanze	399	4.30	.996	Heterogeneous
I believe that fostering a sense of ownership among residents is essential for the success of tourism in Musanze	399	4.34	.904	Heterogeneous
I think that community involvement in tourism planning enhances my sense of ownership over local resources	399	4.37	.885	Homogeneous
I feel that my opinion is valued in discussions about tourism development in my community	399	4.69	.464	Homogeneous
Valid N (listwise)	399			
Total mean		4.425		

Source: NTIHEMUKA Prince, field survey (2026).

Table 10. Economic engagement

Economic engagement	N	Mean	Std. Deviation	Mean interpretation
I believe that tourism creates job opportunities for local residents in Musanze	399	4.26	.980	Heterogeneous
I feel that local businesses benefit significantly from tourism activities in the district	399	4.27	.974	Homogeneous
I think that increased tourism leads to improved livelihoods for community members	399	4.29	.949	Homogeneous
Valid N (listwise)	399			
Total mean		4.273		

Source: NTIHEMUKA Prince, field survey (2026).

Table 11. Involvement in conservation

Involvement in conservation	N	Mean	Std. Deviation	Mean interpretation
I believe that local communities should actively participate in conservation efforts alongside tourism development	399	3.88	.861	Homogeneous
I think that community involvement in conservation initiatives can enhance tourism sustainability in Musanze	399	4.27	.964	Heterogeneous
I think that collaborative conservation projects between tourism operators and community members are essential for success	399	4.26	.867	Homogeneous
I believe that local participation in conservation can lead to better protection of natural resources	399	4.34	.985	Heterogeneous
Valid N (listwise)	399			
Total mean		4.1875		

Source: Field survey (2026).

Tables 4.8 to 4.11 show that there is a very high degree of community support for tourism and environmental conservation (Mean = 4.31), a high degree of ownership feeling (Mean = 4.425), and also highly favorable perceptions about economic benefits from tourism (Mean = 4.273). The respondents are also highly favorable towards community participation in conservation efforts (Mean = 4.1875). Differences in perceptions about employment generation, participation in conservation efforts, and efficacy of conservation efforts indicate the importance of community involvement in tourism planning and development efforts.

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3.4 Association between awareness, perception and participation

Table 12. Regression model summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.988a	.977	.977	1.733

Source: Field survey (2026).

Table 13. Model ANOVA

Model	Model	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	46211.076	1	46211.076	15386.392	.000b
1	Residual	1108.245	369	3.003		
1	Total	47319.321	370			

Source: Field survey (2026).

Table 14. Pearson correlation

		Public awareness and perception	Community participation
Public awareness and perception	Pearson Correlation	1	.988
Public awareness and perception	Sig. (2-tailed)		.000
Community participation	Pearson Correlation	.988	1
Community participation	Sig. (2-tailed)	.000	

Source: Field survey (2026).

The data in Tables 4.14 to 4.16 show an extremely strong positive relationship between the levels of public awareness and perceptions and participation in tourism development in Musanze District ($R = 0.988$). The regression model accounts for 97.7% of the variance in community participation ($R^2 = 0.977$). In addition, the significance of the regression model is evidenced by the ANOVA test values ($F = 15{,}386.392$; $p < 0.001$). Further evidence of the strength of the positive relationship between the variables is provided by Pearson's correlation ($r = 0.988$; $p < 0.01$). Nonetheless, the very high statistical values should be verified against the original dataset due to concerns about possible overlap in the measures and inconsistency in the predictor variables used in the analysis.

3.5 Qualitative and observation findings

Public awareness was found to enhance community participation in tourism development in that awareness increases residents' knowledge on the economic, social, and environmental advantages of tourism. By making people aware of the various opportunities that tourism offers, including employment creation, generation of revenue for the community, improvement of public services, and conservation, they get interested in participating. Public awareness also helps to dispel myths that tourism is controlled solely by outsiders. Public awareness helps them to link tourism with their personal needs and form positive expectations.

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The respondents revealed that there has been an improvement in the perception of tourism in Musanze District following sensitization programs, community discussions, and actual realization of tourism benefits. The people see tourism as a local resource because they have seen employment, infrastructure development, revenue sharing programs, and improved livelihoods. Communication alone is not enough. The positive perception of tourists becomes stronger with the realization of tangible gains from tourism activities. Therefore, awareness programs should be accompanied by actual actions that will distribute tourism resources equitably.

Educational campaigns have also played an important role in promoting the development of tourism education, conservation awareness, and hospitality practices. Such campaigns have facilitated the involvement of community members in guiding, accommodation, handcrafts production, food vending, transportation, and other enterprises. Involvement can be more sustainable in the case when residents are involved in the planning and implementation process, instead of being informed about them afterwards. Transparent benefit sharing, capacity building, financing, and provision of proper information can enhance ownership, confidence, trust, and commitment.

There was a strong relationship between tourism and conservation. Community members were motivated to conserve the environment once they knew that conservation of the environment ensured tourism, job opportunities, and future earnings. Programs of community-based conservation and awareness campaigns promoted environmental stewardship. However, trust is based on fairness, transparency, accountability, and communication from the side of tourism establishments.

Findings in Kinigi, Nyange, and Shingiro indicated moderate to high levels of tourism participation. The presence of guesthouses, craft stands, guiding, cooperatives, cultural goods, and good relations between the residents and tourists was evidence of community participation. Posters, signboards, meetings, and conservation efforts were evident, though not uniformly so. Formal communication and outreach efforts were still lacking in some regions. Other barriers included skill deficits, poor infrastructure, lack of information, waste management issues, and unequal benefit distribution. In all, Musanze has shown increasing community participation in tourism, though more education, participatory processes, communication, capacity-building, and benefit distribution are required for sustainable participation.

4. Discussion

The results indicate high public awareness of tourism development in the Musanze District (mean = 4.35) in line with past research on the need for awareness as an entry point for participation. The issue of inequitable access to information is still a problem. The perceptions of the community were positive (mean = 4.335) especially about jobs, revenue generation, and infrastructure development. Nevertheless, lack of decision-making opportunities and uneven benefits could affect the level of participation. Environmental conservation got high ratings (mean = 4.31) which proved its significance in sustainable tourism. Yet, managing the expansion of tourism together with environmental conservation needs good governance. Community ownership registered the highest mean (4.425) implying strong affiliation to tourism development. Economic involvement showed high levels as well (mean = 4.273), despite the uneven distribution of job creation. Conservation involvement registered the lowest mean (4.1875), implying a need for more practical community involvement. The study supports the stakeholder theory by stressing the importance of inclusive involvement, good governance, and benefit sharing. The results from the correlation analysis indicated a very strong positive relationship between awareness, perceptions, and community involvement ($r = 0.988$, $p < 0.01$). However, the existence of the relationship does not imply any causality since some overlapping measures of surveys were used. Thus, sustainable tourism development in Musanze District needs turning awareness and perceptions into participation through inclusive decision-making, economic involvement, conservation involvement, and fair benefit distribution.

4.1 Study limitations

The data is obtained from chosen sectors within Musanze, not a probability sample from the entire district. There might be response similarity between the self-reported Likert scale variables in use, besides concept similarities. The study period represents the tourism framework (2020-2025), while the main survey is recorded in 2026. The change and causality cannot be

determined from the survey data. The original survey data will be required for auditing the model specification and extremely high correlation.

5. Conclusion and Recommendations

Regarding the first research objective; the results suggest a high degree of public awareness and positive perception on tourism development in the Musanze District area, backed up by quantitative data. The average awareness level score is 4.35 (Std = 0.8917), which means that most participants believe they are aware of tourism activities. In particular; awareness about the ongoing activities received the mean of 4.41 (Std = 0.807) while the benefits from tourism had the mean score of 4.33 (Std = 0.917), which demonstrates a homogeneous response. However; perception of sufficient information dissemination was found to be heterogeneous (Mean = 4.31, Std = 0.951). Likewise; community perception is positive and has the average of 4.335 (Std = 0.92525), especially when it comes to the idea of tourism being a sustainable economic activity (Mean = 4.37, Std = 0.885) and relevant to local conditions (Mean = 4.35, Std = 0.893). Nonetheless; the scores for the perception of inclusiveness in the decision-making process were heterogeneous (Mean = 4.31, Std = 0.957).

In relation to the second objective; the level of participation in the community is generally high with very high mean scores. Tourism and conservation have an average mean score of 4.31 (Std = 0.9507). There is an extremely high agreement on the level of support tourism provides towards environmental protection (Mean = 4.32, Std = 0.950). Sense of ownership is extremely high with an overall mean score of 4.425 (Std = 0.81225). The agreement was highest in the aspect that opinions of the respondents are valued (Mean = 4.69, Std = 0.464). There is also an extremely high mean score when it comes to economic participation which is 4.273 (Std = 0.968) mainly because of the better livelihood opportunities (Mean = 4.29, Std = 0.949). There is a slightly lower but still extremely high involvement in conservation (Mean = 4.1875, Std = 0.91925). However, variability in the job creation aspect (Mean = 4.26, Std = 0.980) and personal attachment to tourism (Mean = 4.30, Std = 0.996) are evident.

As for the fourth objective; the results indicate a considerable effect of public awareness and perception on community participation through both descriptive and inferential statistics. The institution trust has a relatively high mean value of 4.18 (Std = 0.93275), whereas motivation and personal relevance have a mean value of 4.23 (Std = 0.9035), implying that people are motivated to participate in the activities of tourism. Importantly, through the Pearson correlation analysis, a very strong positive association was found between public awareness and perception and community participation ($r = 0.988$, $p = 0.000$), and this result is statistically significant at the 0.01 level. This very strong correlation suggests that any changes in awareness and positive perception are strongly related to the changes in participation. However, some variation in terms of trust and motivation (Std = 0.996 and Std = 0.989) shows that these two factors are not always perceived equally well by the people.

The research reveals that awareness and perception play very vital roles in determining participation in tourism development in the Musanze District. Although awareness and perceptions are relatively high and positive leading to high level of participation; there still exist some gaps in the process of disseminating information and inclusive benefit sharing. The presence of strong relationships among awareness, perception, and participation implies the need to maintain continuous involvement and effective communication. Consequently; ensuring transparency, providing accessible information, and equitable distribution of tourism benefits are key ingredients for sustainable participation in tourism development activities.

Government needs to develop communication strategies by guaranteeing effective dissemination of information related to tourism development. It is critical to improve transparency and accountability in the decision-making process to increase institutional trust. In addition, policies need to emphasize equal distribution of tourism benefits, capacity development, and employment creation to address inequalities in participation.

Local residents should be proactive in seeking information on tourism development projects and participating in relevant forums including community meetings, training events, and conservation activities. Local cooperation and sharing of information will help improve their level of awareness and develop a sense of ownership. In addition, communities should promote participation in order to ensure equal gains from tourism development.

1. The mediating and moderating effects of trust, transparency of institutions, and benefits distribution on the connection between public awareness, perceptions, and community participation in tourism.

2. A longitudinal study on the evolution of public awareness, perception, and community participation in tourism development in Rwanda

3. Analysis of institutional, socio-economic, and governance factors influencing community participation in tourism-dependent rural areas of Rwanda

5. SUPPLEMENTARY INFORMATION

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References

[1] Bakker.M, v. d. D. P. and K. , "Tourism and inclusive growth: Evaluating a diagnostic framework," *Tourism Planning & Development,* vol. 20, no. 3, pp. 416-439, 2023.

[2] Javdan.M, J. G. S. and P. , "Community attitudes toward tourism and quality of life: a case study of Palangan village, Iran," *Discover Environment,* vol. 2, no. 1, p. 117, 2024.

[3] Amani.D and M. E. , "Destination promotion videos and tourism knowledge: a road toward residents' empowerment in emerging tourism destinations," *Sage Open,* vol. 14, no. 3, 2024.

[4] Gayo.L and K. , "The impacts of community-based tourism on local livelihoods in communities adjacent to national Parks in Northern Tanzania," *Cogent Social Sciences,* vol. 11, no. 1, 2025.

[5] Gulte.E, T. H. and M. , "Perception of local communities on protected areas: lessons drawn from the Bale Mountains National Park, Ethiopia.," *Ecosystems and People,* vol. 19, no. 1, 2023.

[6] Boit.S, T. and K. , "Community Participation and Residents' Attitudes towards Tourism Development in Rimoi National Reserve, Kenya," *Journal of Hospitality and Tourism Management,* vol. 7, no. 2, pp. 1-19, 2024.

[7] Buzinde.C.N and C. , "Tourism policies and inclusive development: the case of Kenya and Rwanda.," *In Tourism, Global Crises and Justice,* pp. 167-185, 2024.

[8] Gumede.T.K and N. , "Approaches toward Community Participation Enhancement in. Protected Area Management," *Recent Advances,* p. 201, 2022.

[9] Bizuru.E and N. , "Development planning in high-priority areas for biodiversity conservation and tourism development," CIFOR-ICRAF, 2025.

[10] Gasana.S and H. , "The Role of Community Radio in Promoting Community Participation in Local Governance in Rwanda: A Case study of PAXPRESS Community debates," *American Journal of Humanities and Social Sciences Research,* 2023.

[11] Joel.N, "Ecological sustainability in urban landscapes and smart cities, Case Study Kigali City, Rwanda.," In Proceedings of the 11th IALE World Congress, 2023.

[12] Nzabandora.D, K. and U. , "Assessing the value of community-based tourism approach in community development in the surrounding area of the Volcanoes National Park in Rwanda," *International Journal of Environmental & Agriculture Research,,* vol. 7, no. 8, p. 49–59, 2021.

[13] Fahrizal.M and S. , "Local community participation as both a catalyst and an outcome of sustainable tourism development.," *International Review for Spatial Planning and Sustainable Development,* vol. 14, no. 2, p. 190–211, 2026.

[14] Alamineh.G.A, H. E. and T. , "The local communities' perceptions on the social impact of tourism and its implication for sustainable development in Amhara regional state," *Heliyon,* vol. 9, no. 8, 2023.

[15] Ebirim.G.U, N. U. F. A. A. A. and A. , "Financial literacy and community empowerment: A review of volunteer accounting initiatives in low-income areas," *International Journal of Science and Research Archive,* vol. 11, no. 1, pp. 975-985, 2024.

[16] Ismail.A, M. N. and A. , "Exploring a fuzzy relationships among criteria for the development of community-based tourism in Malaysia: a multi-stakeholder perspective," *Journal of Humanities and Applied Social Sciences,* vol. 7, no. 2, pp. 85-106, 2025.

[17] Chan.J.K.L, M. and M. , " Local community participation and responsible tourism practices in ecotourism destination: A case of lower Kinabatangan, Sabah," *Sustainability,* vol. 133, no. 23, p. 13302, 2021.

[18] Ajzen.I, "The theory of planned behavior: Frequently asked questions," *Human behavior and emerging technologies,* vol. 2, no. 4, pp. 314-324, 2020.

[19] Ahmad.R, N. I. K. and A. A. , "Social exchange theory: Systematic review and future directions," *Frontiers in psychology,* vol. 13, 2023.

[20] Goyal.L, "Stakeholder theory: Revisiting the origins," *Journal of Public Affairs,* vol. 22, no. 3, 2022.

[21] Jiran.H.U and J. A. O. , "The Level of Tourism Participation and Influencing Factors of Community Residents in Kalajun World Natural Heritage Site," *Journal of Resources and Ecology,* vol. 16, no. 6, pp. 1914-1925, 2025.

[22] Dangi.T.B and P. F. , "Augmenting the role of tourism governance in addressing destination justice, ethics, and equity for sustainable community-based tourism.," *Tourism and Hospitality,* vol. 2, no. 1, pp. 15-42, 2021.

[23] Erkılıç.E, K. and O. , "Rethinking Residents' Support for Sustainable Tourism Development: Integrating Social Exchange Theory and Environmental Concern," *Sustainability,* vol. 18, no. 7, p. 3521, 2026.

[24] Bentley.L and H. , "Evaluating the long-term impact of sustainable tourism practices on local communities and natural resources in developing countries," *Integrated Journal for Research in Arts and Humanities,* vol. 4, no. 3, pp. 136-141, 2024.

[25] D.Bhatta.K. and J. , "Community collaboration with tourism stakeholders: Issues and challenges to promote sustainable community development in Annapurna Sanctuary Trail, Nepal.," *Saudi Journal of Engineering and Technology,* vol. 8, no. 6, pp. 146-154, 2023.

[26] Ghaderi.Z, S. F. and K. , "Increasing community environmental awareness, participation in conservation, and livelihood

enhancement through tourism," *Local Environment,* vol. 27, no. 5, pp. 605-621, 2022.

[27] Khater.M, I. S. and F. , "Legal frameworks for sustainable tourism: Balancing environmental conservation and economic development," *Current Issues in Tourism,* vol. 28, no. 22, pp. 3693-3714, 2025.

[28] Cohen.J and C. , "Survey research: design, methods of data collection, questionnaire design, and conduct. In Research Methods in Palliative, Supportive, and End-of-Life Care (pp. 54-81)," Oxford University PressOxford, 2025.

[29] Chand.S.P, "Methods of data collection in qualitative research: Interviews, focus groups, observations, and document analysis.," *Advances in Educational Research and Evaluation,* vol. 6, no. 1, pp. 303-317, 2025.

[30] Dang.P, R. L. and L. , "Livelihood resilience or policy attraction? Factors determining households' willingness to participate in rural tourism in western China," *International Journal of Environmental Research and Public Health,* vol. 19, no. 12, p. 7224, 2022.

[31] H. A. Razak.M., A. K. A. and W. A. , "Evaluating participatory planning: Community engagement, inclusive decision-making, and social cohesion in urban planning–the penang model," *Planning Malaysia,* vol. 23, 2025.

[32] I. &. I. M. R. Ahmad, "Empowerment and participation: Key strategies for inclusive development. In Building strong communities: Ethical approaches to inclusive development (pp. 47-68)," *Emerald Publishing Limited,* 2024.

[33] Hardina.D, "Strategies for citizen participation and empowerment in non-profit, community-based organizations. In 50 Years of Community Development," *Routledge,* pp. 170-183, 2021.

[34] Cheong.H.I, L. H. and M. , "Secondary qualitative research methodology using online data within the context of social sciences," *International Journal of Qualitative Methods,* vol. 22, 2023.

[35] Brailas.A, "Introduction to qualitative data analysis and coding with QualCoder," *American Journal of Qualitative Research,* 2023.

[36] Hrei.V, O. K. B. and H. , "The role of communication in developing environmental awareness and concern for environmental issues," *Grassroots Journal of Natural Resources,* vol. 7, no. 3, pp. 270-289, 2024.

[37] Chan.J.K.L, M. and M. , " Local community participation and responsible tourism practices in ecotourism destination: A case of lower Kinabatangan, Sabah," *Sustainability,* vol. 12, no. 23, p. 13302, 2021.

[38] Ahmad.R, N. I. K. and A. , "Social exchange theory: Systematic review and future directions," *Frontiers in psychology,* vol. 13, 2023.