



## **Influence of Accommodation Destination Dimension on Tourism Sustainability in Selected Regions of Nandi County, Kenya**

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### **Abstract**

*Sustainable tourism is key in any destination because it improves and gives chances for continuity in tourism development. However, poor road networks, decrease in number of tourists in some of the destinations coupled with low revenue collection from tourism related activities have posed big challenges in supporting tourism development in Nandi County. The purpose of this study was to determine the influence of accommodation destination dimension on tourism sustainability in selected regions of Nandi County, Kenya. Hence, hypothesis constructed from the objectives above. The target population was 598 tourists where a sample size of 239 was drawn. Stratified and simple random sampling techniques were applied. Data was collected by the use of questionnaires. Out of the 239 questionnaires issued, 189 responded. Statistically, data was analysed using both descriptive analyses particularly percentages, frequencies, mean, standard deviation while inferential statistics employed standard multiple regression and Pearson correlation analysis. Statistical Package for Social Science (SPSS) version 21 was used to test the hypothesis. Reliability for research instruments was tested using Cronbach's Alpha coefficient which was at 0.738(73.8%) which was above the minimum value of 0.70 (70%). The findings showed that accommodation destination dimension had ( $\beta_1 = .732, p < 0.05$ ). This indicates that accommodation destination dimension has a substantial and positive influence on tourism sustainability. The study concluded that accommodation destination dimensions enhances tourism sustainability. The study recommended that there is need for more modern hotels that should be built in the county.*

**Keywords:** Accommodation Facilities, Tourism Sustainability, Kenya

### **INTRODUCTION**

The tourism sector has been prone to challenges around the globe that have acted as an impediment against realization of tourism sustainability. The challenges include amongst others, the surge in covid-19 pandemic. Tourism sustainability is a fundamental process and has the capacity to maintain or endure the level of tourism activities over a longer period of time (Gisore & Ogutu, 2015). Amanda (2021), posits that for tourism to be considered as sustainable, there must be sustainability principles and pillars such as; environmental, economic, and socio-cultural. Scholars like; (Carrillo & Jorge, 2017). Asmelash and Kumar (2019); Marinao (2017); Ramukumba (2018), opine that tourist's satisfaction and recommendations are suitable tools/indicators to measure tourism sustainability which should be reflected before

making a decision to go to a destination. According to Dodds and Butler (2009), tourists' who are satisfied with a certain destination usually recommend others or revisit a destination and hence it results into a thriving tourism industry. There are so many factors that affect tourism sustainability. These factors include; amongst others destination dimensions.

A destination exists as a trademark that has a merger of products and services that respond to the needs of tourist (Mutuku, 2017). According to WTO (2008) cited in Page (2014), a visitor(s) goes to an exceptional destination that display products like; attractions, provisional services, well managed resources, administrative boundaries and an outstanding appearance. A destination is considered to contain features that can be enumerated as eight A's; attractions, access, accommodation, amenities, activities, affinity, actors, act and administration (Neupane, 2019). Also, elements that make up the destination include: attractions, amenities, access, marketing and pricing (Fazenda et al., 2010). The current study focused on accommodation which is among the eight A's of destination dimensions (Neupane, 2019). According to Cooper, Fletcher, Fyall, Gilbert and Wanhill (2008) accommodation is one of the universal subsectors with the tourism industry. Tourists need a place to revive and relax after travelling to destination (s). On the other hand, Volo (2012) posits that accommodation should be available for tourists who spend at least twenty-four hours in a destination visited. In order to develop the tourism industry and achieve expansion, then suitable choice of accommodation is needed (Saxena, 2008).

Tourists are attracted to various destinations where comfortable hotels and other forms of accommodation facilities are available. Since tourists need rest while on a tour, destination sites should have a range of accommodation that meet the needs for all visitors. Volo (2012) further suggests that accommodation facilities are complementary facilities to tourist attractions. This implies that destinations without good accommodation facilities are disadvantaged when it comes to attracting tourists. The demand for accommodation away from one's home is met by a variety of facilities such as; hotel industry, hostels, pensions, bed and breakfasts, campsites, leisure vehicle parks, and holiday rentals. Quality of service and a range of accommodation facilities available to visitors tend to reflect and affect a wide range of visitors to the site (Sparks & Browning, 2010). A study by Kiprutto, Sitati, Ngoriarita, Akama and Munyao (2012) posited that tourism sector in the north rift region face accessibility challenges such as poor road networks and development of tourist's products. Nandi county Department of Tourism and Social Culture (NCDTSC 2018), reveals that though the County is a well-known tourism potential hub, it has not been exploited. It has many tourist's resources but experiences low revenue collection from tourist related activities and customer dissatisfaction which has resulted into low tourist revisit's rate, most of the sites are not up to the international tourist attraction standards as well as attracting more local tourists to the destinations which compromises sustainability of tourism in the County.

Instances of a decline in the number of tourists in some of the destinations like Ngabunat caves, Kaptumo Native Court in Nandi County (NCDTSC, 2018) This implies that tourism sector in Nandi is not performing well as compared to other destinations yet there is effort to improve the current situation. Empirically, few studies had examined the influence of accommodation tourism dimension on tourism sustainability. Majority of the published research articles as well as unpublished work has dealt with sustainable tourism without considering the influence of accommodation on tourism sustainability (Tosun, 2001). For example, Ariya, Wishitemi and Sitati (2017), considered; tourism destination attractiveness dimension as perceived by

tourists and not tourism destination dimensions. Therefore, it is against this background that this study sought to find out the influence of accommodation destination dimension on tourism sustainability in selected regions of Nandi County. The remaining sections of the research article are as follows; section 2 covers literature review & hypothesis development, section 3 research methodology, section 4 results & discussions and section 5 conclusion & recommendations.

## **LITERATURE REVIEW & HYPOTHESIS DEVELOPMENT**

Accommodation is a need for human travelling and accommodation facilities are classified according to size, price, different kind of visitors and the services they provide. According to Camping, (2013) hotels are the main form of accommodation and are categorized into five-star hotels to the very economic hotels. Also, one-star class camping site to five-star camping sites where every visitor can find the best options on the basis of what they can afford. Accommodation facilities vary also based on the target groups; while others target families and business travellers' others target leisure travellers (G.P, 2009). Nowadays, meals and accommodation are not the only prioritised services in hotels but many offer health club and crèche according to tourists needs. Larger hotels are increasing their share of holiday trade, particularly in big metropolitan areas and popular spots (Zopiatis, Theocharous, Constanti & Tjiapouras, 2017). In more traditional holiday and sea-side resorts in Europe and elsewhere, big hotels are keeping their share of holiday resorts (Carretero, Rapaglia, Bokuniewicz & Kruse, 2013).

Besides hotels, supplementary accommodation facilities have been developed around the world to cater for the needs of tourists. These supplementary accommodation facilities are categorised according to their service provision, location, different managers among others. They have accommodation facilities that are friendly to visitor rather than the big hotels and resort hotels. These facilities provide overnight stay and food to the customers. Services provided by these facilities are at affordable price. Normally, other services offered by these facilities include entertainment and sports services like bowling alley, spurs (Marinao, 2017). The types of supplementary accommodation facilities include motels, camping and caravan sites, tourist holiday village, bed and breakfast, youth hostels, inns, farmhouse accommodation, guest houses, hostels among others (G.P., 2009). The countries that have a reputation of excellent five-star to seven-star accommodation facilities include Switzerland, Holland, France, Malaysia, Australia, and Belgium. Most of the tourists chose a specific site or city because they are assured of outstanding tourist's facilities and services in hotels (Martin-Fuentes, 2016; Rhee & Yang, 2015). For instance, in Europe, France paved the way for tourist development of Corsica by launching a big hotel development programme (Theng & Tatar, 2015). Quality of service and a range of accommodation facilities available to visitors who attend will reflect and affect a wide range of visitors to the site.

There are latest faces of accommodation such as holiday villas, private villas, apartment houses, camping and caravan that have attested as more effective in the new accommodation market. These are the new trends in the accommodation sector that have been used to meet the highly seasonal demand. Saxena (2008) suggests that the increase in supplementary accommodation facilities has been used to fulfil the income of middle-class income travellers as it meets their budget. In many holiday areas camping and caravan sites are recognized as a significant form of accommodation. This form of accommodation is common in some European countries and in the United States of America. Camping and caravan sites are found in different shapes, quality of

services and sizes (Cooper et al., 2008). Tourists' destinations should be bestowed with variety of accommodation facilities, services offered by these facilities should be of high quality to ensure customer satisfaction as well as upsurge in revisits. Limited studies have assessed the effect of accommodation on tourism sustainability in Kenya more specifically in Aldai sub-County and hence the need for this study so as to address this Knowledge gap. The literature reviewed led to the development of the study below;

**H0<sub>1</sub>:** *There is no significant relationship between Accommodation facilities and tourism sustainability in selected regions of Nandi County, Kenya.*

## METHODOLOGY

This study adopted a cross-sectional research design. It is a type of observational study that analyses data from a population, or a representative subset, at a specific point in time (Levin, 2006). It is a methodology for conducting research that involves collecting, analysing and integrating quantitative data (Creswell & Clark, 2017). This approach to research is used when this integration provides a better understanding of the research problem. By using a quantitative research design, the researcher was able to understand and authenticate the findings, while offsetting the weaknesses vital to using any other approach (Mugenda & Mugenda, 2003; Levin, 2006). This design gives a description of variables based on field generated data and desk research (Orodho, 2004). The target population for the study was approximately 598 tourists according to average visitor statistics at the county (Nandi County Department of Tourism Culture and Social Welfare, 2019). These were visitors who were estimated to be visiting all the 6 tourist destinations in selected regions of Nandi County in a period of one month. These attractions were; Diguna falls, Kaptumo Africa native court, Koitalel Samoei museum, Ngabunat caves, Eden spring guest house and Chepkiit falls (Tourism, Culture and Social Welfare Nandi County, 2019). The targeted population per destination was as summarized in Table 1:

**Table 1: Estimated target Population for Nandi County**

Stratas	Population (Visitors per month)	percentages
Diguna falls	160	27%
Kaptumo Africa native court	43	7%
Koitalel Samoei museum	125	21%
Ngabunat caves	130	22%
Eden spring guest house	106	18%
Chepkiit falls	34	5%
<b>Total</b>	<b>598</b>	<b>100%</b>

Source: Nandi County, Department of Tourism, Culture and Social Welfare, (2019)

The sample size for this research was obtained using the Yamane's (1967) formula for finite population.

$$n = \frac{N}{1 + N(e)^2} \quad n = \frac{598}{1 + 598(0.05)^2} = 239 \dots \dots \dots \text{Equation 1}$$

Stratified sampling was used to allocate the stratum samples; the formula that was used to allocate the stratum samples was as follows;  $nh = n(Nh/N)$  Where;  $h$  = stratum number,  $nh$  = Sample size in stratum  $h$ ,  $Nh$  = Population size in stratum  $h$ , where  $h=1,2,3,4,\dots$ ,  $N$  = Total population size and  $n$  is the total sample size. After stratification,

visitors were sampled using simple random sampling technique. The sample size was shown in Table 2.

**Table 2: Sample Size**

<b>Stratas</b>	<b>Population (Visitors per Month)h</b>	<b>Sample size per strata</b>
Diguna Falls	160	64
Kaptumo Africa native court	43	17
Koitalel Samoei	125	50
Ngabunat caves	130	52
Eden spring guest house	106	42
Chepkiit falls	33	14
<b>Total</b>	<b>598(N)</b>	<b>239</b>

Data was collected by use questionnaires. Questionnaires are a set of printed or written questions with a choice of answers, derived for the purposes of a survey or statistical study. There was a set of statements carefully designed to enhance gathering information of interest to the researcher. Questionnaires in this section has been advocated from Valentina, Mauro and Giovanna (2015); Boopen, Seetanah, Teeroovengadam and Nunkoo (2018). This was determined through a revision and a variety of related survey in different research journals. The four tourism dimensions engaged in the questionnaire was designed from the tourism journals. A pilot test was done on the questionnaire to ensure that it was easily understood, consistent and clear. The pilot test followed the applauded rule of 5% to 10% (Gall, Gall & Borgh, 2007). During the pilot test, 10% of sampled size of 239 was used. Questionnaires were administered to 24 respondents who were not allowed to participate in the main study. Pilot testing was done at Elgeyo Marakwet County (EMC). This was because (EMC) as a destination, has tourism attributes that can be compared with another destination like Nandi County. The feedback from the pilot study was used to test the quality of instrumentation that was subsequently used during data collection and analysis. Validity and reliability tests were then performed.

Validity can either be internal validity or external validity. Internal validity focuses on the question of causality which essentially means the causal relationship between two or more variables (Bryman, 2012). External validity relates to the capacity of solutions which can be simplified outside a particular research perspective (Bryman, 2012). To ensure that external validity was realized, there was a selection of study sample that was the most representative group and had no problem with external validity (Trochim, 2006). The study adopted both content validity and construct validity. Gall *et al.* (2007) postulates that content validity of an instrument is improved through expert judgment. Therefore, content validity of the research instrument items in this study was determined through expert knowledge which was sought from the supervisor's whose insights was used to ensure that the research instrument was in with the set of objectives used in this study and content area under study. Experts' comments were then reviewed and incorporated to enhance the validity of the research instruments. Construct validity is the experimental demonstration that a test is measuring the construct it claims to be measuring (Mbwesa, 2006). Principal component analysis was performed to assess construct validity. If all the individual loadings are above the minimum of 0.5 recommended by Hair *et al.* (2007), then the instrument is good to be used.

Reliability is the extent to which data collection procedures and tools are consistent and accurate (Bryman, 2012). Reliability of a measure indicates the extent to which it is without bias and hence ensures consistent measurement across time and across the various items in the instrument (Sekaran, 2006). This study adopted internal consistency reliability as the most appropriate measure for reliability. This is because it is the most commonly used measure of reliability in applied settings. It also needs a sample of data to assess the inner uniformity (Kothari, 2004). Therefore, Cronbach's alpha is used to measure. This checks on how the respondents are consistent in responding to questionnaires. Sreevidya and Sunitha (2011) advocates that a Cronbach' alpha co-efficient of above or equal to 0.70 is sufficient for most cases to test reliability. This facilitated the removal of ambiguities, confusion and improve wording at the early stage and ensure that questions measure what was purported to measure.

Data was analysed with the help of Statistical Package for Social Sciences (SPSS) version 21 software. Both inferential and descriptive statistical metrics was used to summarize the quantitative data. Descriptive statistics that was used were percentages, frequencies, means and standard deviations while the inferential statistics used Pearson correlation and Regression analysis. Correlation statistics was used to assess whether there was a major relationship between the study variables. Simple linear regression analysis was used to identify important predictors of sustainability. A 5% level of significance is considered. The model was as follows:

$$y = \alpha + \beta_1 X_1 + e \dots \dots \dots \text{Equation 2}$$

Where; y relates to tourism sustainability,  $\alpha$  is y intercept,  $\beta_1$  relates to changes in accommodation dimension,  $\epsilon$  relates to error while  $X_1$  accommodation dimension.

## RESULTS AND DISCUSSIONS

### Characteristics of the Respondents

It is relevant as it provides a snip preview of who comprises the sample population in-terms of the basic characteristics of the respondents. The background information of the respondents entails; nationality, gender, age, occupation, education qualification, destinations visited and the most preferred destination. The findings were then summarized in Table 3; Out of the total respondents, 158 were Kenyans, 4 were from German, 4 were Indians, 2 were from United States of America while 4 respondents were either from New York, Nigeria and Brazil. This was ascertained by 91.9%, 2.3%, 2.3%, 1.2% and 2.3% respectively. In regards to gender, 60 were female while 112 were male. This was accounted for by 34.9% and 65.1% respectively. This indicated that most of the respondents were male. All the respondents had no difficulty while disclosing their ages. One's age is constantly linked to undertaking certain issue of interest. Persons of unlike age groups normally have unlike views of a particular topic of study that delivers complete information on the topic (Volo, 2012). The respondents' age showed significant differences among respondents as shown in Table 3.

Majority of the respondents 36.0% had an age difference between 21 and 30 years, 26.7% between 18 and 20 years, 23.8% between 31 and 40 years while 13.4% above 40 years. According to Martin-Fuentes (2016), tourists who visit various destinations are usually of different age groups. This is in tandem with the different age groups shown in the current study. The respondent's occupation was also sought in this study, the study results revealed that 41.9 % were students, 32.0% employed, 20.9% self-emp

**Table 3: Characteristics of the Respondents**

<b>n=172</b>		<b>Frequency</b>	<b>Percent</b>
Nationality	Kenyan	158	91.9
	German	4	2.3
	Indian	4	2.3
	USA	2	1.2
	Others	4	2.3
Gender	Female	60	34.9
	Male	112	65.1
Age	18-20 years	46	26.7
	21-30 years	62	36.0
	31-40 years	41	23.8
	> 40 years	23	13.4
Occupation	Student	72	41.9
	Employed	55	32.0
	Self-employed	36	20.9
	Others	9	5.2
Education Qualification	Primary	7	4.1
	Secondary	67	39.0
	Tertiary	31	18.0
	Graduate	47	27.3
	Postgraduate	16	9.3
	Others	4	2.3
Destinations visited	Diguna Falls	30	17.4
	Kaptumo Africa Native Court	6	3.5
	Koitalel Samoei Museum	25	14.5
	Ngabunat caves	46	26.7
	Eden spring guest house	24	14.0
	Chepkiiit Falls	41	23.8
	Others	4	2.3
Destinations most preferred	Diguna Falls	24	14.0
	Kaptumo Africa Native Court	2	1.2
	Koitalel samoei museum	19	11.0
	Ngabunat caves	59	34.3
	Eden spring guest house	31	18.0
	Chepkiiit falls	37	21.5

Education qualification was described by the use of variables like; primary, secondary, tertiary, graduate, post-graduate and others. All the fundamental information pertaining one's level of education were easily provided by the respondents (Irshad, 2010). Level of education also provides a sign that people are ready to give an enhancement of research awareness on a region (Rajesh, 2013). Majority of the respondents 39.0% had secondary education qualification, 27.3% were graduates, 18% tertiary, 9.3% postgraduate, 4.1% primary while 2.3% had no education. It is an indication that most of the respondents were literate and therefore were in a position to respond well to the contents of the research instrument. The study also sought to determine the destinations the respondents had visited in Nandi County. Out of the total respondents, 17.4% had visited Diguna falls, 3.5% Kaptumo Africa Native Court, 14.5% Koitalel Samoei Museum, 26.7% Ngaunat caves, 14.0% Eden spring guest house and 23.8% Chepkiiit falls. This shows that most respondents had visited Ngabunat caves. The study also sought to determine the destinations preferred by the visitors. Majority of the respondents 34.3% preferred Ngabunat caves, 21.5% Chepkiiit falls, 18.0% Eden spring guest house, 14.0% Diguna falls, 11.0% Koitalel samoei museum while 1.2% Kaptumo Africa Native Court. This implies that most of the respondents preferred visiting Ngabunat caves.

### Descriptive Statistics for Accommodation on Tourism Sustainability

The objective was to find out the influence of accommodation facilities on tourism sustainability in selected parts of Nandi County, Kenya. The study focused on accommodation facilities, provided services and quality of meals in hotels or restaurants as the main sub constructs of accommodation. The researcher was interested on the opinion of respondents on the extent to which such sub-constructs affect tourism sustainability in selected parts of Nandi County, Kenya. The descriptive outcome was as indicated below in Table 4.

**Table 4: Descriptive statistics for Accommodation**

Accommodation [n= 172]		N.V. V	N. V	N	V	V.V	Mean	Std. Deviation
Accommodation facilities	F	35	48	35	29	25	2.7733	1.34242
	%	20.3	27.9	20.3	16.9	14.5		
Quality of services	F	21	34	42	42	33	3.1860	1.29336
	%	12.2	19.8	24.4	24.4	19.2		
Quality of meals in hotels/restaurants	F	33	38	29	37	35	3.0174	1.42441
	%	19.2	22.1	16.9	21.5	20.3		
<b>Composite values</b>							<b>2.9922</b>	<b>1.35340</b>

The study sought to find out from the respondents whether accommodation facilities were valuable to their visit in Nandi County, 20.3% opined not very valuable, 27.9% not valuable, 20.3% were undecided, 16.9% valuable while 14.5% very valuable. This implies that accommodation facilities were not valuable to their visit in Nandi County. The sub construct had a mean of 2.7733 and a standard deviation of 1.34242. The study findings disagree with the findings of Zopiatis, *et al.* (2017), that accommodation facilities are valuable to tourists' visit to a certain destination. Another item of interest was whether quality of services was valuable to their visit in Nandi County, 12.2% revealed that it was not very valuable, 19.8% not valuable, 24.4% were undecided, 24.4% valuable while 19.2% very valuable. This implies that quality of services is valuable to their visit in Nandi County. The sub-construct had a mean of 3.1860 and a standard deviation of 1.29336. The study results are similar to that of Volo (2012) that quality of services is valuable to tourists visit to a certain destination. In regards to quality of meals in hotels or restaurants, 19.2% opined that in was not very valuable, 22.1% not valuable, 16.9% were undecided, 21.5% valuable while 20.3% very valuable. This implies that quality of meals in hotels or restaurants is valuable to their visit in Nandi County. The item recorded a mean of 3.0174 and a standard deviation of 1.42441. The study findings resembles that of Sparks and Browning (2010) that quality of meals in hotels or restaurants is valuable to tourists' visit to a certain destination. In summary, accommodation had a mean of 2.9922 and a standard deviation of 1.35340.

### Descriptive Statistics for Tourism Sustainability

The respondents were asked whether they would revisit these sites in Nandi County, 5.8% opined definitely not, 5.8% not sure, 16.9% were undecided, 20.3% definitely while 51.2% definitely yes as shown in Table 5. This implies that majority of the respondents would revisit these sites in Nandi County. The sub-construct had a mean of 4.0523 and a standard deviation of 1.20070. The study findings are similar to that of Hutchinson *et al.* (2009), that tourists would revisit tourist's sites. The respondents were also asked whether they would recommend anyone to visit the destinations in Nandi County, 2.9% opined definitely not, 8.1% not sure, 16.9% neutral, 25.0% definitely and 47.1% definitely yes. This implies that most respondents agreed to recommend anyone to visit the destinations in Nandi County. The item had a mean of



4.0523 and a variation in responses of 1.10958. The study finding resembles that of Orel and Kara (2014) that tourists are willing to recommend anyone to visit the destinations they visit. The study also sought to find out from the respondents whether they were satisfied with the general services in destinations in Nandi County, 7.0% were definitely not, 11.0% not sure, 20.9% were undecided, 25.6% definitely while 35.5% definitely yes. This implies that majority of the respondents were satisfied with the general services in destinations in Nandi County. The sub-construct had a mean of 3.7151 and a standard deviation of 1.24966. The study findings are similar to that of Choo *et al.* (2016), that the tourists are satisfied with the general services in destinations. In summary, tourism sustainability had a mean of 3.4918 and a standard deviation of 1.84208.

**Table 5: Descriptive statistics for Tourism Sustainability**

n=172		D.N	N.S	N	D	D.Y	Mean	Std. Deviation
Revisiting	F	10	10	29	35	88	4.0523	1.20070
	%	5.8	5.8	16.9	20.3	51.2		
Recommend anyone	F	5	14	29	43	81	4.0521	1.10958
	%	2.9	8.1	16.9	25.0	47.1		
Satisfied with general services	F	12	19	36	44	61	3.7151	1.24966
	%	7.0	11.0	20.9	25.6	35.5		
<b>Composite values</b>							<b>3.4918</b>	<b>1.84208</b>

### Inferential Statistics

The study conducted inferential analysis using both Pearson's product moment correlation coefficient and regression analysis.

### Correlation Analysis

Correlation analysis of variable under study was conducted to establish whether there was any significant relation between dependent and independent variables under study (Orodho, 2013). The correlation results of the analysis were as shown in Table 6:

**Table 6: Correlation Analysis Results**

n=172		Correlations
<b>Sustainability</b>	Pearson Correlation	1
	Sig. (2-tailed)	
<b>Accommodation</b>	Pearson Correlation	.578*
	Sig. (2-tailed)	.000
*. Correlation is significant at the 0.05 level (2-tailed).		

Accommodation was found to have a significantly fairly strong positive relationship with tourism sustainability with ( $r = 0.578$ ,  $p$ -value  $< 0.05$ ). This implies that accommodation enhances tourism sustainability. The study results are similar to that of Zopiatis *et al.* (2017), that accommodation has a significant strong positive relationship with tourism sustainability.

### Multiple Regression Analysis

Multiple regression analysis was used to ascertain major predictors of tourism sustainability at 5% level of significance.

### Model Summary

The results for the regression model summary are presented in Table 7;

**Table 7: Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.673 <sup>a</sup>	.453	.440	7.97986

Predictors: (Constant), amenities, attractions, accommodation, accessibility

According to the table above, the adjusted R-square is 0.440 (44.0%) which is a typical explanation of tourism sustainability from the predictor variable (i.e. accommodation).

### Analysis of Variance

Analysis of variance (ANOVA) was employed to measure the differences in means between tourism sustainability including predictor variables as indicated in Table 8;

**Table 8: Analysis of Variance**

ANOVA <sup>a</sup>						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	8817.860	1	2204.465	34.619	.000 <sup>b</sup>
	Residual	10634.256	167	63.678		
	Total	19452.116	171			

a. Dependent Variable: sustainability

b. Predictors: (Constant), amenities, attractions, accommodation, accessibility

The F-ratio was 34.619 at 1 degree of freedom which is the variable factor. This represented the effect size of the regression model and the model is significant at 95% confidence level ( $p=0.000$ ) meaning that tourism sustainability can be projected from the above-mentioned independent variables.

### Coefficient Analysis

Regression coefficient analysis was conducted in order to determine the beta which shows the extent to which each independent variable affects dependent variable as indicated below in Table 9.

**Table 9: Regression Co-efficients**

Coefficients <sup>a</sup>						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		$\beta$	Std. Error			
1	(Constant)	19.207	3.367		5.704	.000
	accommodation	.732	.200	.236	3.663	.000

a. Dependent Variable: sustainability

Table 9 shows the regression coefficients results where by accommodation had a positive and major influence on tourism sustainability of ( $\beta = .732$ ,  $p < 0.05$ ). This implies that an increase in accommodation by one unit increases tourism sustainability by .732 units. The study findings are similar to that of Carretero et al. (2013), that accommodation has a positive and significant influence on tourism sustainability. Hypothesis 1 ( $H_{01}$ ) had predicted that there is no significant relationship between Accommodation facilities and tourism sustainability in selected regions of Nandi County, Kenya. The results in Table 4.18 indicate that there is a significant relationship

between Accommodation facilities and tourism sustainability ( $p < 0.05$ ) implying that the null hypothesis is rejected and the alternative hypothesis that there is a significant relationship between Accommodation facilities and tourism sustainability in selected regions of Nandi County, Kenya is accepted. It was therefore noted that, Accommodation facilities has a significant relationship with tourism sustainability. The study findings resemble that of Zopiatis et al. (2017), that Accommodation has a significant relationship with tourism sustainability.

## CONCLUSIONS & RECOMMENDATIONS

The study concluded that accommodation facilities have a significant influence on tourism sustainability. Qualities of services are valuable to tourists visit. The quality of meals in hotels or restaurants is also valuable to tourists visit. Tourists are not satisfied with accommodation facilities in Nandi County. Tourists are satisfied with the quality of services in Nandi County. The tourists were satisfied with the quality of meals in hotels or restaurants. The following recommendations are made in light of the findings and conclusion of the study. On Accommodation, more modern hotels should be built in the county. The researcher recommends that a further study on the same research topic should be carried out in Elgeyo Marakwet County and other Counties with tourism destination in Kenya. It would be interesting to find out whether similar findings will be found in other counties in Kenya. Further studies on destination dimensions and tourism sustainability should consider other destination dimensions such as attractions, accessibility and amenities.

## REFERENCES

- Amanda, W. (2021). *Sustainable Tourism: What is it, and Why Should We Care?* Retrieved from <https://landlopers.com/2011/12/25/sustainable-tourism-definition>
- Asmelash, A. G., & Kumar, S. (2019). Assessing progress of tourism sustainability: Developing and validating sustainability indicators. *Tourism Management*, 71(3), 67-83.
- Bryman, A. (2012). *Social research methods* (4<sup>th</sup> ed.). New York: Oxford University.
- Camping fi. (2013, March). *Camping site classification*. Retrieved from <http://www.Camping.fi/Camping-site-classification>.
- Carretero, S., Rapaglia, J., Bokuniewicz, H., & Kruse, E. (2013). *Impact of sea-level rise on saltwater intrusion length into the coastal aquifer, Partido de La Costa, Argentina*. *Continental Shelf Research*, 61-70.
- Carrillo, M., & Jorge, J. M. (2017). Multidimensional analysis of regional tourism sustainability in Spain. *Ecological Economics*, 140(1), 89-98.
- Cooper, C., Fletcher, J., Fyall, A., Gilbert, D., & Wanhill, S. (2008). *Tourism principles and practice*: UK: Pearson.
- Choo, H., Ahn, K., & Petrick, F.J. (2016). An integrated model of festival revisit intentions: Theory of planned behaviour and festival quality/satisfaction. *International Journal of Contemporary Hospitality Management*, 28(4), 818-838.
- Gall, M. D., Gall, J. P., & Borg, W. R. (2007) *Educational Research: An Introduction*. New York: Longman.
- Gisore, R., & Ogotu, H. (2015). Sustainable tourism in Africa: Standards as essential catalysts. *Sector Standardisation Needs Review*, 9(3), 1-26.
- G.P., R. (2009, October). *Tourism marketing and management*. Retrieved from <http://portal.cou.fi/ebrary/lib/cop/docdetail?docID=10416095&p00=accommodation>
- Hair, J.F., Anderson, R.E., Tatham, R.L., & Black, W.C. (2007). *Multivariate data analysis*. (5<sup>th</sup> ed.). Prentice - Hall International, Upper Saddle River, NJ.
- Hutchinson, J., Lai, F., & Wang, Y. (2009). Understanding the relationships of quality, value, equity, satisfaction, and behavioral intentions among golf travellers. *Tourism Management*, 30(2), 298-308.
- Kothari, C. R. (2004). *Research methodology: Methods and techniques*. India: New Age International.
- Martin-Fuentes, E. (2016). Are guests of the same opinion as the hotel star-rate classification system? *Journal of Hospitality and Tourism Management*, 29(3), 126-134.
- Marinao, E. (2017). Determinants of Satisfaction with the Tourist Destination. *International Journal of Contemporary Hospitality Management*, 5(1), 51-60.

- Mutuku, C. (2017). *Tourism Destinations. Definitions, Changes and Trends*. GRIN Verlag. Natural attractions: the need for an aesthetic approach. *Journal of Sustainable Tourism*, 21(1), 117-133.
- Mbwesa, K. J. (2006). *Introduction to management research, a student hand book*. Nairobi, Kenya: Jomo Kenyatta Foundation.
- Neupane, P. C. (2019). Destination Management: Nepalese Efforts, Experiences & challenges. *The Gaze: Journal of Tourism and Hospitality*, 10(1), 51-66.
- Orel, F. D., & Kara, A. (2014). Supermarket self-checkout service quality, customer satisfaction, and service quality, customer satisfaction, and loyalty: Empirical evidence from an emerging market. *Journal of Retailing and Consumer Services*, 21(2), 118-129.
- Rajesh, R. (2013). Impact of tourist perceptions, destination image and tourist satisfaction on destination loyalty: a conceptual model. *PASOS. Revista de Turismoy Patrimonio Cultural*, 11(3), 101-108.
- Ramukumba, T. (2018). Tourists revisit intentions based on purpose of visit and preference of the destination. A case study of Tsitsikamma National Park. *African Journal of Hospitality, Tourism and Leisure*, 7(1), 1-10.
- Rhee, H. T., & Yang, S. B. (2015). Does hotel attribute importance differ by hotel? Focusing on hotel star-classifications and customers' overall ratings. *Computers in Human Behavior*, 50(2), 576-587.
- Saxena, A. (2008). Cross-sector regeneration partnership strategies and tourism. *Tourism Planning & Development*, 11(1), 86-105.
- Sreevidya, U., & Sunitha, K. (2011). *Business Research Methods*. New Delhi: New Age.
- Sekaran, U., & Bougie, R. (2016). *Research methods for business: A skill building approach*. United States: John Wiley & Sons.
- Theng, S., Qiong, X., & Tatar, C. (2015). Mass tourism vs alternative tourism? Challenges and new positionings. *Études caribéennes*, (31-32).
- Volo, S. (2012). A consumer-based measurement of tourism innovation. In *Innovation in hospitality and tourism* (pp. 85-100). Milton Park, Abingdon: Routledge.
- Zopiatis, A., Theocharous, A. L., Constanti, P., & Tjiapouras, L. (2017). Quality, satisfaction and customers' future intention: The case of hotels' fitness centers in Cyprus. *Journal of Quality Assurance in Hospitality & Tourism*, 18(1), 1-24.