

**ENVIRONMENTAL IMPACT OF STANDARD GAUGE RAILWAY ON THE  
TOURISM PERFORMANCE: THE PERSPECTIVE OF COUNTY GOVERNMENT OF  
MOMBASA, KENYA**

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AWARD OF THE DEGREE OF BACHELOR OF SCIENCE IN HOSPITALITY  
MANAGEMENT OF GREYSA UNIVERSITY**

**NOVEMBER 2021**

## DECLARATION

### DECLARATION


This research project is my original work and to the best of my knowledge, has never been submitted for the award of a degree or any other academic qualification in any other university or institution

Signature.....  ..... Date.. 7/12/2021.....

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This research project has been submitted for examination with my approval as University Supervisor.

Signature.....  ..... Date: 07/12/2021.....

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## **DEDICATION**

This work is dedicated to my dear parents, who have sacrificed and supported me all the way and whose support made sure that I give it all it takes to finish that which I began. To my siblings, thank you. I cannot quantify my love for you all. May you all be blessed.

## **ACKNOWLEDGEMENTS**

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## **ABBREVIATIONS AND ACRONYMS**

**SGR** -Standard Gauge Railway

**KPA**- Kenya Port Authority

**GDP**- Gross Domestic Product

**VAT**- Value Added Tax

**RDG**- Railway Delivery Group

**SEIA**-Solar Energy Industrial Association

**UNWTO** -United Nation World Tourism Organization

**UNCS**- United Nation Security Council

**ANC**- Africa National Congress

**UK** -United Kingdom

**WTTC** -World Travel and Tourism Council

## **OPERATIONAL DEFINITION OF TERMS**

**Standard Gauge Railway:** The standard gauge (also known as Stephenson gauge after the founder, George Stephenson, International gauge, or normal gauge) is a widely used railway track gauge for transporting passengers from one destination to another. In Kenya the SGR runs from Nairobi to Mombasa.

**Gross Domestic Product (GDP):** This is the broadest quantitative measure of a country's total economic activity. The GDP represents the monetary value of all goods and services produced within a nation's geographic borders over a specified period of time.

**Infrastructure:** The basic physical and organizational structures and facilities such as buildings, roads, and power supplies needed for the operation of a society or enterprise.

**Tourism Performance:** This refers to how tourism has had its fair share of quantitative performance. It may either be performing good or performing bad.

## ABSTRACT

Transport is seen as a vital constituent of development and socio-economic growth. Among the factors suitable for economic integration, transport infrastructure and service facilities are precursors for facilitating trade and the movement of goods and persons. The standard Gauge railway since its official opening has had an impact on the tourism in the country (Kenya). The study sought to investigate the positive impact of Standard Gauge Railway transport on tourism performance in Mombasa County. The objectives of the study are to identify environmental impact of SGR in Mombasa County, to determine the tourism performance in Mombasa County, to establish the relationship between the environmental impact of tourism and the county government of Mombasa County. This study adopted the descriptive cross-sectional research survey design. The study was conducted in the county government of Mombasa. It targeted a population of 50 respondents who included the Government and County officials in the Ministry of Tourism in Mombasa County. Questionnaires were used as the tool for data collection. A pilot study was carried out in Kilifi County. Validity was ensured through content validity which was done by the supervisor. Test retest reliability was used to ensure reliability of the instrument. Data was analyzed using Statistical Package for the Social Sciences (SPSS) Software and presented in form of graphs and tables. This study is of value to the policy makers who are the county government of Mombasa through the relevant Ministries and regulators within and without the country. Scholars and future researchers can also benefit. It was established that there not only exists a significant relationship between the variables but also, the strength of correlation has been established. The researcher was able to identify and find out that in turn a higher percentile number was significantly evident towards the aspect of female population compared to the ample population of the sample size at large.

**Key words:** *Standard Railway Gauge, Tourism Performance, Questionnaires and descriptive cross-sectional research survey design*

## **CHAPTER ONE: INTRODUCTION**

### **1.0 Introduction**

Background of study, statement of the problem, research objectives, research questions, significance of study, scope of the study, limitation of the study and conceptual framework have been discussed in this chapter.

### **1.1 Background of the Study**

Transport is seen as a vital constituent of development and socio-economic growth (UNCSC, 2010). Among the factors suitable for economic integration, transport infrastructure and service facilities are precursors for facilitating trade and the movement of goods and persons (UNCSC, 2010). Transport infrastructure remains a key pillar of development and is acceleration to growth and poverty reduction (UNCSC, 2010).

In line with Kenya's vision 2030, The Standard Gauge Railway (SGR) infrastructure is undoubtedly among the mega projects in the region and it aims to strengthen the framework for infrastructure and economic development within the country. The project is aimed at not only developing and maintaining an integrated safe and efficient transport network, but will also enhance private sector participation in the provision of infrastructure facilities and services strategically complemented by government interventions benchmark infrastructure facilities and services and provide globally acceptable performance standards targeting to enhance customer satisfaction (Kenya Vision 2030, 2018).

A study done by (Marie D, Sylvie B, Francesca P, Antonio S, 2014) on high speed railway system and the tourism market in France states that the effects of the high speed railway system on tourism are not systematic since they depend on the implementation of the high speed railway

service. To understand the role of high speed Railway, it is important to take into account the changes of accessibility, and also its effects on the image of the destination and on the coordination of the stakeholders.

A study done by Syed Abdul, 2016 on travel and tourism competitiveness index: an impact of railway transportation on the international inbound and outbound tourism in South Africa, states that railway transport positively impact on international tourism. It concludes that different modes of transport including railway transport are helpful in advancing international tourism. This hence is a good start to my research on the positive impact of SGR on tourism performance in Mombasa County.

## **1.2 Problem statement**

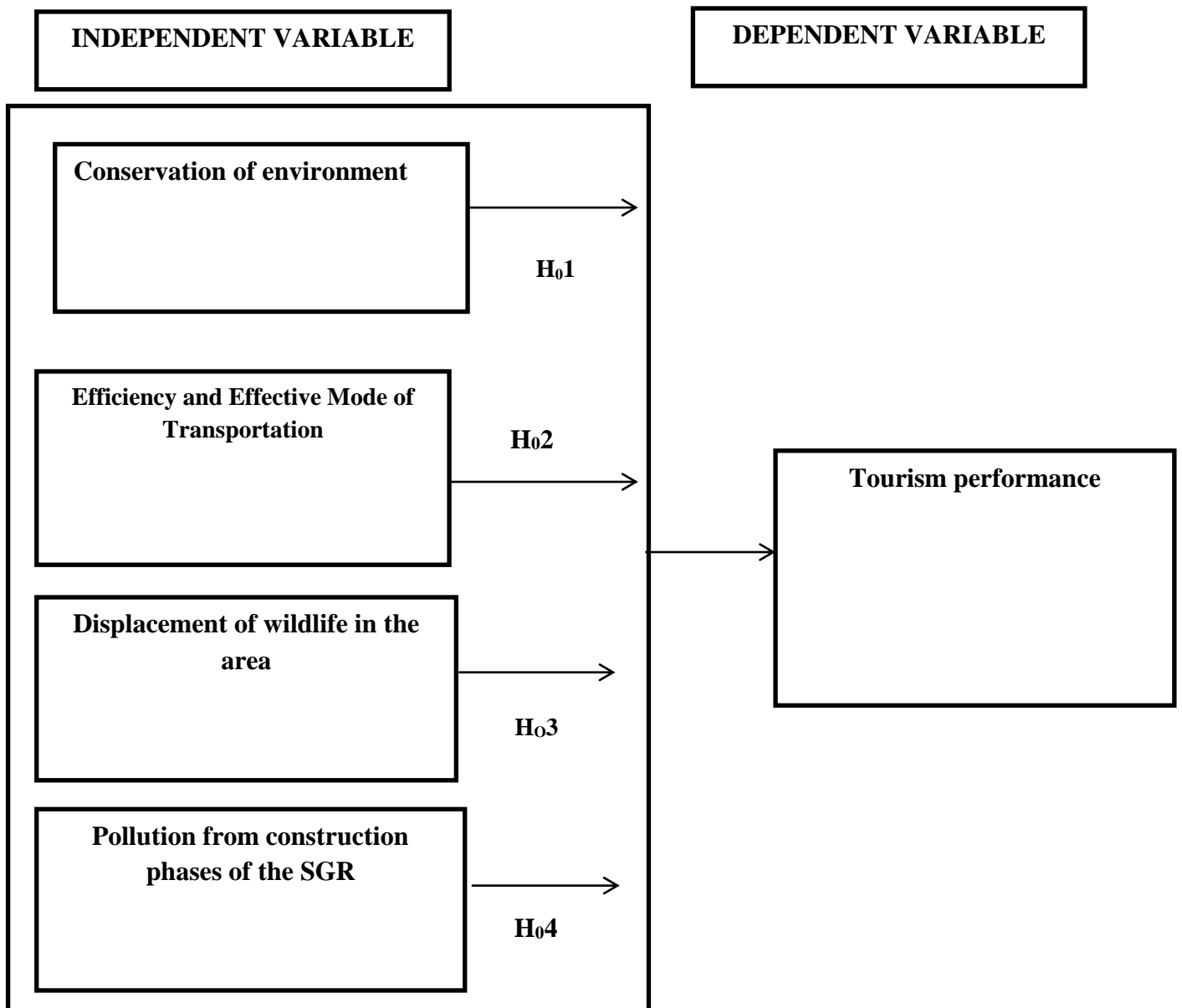
The Mombasa SGR was launched in 2017 and is expected to stimulate investments and the growth of economy in the Mombasa County. The main function of SGR is for both passenger and cargo transportation between Mombasa and Nairobi and other parts of East African countries. A study done by Ogola K. Rucha K (2018) focused on the socio-economic impact of Operationalization of the Standard Gauge Railway (SGR) on the Port City of Mombasa .The SGR's current re-aligned route encroaches 87.29ha of land of the Nairobi National Park, which is a significant portion of the wildlife habitat. Impacts related to SGR construction activity include vegetation clearance, land burrowing and filling, noise and air pollution. Particularly, the SGR has proven to interfere with wildlife migration corridors that the animals have been used to for a long time. Murithi (2015) states that the SGR design proposes to incorporate culverts and an animal underpass bridge so as to maintain the ecosystem connectivity and allow wildlife movement although this does not seem realistic since it is not easy to train wild animals like domestic animals, however the study does not focus on the impact of the SGR on tourism

performance in the County. This study focuses on the positive and negative environmental impact of SGR on tourism performance in Mombasa County.

### 1.3 Purpose of the study

It seeks to investigate the positive and negative environmental impacts of SGR on tourism performance in Mombasa County.

### 1.4 Conceptual framework



**Source: Researcher (2020)**

## **Figure 1.1 Conceptual framework**

### **1.5 Objectives of the Study**

#### **1.5.1 General Objective**

The general objective of the study was to find out the environmental impacts of Standard Gauge Railway on tourism performance in Mombasa County.

#### **1.5.2 Specific Objectives**

- a) To examine the impact of Conservation of environment on Tourism performance in Mombasa County, Kenya.
- b) To investigate the impact of SGR's efficiency and effective Mode of transportation on tourism performance in Mombasa County, Kenya.
- c) To establish the effect of displacement of wildlife in the area to accommodate SGR on Tourism performance in Mombasa County, Kenya.
- d) To assess the extent to which Pollution from construction phases of the SGR impacts Tourism performance in Mombasa County, Kenya.

#### **1.6 Hypotheses**

**Ho1:** There is no statistically significant relationship between Conservation of environment and Tourism performance in Mombasa County, Kenya.

**Ho2:** There is no statistically significant relationship between SGR as Efficiency and Effective Mode of Transportation and Tourism performance in Mombasa County, Kenya.

**H<sub>03</sub>:** There is no statistically significant relationship between displacement of wildlife in the area to accommodate SGR and Tourism performance in Mombasa County, Kenya.

**H<sub>04</sub>:** There is no statistically significant relationship between Pollution from construction phases of the SGR and Tourism performance in Mombasa County, Kenya.

### **1.8 Scope of the Study**

It sought to investigate the environmental impacts of SGR on tourism performance in Mombasa County. This study was carried out in Mombasa County. This is as result of the SGR runs from Mombasa to Nairobi over the environmental terrains lineage. In addition to this, Mombasa is one of the places within East Africa where tourism attraction is highest thus favorable for the research. The respondents in this research included ministries within the County Government officials especially in the department of Governance and Administration, Roads, Transport and Public Works as well as Tourism, Heritage and Culture. It also relied on secondary data sources available in public domain relevant to the area and the objectives of the research.

### **1.9 Significance of the Study**

This study is of value to the policy makers who are the County Government of Mombasa through the relevant Ministries and regulators. The Ministries of Finance and Transport who oversaw the Privatization of the railway can gain valuable insights on the challenges which enable them make sound policies. This study is a source of reference material for future researchers on other related topics; it can help other academicians who undertake the same topic in their study and shall recommend Areas for further studies.



### **1.10 Limitation of the Study**

The limitations that were experienced from this research include: Hostility and rejection from the County Government Officials; the researcher was able to overcome this challenge by nicely talking with the involved parties to inform them the importance of the study, Lack of enough funds and equipment such as digital cameras and hi-tech notebooks to carry out the research within Mombasa County was also a big challenge but to counter this, the researcher used the necessary and available material for data collection.

## **CHAPTER TWO: LITERATURE REVIEW**

### **2.0 Introduction**

This chapter discusses literature review on the impact of Standard Gauge Railway transport on tourism performance as well as empirical studies that have been done on the area of the study.

### **2.1 Impacts of SGR on Tourism Performance**

The SGR runs parallel to the narrow gauge Uganda railway that was completed in 1901 under British colonial rule. The east African railway master plan provides for the Mombasa –Nairobi SGR. The railway transport provide employment across Britain, both directly in the industry and in the supply chain, it also provides significant economic benefit by enabling other sector of economy to be more productive (R D G, 2014). In South Africa, transportation of industrial raw materials and finished products are through the Standard Gauge Railway which intern would not only be efficient but also cost effective (Edson Lungomesha, 2018).

The operationalization of the SGR and the subsequent directives from the Government are envisaged or visualized to generate economic and social impact which could be positive, direct or indirect, local, regional (SEIA) process(Dr. Kennedy Ogola, 2019). Furthermore, other specialists continue to point out that if the station is found in the city Centre, places of urban tourism are more easily accessible without loss of time for tourists.

SGR service allows visitors to access their destinations faster and with less fatigue, by avoiding congestion and navigation difficulties in the heart of cities, especially when travelling by car (Martinez Navarro, 2016). These benefits are even greater when the station is located close to the city Centre (Martinez Navarro, 2016). It can also allow foreign tourists visiting major cities to select a secondary destination that can be visited during the day with a round trip by train (Delaplace et al. 2014).

The SGR has offered many locals with job opportunity including both skilled and non-skilled personnel, direct and indirect (China Africa Research Initiative, 2017). This new realization thereby modifies the cause and the effect relationships between the investment in the transport infrastructure and an expanded role for tourism in the economies served by SGR. In short, the effects depend on the space economy in which the SGR fits (Masson and Petiot 2009), and the conditions that led to the appearance of these impacts include: a) the existence of strong local potentialities; b) the existence of local strategies; c) and the development of specific aspects of tourism sector like urban tourism and business tourism (Masson and Petiot 2009).

Majority of local workers in full time and part-time role have been employed during the construction, (Sanghi and Johnson, 2016). For an average of 360 employees, 78% of full time and 95% of part-time worker are sourced locally which has been a great opportunity to skilled and non- skilled Kenyans, (China Africa Research Initiative, 2017). Railway transport in the UK has improved the journey as per the number of passengers, the distance travelled by trains as also increased by 36 over the same period and there has been improvement in safety, quality, accessibility hence increase in passenger satisfaction (Rail Delivery Group, 2014).

Railway transport in South Africa led to socio-economic needs development needs particularly those of the rural areas (Mr. Montanna-ANC, 2012). Also poverty reduction program skill development empowerment project as well is another impact that SGR has brought in South Africa (Mr. Montanna-ANC, 2012). The security concern in SGR has been taken serious by the county government with the collaboration of the national government of Kenya; thirty Kenyan police officers were shipped to china for a special training on railway security which is a key to smoothen operation of Kenya SGR (Jin Zheng, 2018).

## **2.2 Conservation of the Environment**

Rail is usually a green mode of both passenger and cargo transport since it has a positive impact on the environment as it reduces pollution (Alexandrine Press, 2010). In South Africa, it proved that the high priority of road to rail freight shift from the point of view of movement environmental benefit (Freight Shift from Road to Rail-D E South Africa, 2020). There is a notable decrease in the number of trucks carrying containers to and from the port of Mombasa (Kennedy Ogle, 2019). Due to the reduced number of trucks in County of Mombasa roads accessing the port through Changanwe, Port-Reitz, Docks and Shimanzi (Kennedy Ogola, 2019). This has resulted in a gradual reduction in congestion and traffic snarl-ups in the town and result in improved flow of traffic, this huge reduction in road traffic will reduce distillate consumption, potentially augmenting climate change management initiatives (Kennedy Ogola, 2019).

## **2.3 Effectiveness and efficiency mode of transportation**

Europe is ranked as the worldwide leader in international tourism (Jennifer, 2019). For the Europe economy, traveling and tourism has directly contributed an estimated 783 billion Euros to the Europe GDP and 14.4 million jobs through direct employment (Jennifer, 2019). The researcher found out that tourism in Africa was mainly 71% leisure-driven and 29% business-driven as domestic tourism contributed to 56% and international contributed to 44% to Africa's tourism industry according to Atta, 2019. Tourism Promotion is evident that that operationalization of SGR in Mombasa County will have an impact on tourism due to reduced cost of commuting and high passenger capacity to and from Mombasa (Kennedy Ogola, 2019). The entry of low cost, comfortable, fast and safe mode of transport to Mombasa coupled with the breathe taking scenery along its route especially the stretch that traverses the Tsavo National Park,

home to wide variety to wild animals has boosted the number of domestic and foreign tourists visiting the region(Trade Mark East Africa, 2020).

#### **2.4 Displacement of wildlife in the area**

Murithi (2015) states that the SGR design proposes to incorporate culverts and an animal underpass bridge so as to maintain the ecosystem connectivity and allow wildlife movement although this does not seem realistic since it is not easy to train wild animals like domestic animals However the study does not focus on the impact of the SGR on tourism performance in the County. In UK, the SGR and tourism sector has employed many people including foreign both skilled and non-skilled which intern has raised the country's per capita (R D G, 2014). Also poverty reduction program skill development empowerment project as well is another impact that SGR has brought in South Africa (Mr. Montanna-ANC, 2012).

The SGR has offered many locals with job opportunity including both skilled and non-skilled personnel, direct and indirect (China Africa Research Initiative, 2017). This new realization thereby modifies the cause and the effect relationships between the investment in the transport infrastructure and an expanded role for tourism in the economies served by SGR. In short, the effects depend on the space economy in which the SGR fits (Masson and Petiot 2009), and the conditions that led to the appearance of these impacts include: a) the existence of strong local potentialities; b) the existence of local strategies; c) and the development of specific aspects of tourism sector like urban tourism and business tourism (Masson and Petiot 2009).

#### **2.5 Pollution from construction phase of SGR**

The running of rail transport in the UK and South Africa has led to clean environment since it has led to the reduction of the greenhouse effect by a measurable percentage thereby this make most of the tourists safe and get retained (Freight Shift from Road to Rail-D E South Africa,

2020). The gradual reduction in congestion and traffic in the town has resulted into improved flow of traffic; this huge reduction in road traffic will reduce distillate consumption, potentially augmenting climate change management initiatives (Kennedy Ogola, 2019).

The safe and convenient rail transport fully equipped with freight security in the rail sector in South Africa has enabled the retention of tourists in the region (Mr. Montanna-ANC, 2012). The smooth operation of SGR with the complete trained security officers from the Kenya Railway with a full training from China (Jin Zheng, 2018) together with the fast and comfortable mode of transport of SGR (Trade Mark East Africa, 2020) has assured many tourists on their security and hence has enabled the county to retain the tourists visiting the county both local and foreign tourists (Trade Mark East Africa, 2020). Traces of pollutants around sections where the SGR passes is evidence of just how much the entire process of constructing the SGR came along with some pollutants.

## **2.6 Theoretical Framework**

Tourism is defined as the temporary movement to destination outside the normal home and work place, the activities undertaken during the stay and the facility created to cater for the needs of tourism (Mathieson and Wall, 1982). The tourism industry is still thriving in the 21<sup>st</sup> century as it represent 9.2% of world GDP and 235 million people are employed within this industry (WTTC, 2010) therefore, it is an indication that tourism industry is one of the main economic sector in the world (WTTC, 2010).there are few types of theories in tourism planning and development (Christaller 1933 and Doxey 1995)

### **Christaller's theory 1933**

The theory was first developed by the Germany geographer Walter Christaller in 1933 after he began to recognize the economic relationships between cities and their hinterlands. The theory

suggested that there was a process of continuous development of tourist areas that were summarized as destinations develop and change overtime, there are different types of visitors at different times, the tourist experience change overtime, the impacts of destinations change overtime, involvement of locals in tourism destinations change overtime, new cycles involving new tourist destinations will occur. This theory therefore informs this study in a way that the Standard Gauge Railway does have an impact on tourism performance in Mombasa County, and the places where the stations have been located (the terminals).

### **2.7 Summary of identified gaps in the literature review**

The researcher reviewed the above information and found out that most of the previous work has not given detailed information on the subject under study and at such, this study sought to bridge this knowledge gap, and bring into understanding detailed information on the environmental impacts of Standard Gauge Railway on tourism performance in Mombasa County.

Further, the researcher provided a better understanding of the main study variables on matters the conclusions and recommendations that have been made in the final chapters of this study.

## **CHAPTER THREE: RESEARCH METHODOLOGY**

### **3.0 Introduction**

This chapter highlights the research methodology that was adopted in order to achieve the research objective of this project. The Methodology includes Research design, study area, Target population, Sample techniques, Sample size, Measurement of variables, Research instruments, Pre-testing, Validity and Reliability, Data collection techniques, Data analysis and Ethical consideration.

### **3.1 Research Design**

This study adopted the descriptive cross-sectional research survey design. This design allowed the researcher to gather information, summarize and interpret the data and assisted in obtaining relevant information concerning the phenomena and whenever possible draw general conclusion from facts discovered at a specific time (Cray 1992).

### **3.2 Study Area**

The study was done in Mombasa County which is a coastal city of Kenya along the Indian Ocean. It is the country's oldest (circa 900 AD) and second-largest city after the capital of Nairobi. Mombasa is a regional cultural and economic hub; it has an extra-large port and an international airport, and is an important regional tourism center. Mombasa was chosen as the study area because tourists from Europe and beyond flock here to enjoy the many things to do - from dolphin spotting, trips on traditional dhows and deep-sea fishing to diving and snorkeling, the wrecks and reefs and basking on the sun-splashed shores.



### 3.3 Target population

The study targeted a population of 70 respondents who constituted Government and County officials in the Ministry of Tourism in Mombasa County.

### 3.4 Sampling Techniques and Sample Size

According to Philip (2018) he stated that 30% of the total target population is considered as adequate for carrying out any scientific, humanitarian and applied research. Yamane formula 1967. i.e.

$$n = \frac{N}{1 + N(e)^2}$$

Where **n** is the sample size

**N** is the target population

**e** is the error based on level of significance (5%)

$$n = \frac{70}{1 + 70(0.05)^2} \quad n = 50 \text{ customers}$$

This study will therefore use total census of the entire population which is 50 respondents.

### 3.5 Measurement of Variables

The independent variable was measured by the social, economic and environmental impacts. A Likert scale stretching from 1= strongly disagree to 5= strongly agree was developed using questions based on the independent variables. The dependent variable was measured by using a Likert scale which stretches from 1-5. The scale was based on labor, customer retention and infrastructure.

### 3.6 Research Instrument

The study used questionnaires to collect primary data. Kottler and Armstrong (2004) states that questionnaire is an instrument used to collect data using designed questions asked to the

respondents. The advantage of questionnaires is that it permits collection of large amount of information within a short period of time and is relatively cheap (Kombo & Tromp 2003) Questionnaires were constructed by questions based on the independent and dependent variables.

### **3.7 Pre-Testing**

A pilot study was conducted to assess the design of the questionnaire in order to collect the intended data from participants. The piloting was conducted at Pride Inn Hotel in Mombasa. The hotel was chosen because it has the same characteristics as the stud area. The main aim of this pre-test was to determine the participants' understanding of the questions to enhance the question in easier understanding and filling the questionnaire (Mugenda & Mugenda, 2003).

### **3.8 Validity and Reliability**

Validity was ensured through content validity which was done by the supervisor. Test retest reliability was used to ensure reliability of the instrument.

### **3.9 Data Collection Techniques**

Questionnaires were issued to the employees to be filled and they were collected as soon as they were completed. In this study, data was collected from the field using questionnaires. After obtaining the permission, the selected members was requested and be given the questionnaires to fill. The selected members was also requested and given an ample time to fill the questionnaires and hand them back to the researcher. The respondents were informed the purpose of the study and what their involvement in the participation.

### **3.10 Data Analysis**

The researcher used SPSS software to analyze data obtained from the questionnaires variables. Objectives 1 and 2 were analyzed using descriptive statistics while objective 3 was analyzed

using inferential statistic for this study correlation analysis was adopted. After the data was collected, the questionnaires that was used was coded, summarized and the subsequent keying of the responses into statistical packages for social sciences (SPSS). The data collected was analysed for demographic variables which involved the use of descriptive statistics like the mean, percentages frequencies and the standard deviation scores and the inferential statistics was used like The data will be presented inform of graphs and tables.

### **3.11 Logistical and Ethical Considerations**

Logistics in academic research refers to all activities that a researcher must perform in order to conduct and complete the proposed study (Mugenda & Mugenda, 2003). The researcher obtained permission approvals. In addition, the researcher informed the selected participants to participate in the research by assuring the participants of the confidentiality and freeness by ensuring that their names will not be indicated in the questionnaires and each questionnaire will be notified of their voluntary participation in the study.

## **CHAPTER 4: FINDINGS AND DATA ANALYSIS**

### **4.0 Introduction**

This section mainly contains the various data analysis that was carried out by the researcher as well as the various related findings of the research study

### **4.1 Response rate of respondent's**

Response rate refers to the various respondents who in turn were able to respond back to the various questionnaires that had been issued by the various respondents in the research study.

According to the research study, there were a large number of respondents who in turn were able to be engaged in the research study for the purpose of meeting the objectives of the research study. Due to various differentiated reasons or the other, the respondents were some not able to carry on with the aspect of data entry (responding back to the questionnaires) and thus only a portion of the respondents were able to carry on with the process of answering the questionnaires.

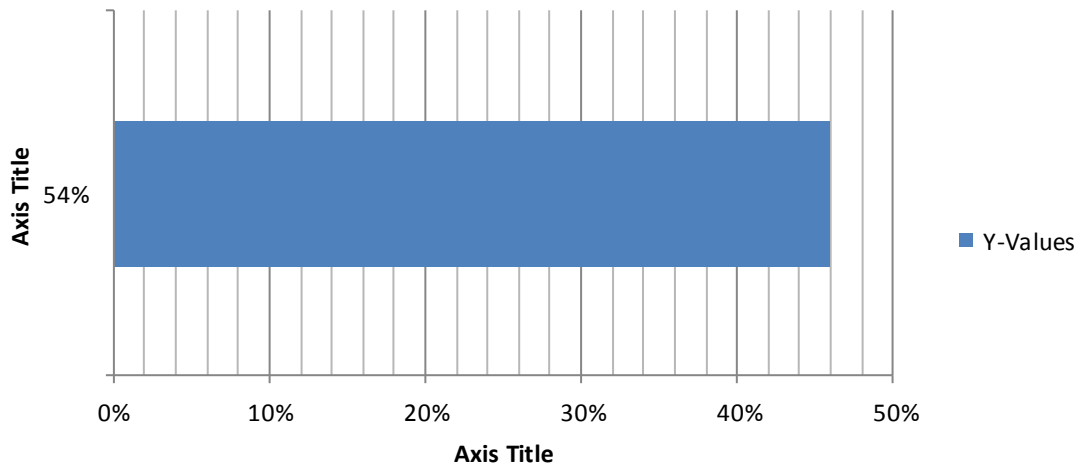
Upon an analysis of the data below the research study was able to carry on with the process of the analysis of data for the understanding of the respondents' response rate. It was a common observation that the response rate of the questionnaires issued by the researcher was as below;

**Table 4.1 Descriptive statistics**

**Descriptive statistics**

	<b>Frequency</b>	<b>Percent</b>	<b>Valid percent</b>	<b>Cumulative percent</b>
Questionnaires answered back	32	58%	58.00%	58%
Questionnaires not answered back	18	42%	42.00%	42%

**RESPONSE RATE  
OF RESPONDENTS**



**Figure 4.1 Respondents response rate**

## 4.2 Introduction to Bio-Information

### 4.2.1 Concept bio-information

Bio-information refers to the various information that in turn gives out the description of the various respondents who in turn were engaged in the research study and their various attributions towards the way they answered the research instruments by the researcher.

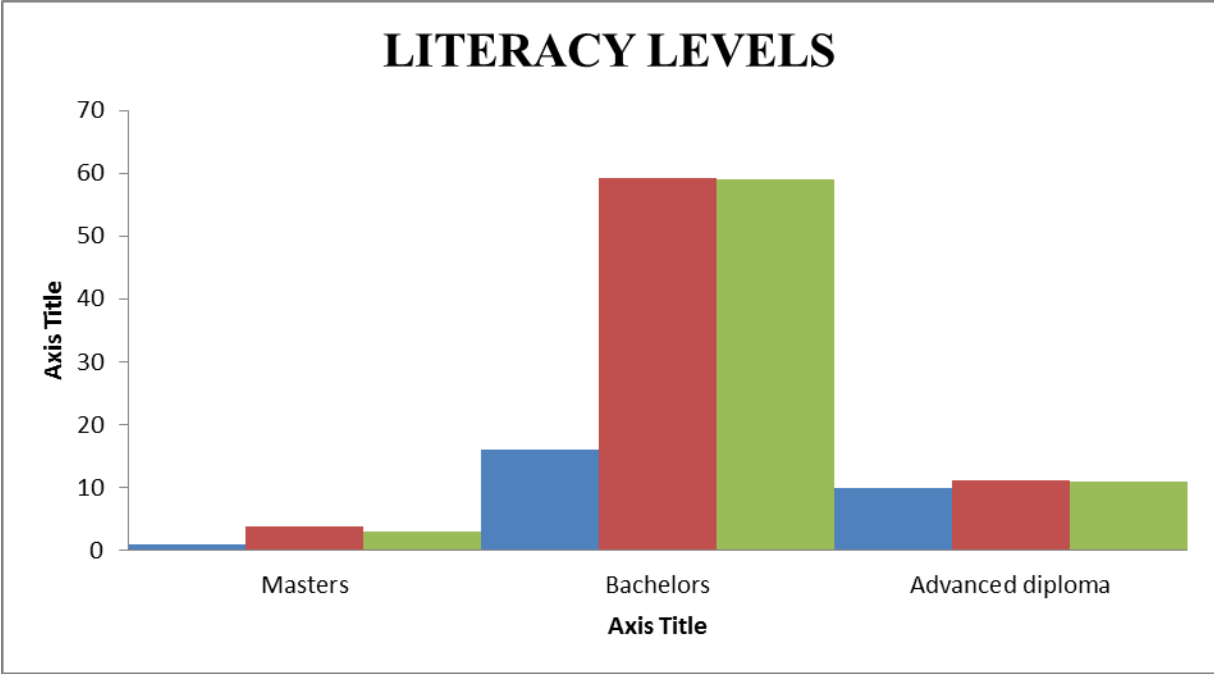
According to the research study so far carried out, there were several attributions on the various respondents; literacy levels, gender and sex of the respondents, age classification and composition as well as other related patterns of concern that were mainly observed in a research study.

#### 4.2.1.1 Literacy levels

The research study sought to carry out an analysis of data that was obtained in the research study. The study was able to attain out various correlation findings that were able to justify on the various research respondent's data on literacy levels. The research study was able to identify a number of factual evidence pertaining the various literacy levels of various respective respondents who were in turn engaged in the research study.

	<b>Calibrated log</b>	<b>Percent</b>	<b>Valid percent</b>	<b>Cumulative percent</b>
Master's degree	1	3.703	3	3.703
Bachelor's				
<b>valid</b>	16	59.25	59	59.25
Advanced diploma				
Diploma	10	11.11	11	11.11

**Table 4.2.1 Literacy levels**



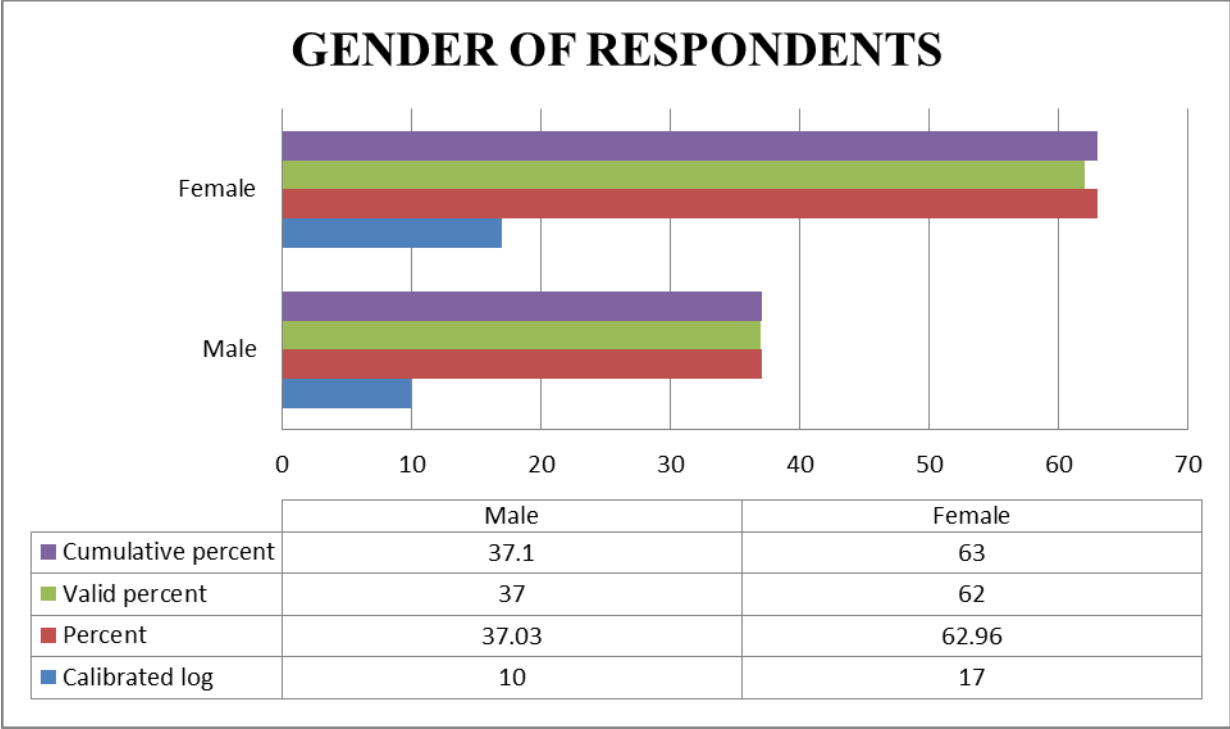
**Figure 4.2.1 Bar graph for literacy levels**

**4.1.1.2 Gender (Sex classification and composition of respondents)**

The research study was able to carry out a proper analysis of the various outcomes that in turn would contribute towards the findings of data pertaining the gender or the cluster (Composition of the respondents).

	<b>Calibrated log</b>	<b>Percent</b>	<b>Valid percent</b>	<b>Cumulative percent</b>
Male	10	37.03	37	37.1
Female	17	62.96	62	63

**Table 4.1.1.2 Gender**



**4.1.1.3 Age bracket classification and composition**

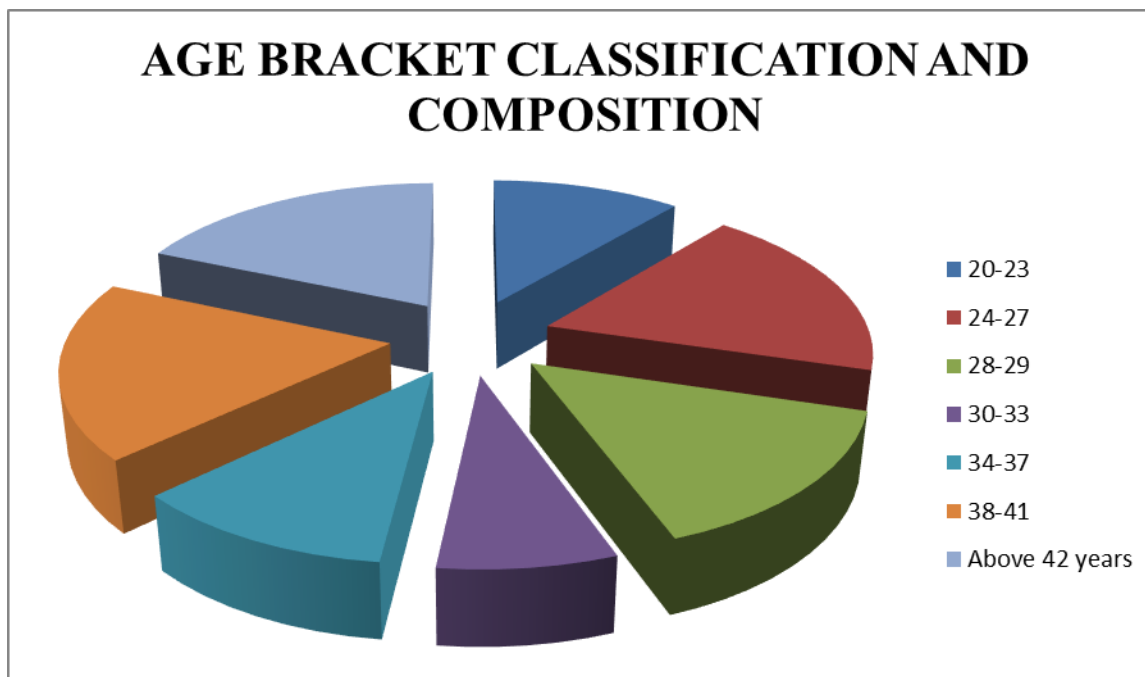
The research study also carried out an extensive research pertaining the various information on the various respondents’ age bracket classification. The various age bracket compositions was analyzed and clustered into various categories as derived in the figure below:

	Calibri log	Percent	Valid percent	Cumulative percent
20-23	3	11.11	11	11.2
24-27	5	18.51	18	18.6
28-29	4	14.81	14	14.9
30-33	2	7.41	7	7.4
34-37	3	11.11	11	11.0
38-41	5	18.51	18	18.6



Above 42 years	5	18.51	18	18.6
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**Table 4.1.1.3 Age analysis**



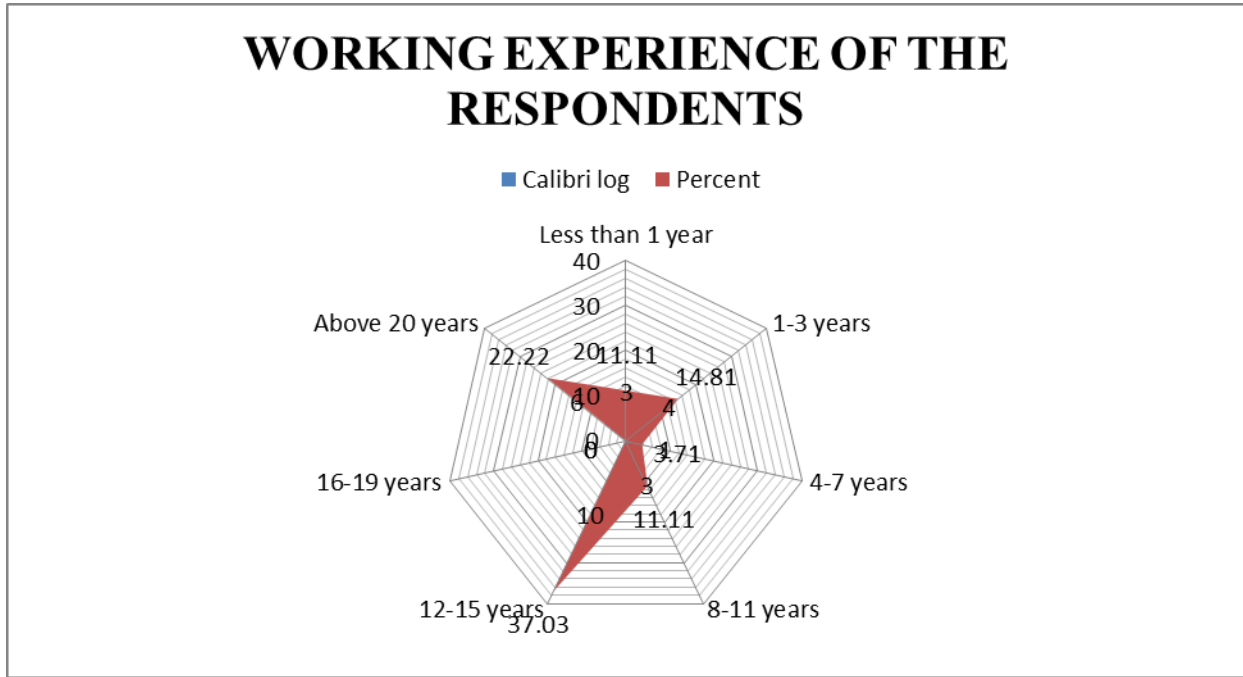
#### 4.1.1.4 Working experience of the respondents

The research study was able to give out an analysis of the various working experience that the various respondents were able to have in terms of the respondents who were working with the various departments within the case study organizations.

Upon proper calibration and estimation of the data accrued, the working experience of the respondents were as clustered as in the below table.

	Calibri log	Percent	Valid percent	Cumulative percent
Less than 1 year	3	11.11	11	11.2
1-3 years	4	14.81	14	14.9
4-7 years	1	3.71	3	3.7
8-11 years	3	11.11	11	11.2
12-15 years	10	37.03	37	37.1
16-19 years	0	0	0	0
Above 20 years	6	22.22	22	22.3

**Table 4.1.1.4 working experience of the respondents**



**4.2 Findings of the research study**

Item	SA	U	D	SD	N	Mean	Std. Dev
	68	19.8	209	60.8	50	14.5	5.9

**4.2.3 Discussion of the research study**

The research findings was able to account towards the following research findings

**4.2.3.1 Conservation of environment**

The research study was able to find out that most of the respondents in the research study acclaimed that since the emergence of the SGR in the coastal region, it was found that the

government had given out various aspects in response to the this factor. The government therefore made various policies at hand that in return would make sure that these conservation policies of the environment are enacted and therefore ensure that some of the various tourism areas were reserved.

#### **4.2.3.2 Efficiency and Effective Mode of Transportation**

The research study found out that most of the respondents in the research study were able to give account that the emergence of the SGR has therefore facilitated the transport sector with the opportunity to have most of its people to have the opportunity to travel to the coastal region and therefore facilitate and increase the positive performance of the tourism sector at large.

#### **4.2.3.3 Displacement of wildlife in the area**

The research study has then therefore facilitated the tourism sector with the positive performance in which some of the wildlife that were allocated in various wildlife catchment areas to be displaced due to allowing it to be a railway line pathway. This has then negatively affected the performance of most of the tourists whose main interest was to visit and see some of this wildlife.

#### **4.2.3.4 Pollution from construction phases of the SGR**

The research study found out that there has been pollution of various aspects that has been in existence due to the aspect of construction of the S.G.R. This has then made a particular percentage of people not to visit the coastal region due to the co-existing pollution of various ways that has limited the social welfare of individuals.

#### 4.4 Correlation Results

In order to achieve the study objectives, four different null hypotheses were set at a significance level of 5%. So as to test the hypotheses in question, Pearson correlation was successfully conducted by the researcher to show the strength of the association that is exhibited by the variables of the study. It was established that there not only exists a significant relationship between the variables but also, the strength of correlation has been established. The results of the correlation analysis have been demonstrated in the table below (table 4.4):

<b>Null Hypotheses (Ho)</b>	<b>Correlation (r)</b>	<b>P-value</b>	<b>Decision Rule</b>
<b>Ho1:</b> There is no statistically significant relationship between Conservation of environment and Tourism performance in Mombasa County, Kenya.	.765*	0.05	<b>Reject</b>
<b>Ho2:</b> There is no statistically significant relationship between SGR's Efficiency and Effective Mode of Transportation and Tourism performance in Mombasa County, Kenya.	.636*	0.03	<b>Reject</b>
<b>Ho3:</b> There is no statistically significant relationship between displacement of wildlife in the area to accommodate SGR and Tourism performance in Mombasa County, Kenya.	.548*	0.01	<b>Reject</b>
<b>Ho4:</b> There is no statistically significant relationship between Pollution from construction phases of the SGR and Tourism performance in Mombasa County, Kenya.	.441*	0.01	<b>Reject</b>

**Table 4.4 Correlation Results**

According to table 4.4 above on correlation analysis' results, significant results were indicated in the first null hypothesis, Ho1 (There is no statistically significant relationship between Conservation of environment and Tourism performance in Mombasa County, Kenya.) having ( $r=-.765^*$ ,  $p$ -value= 0.05) and therefore, the null hypothesis was rejected as there exists a strong positive correlation between the variables. The second hypothesis (Ho2) stating: There is no statistically significant relationship between SGR's Efficiency and Effective Mode of Transportation and Tourism performance in Mombasa County, Kenya was rejected by the researcher due to the fact that its analysis yielded a significant result of  $r= .636^*$  and a  $p$ -value of 0.03.

The third hypothesis, Ho3 that states there is no statistically significant relationship between displacement of wildlife in the area to accommodate SGR and Tourism performance in Mombasa County, Kenya was rejected after the results of correlation analysis were insignificant at 5% level of significance ( $r=.441$ ,  $p$ -value=.001). The last null hypothesis, Ho4 (There is no statistically significant relationship between Pollution from construction phases of the SGR and Tourism performance in Mombasa County, Kenya) having ( $r=-.441^*$ ,  $p$ -value= 0.01) and therefore, the null hypothesis was rejected as there exists a strong positive correlation between the variables.

## **CHAPTER FIVE: RESEARCH FINDINGS, CONCLUSIONS AND RECOMMENDATIONS**

### **5.1 Introduction**

This chapter mainly highlights on the research study, research findings, research conclusions and the research recommendations as well as the suggestions for further studies.

### **5.2 Research findings**

The researcher was able to conduct out a wide research in the respective case study area at large. Some of the challenges that the researcher was able to overcome in order to ensure that the research study is successful is the aspect whereby the researcher had not all of the questionnaires returned towards him for the aspect of data analysis and thus resulted towards impartial data that was analyzed by not the exact number of sampled respondents used in order to facilitate them with the aspect of analyzing and drawing out conclusions of the research study.

The other research finding that the researcher was able to identify was the fact that there was necessary information on the aspect of data compiled with respect to the gender of the respondents. The researcher was able to identify and find out that in turn a higher percentile number was significantly evident towards the aspect of female population compared to the ample population of the sample size at large.

The researcher was able to find out at large that most of the literacy levels of the respondents were mainly clustered into between three common levels which were mainly respectively, masters, and Bachelor's degree and diploma holders whereby 40% of the respective sample size were classified as Bachelor's degree holders.

Lastly the other aspect that had keenly been observed was the fact that most of the respondents believed that the influence of training and motivation was significantly effective due to the fact

that it constituted towards the following aspects at large; performance of the organization, achievement of the organizational objectives and the creation of efficiency of the organizational operations.

### **5.3 Research conclusions and recommendations**

The research findings was able to account towards the following research findings

#### **-Conservation of environment**

The research study was able to find out that most of the respondents in the research study acclaimed that since the emergence of the SGR in the coastal region, it was found that the government had given out various aspects in response to the this factor. The government therefore made various policies at hand that in return would make sure that these conservation policies of the environment are enacted and therefore ensure that some of the various tourism areas were reserved.

#### **-Efficiency and Effective Mode of Transportation**

The research study found out that most of the respondents in the research study were able to give account that the emergence of the SGR has therefore facilitated the transport sector with the opportunity to have most of its people to have the opportunity to travel to the coastal region and therefore facilitate and increase the positive performance of the tourism sector at large.

#### **-Displacement of wildlife in the area**

The research study has then therefore facilitated the tourism sector with the positive performance in which some of the wildlife that were allocated in various wildlife catchment areas to be displaced due to allowing it to be a railway line pathway.

This has then negatively affected the performance of most of the tourists whose main interest was to visit and see some of this wildlife.

#### **-Pollution from construction phases of the SGR**

The research study found out that there has been pollution of various aspects that has been in existence due to the aspect of construction of the S.G.R. This has then made a particular percentage of people not to visit the coastal region due to the co-existing pollution of various ways that has limited the social welfare of individuals.

#### **5.4 Recommendations for Future Research**

This research study examined the environmental impacts of Standard Gauge Railway on tourism performance in Mombasa County as the geographical scope. The same study can as well be conducted in a different county, or country to understand better if the variables in this study do affect tourism performance. The findings of this study are only in relation to environmental impacts of Standard Gauge Railway and how this affects tourism performance, but there are other environmental factors that affect the tourism performance and therefore, other studies can be conducted focusing on other factors that affect tourism performance.



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## APPENDICES 1: INTRODUCTION

Dear Sir/Madam

I'm Tresy Ajwang a student at Greta University pursuing a bachelor of science in Hospitality Management under the school of Hospitality and Tourism Management and completing my undergraduate degree. One requirement for graduation is a completion of research project titled: **Positive Impacts of Standard Gauge Railway on Tourism Performance in Mombasa County**. Your participation will be highly appreciated. Your responses will be confidential and will only be used for the purpose of academic study. Thank you.

**(NOTE: Do not indicate your name in the question and participation is voluntary)**

## APPENDIX 2: QUESTIONNAIRE

### PART 1: BIO DATA

Please tick or cross where appropriate

1. Gender

Male[ ]                  Female[ ]

2. Your age.

Below 20 [ ]                  21-30[ ]                                  Above 30[ ]

3. Position

Human Resource[ ]                  Manager[ ]

In this part, tick in the box as per your view:

Strongly Disagree	Disagree	Slightly Agree	Agree	Strongly Agree
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>

<b>A</b>	<b>POSITIVE IMPACTS OF SGR</b>	1	2	3	4	5
<b>1</b>	The SGR has brought about employment opportunities					
<b>2</b>	There is revenue being generated from the SGR					
<b>3</b>	Presence of social amenities has been necessitated by the SGR					
<b>4</b>	SGR has brought about security in Mombasa County					
<b>5</b>	The SGR has enhanced preservation of environment					
<b>6</b>	The SGR has enhanced conservation of environment					

<b>B</b>	<b>TOURISM PERFORMANCE</b>	1	2	3	4	5
<b>1</b>	Labour production has been impacted by SGR					

<b>2</b>	Visitors have been satisfied by the SGR					
<b>3</b>	The SGR has been able to retain the customers					
<b>4</b>	The SGR has brought about an improved market					
<b>5</b>	The SGR has brought about an improved infrastructure					

<b>c</b>	<b>Conservation of wildlife</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
	The government took an initiative of conserving various natural forests that are cross along the SGR railway line					
	There are policies to ensure that the natural forests are conserved					

<b>d</b>	<b>Efficiency and Effective Mode of Transportation</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
	The SGR is constituted towards the development of transportation for Efficiency and Effective Transportation					
	The SGR has aided in improving tourism due to the ease in transportation					

<b>e</b>	<b>Displacement of wildlife in the area</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
	The introduction of the SGR has aided towards the displacement of wildlife in the area					
	The introduction of the SGR has aided in making the wild animals uncomfortable					
	The introduction of the SGR has aided in making the wild					

	animals to feel insecure as they hide at hearing sound of trains					
--	--	--	--	--	--	--

f	<b>Pollution from construction phases of the SGR</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
	The introduction of the SGR has aided land Pollution from construction phases of the SGR					
	The introduction of the SGR has aided sound Pollution from construction phases of the SGR					

**Thanks for participating!!**

### APPENDIX 3: BUDGET

Item	Description	Units	Quantity	Unit price	Total
<b>Stationary</b>					
	Ball pens	No	5	20	100
	Fools caps	Ream	1	500	500
	Calculator	No	1	800	800
	Pencils	No	10	10	10
	Note book	No	1	1	100
	Erasers	No	5	10	50
	<b>Subtotal</b>				<b>1750</b>
<b>Services</b>					
	Printing questionnaire	Pages	3	10	30
	Photocopying	pages	300	2	600
	Printing and photocopying research proposal	Pages	30	100	3000
	Binding proposal and research report	Booklet	1	100	100
	<b>Subtotal</b>				<b>3730</b>
	Lunch and transport	Days	30	1000	3000
	Subtotal				7000
	<b>Total</b>				<b>10480</b>

#### APPENDIX 4: WORK PLAN

<b>Activity</b>	<b>March</b>	<b>May, June</b>	<b>August</b>	<b>October</b>
Proposal defense	■			
Data collection		■		
Project presentation			■	
Project presentation				■
Compiling final report and hand over				■