

**EFFECTS OF RURAL TOURISM PRACTICES ON SOCIO-ECONOMIC  
DEVELOPMENT OF COMMUNITIES LIVING IN MACHAKOS COUNTY**

**BY**

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**A THESIS SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS  
FOR THE DEGREE OF MASTER OF SCIENCE IN TOURISM MANAGEMENT**

**SCHOOL OF BUSINESS AND ECONOMICS**

**MASENO UNIVERSITY**

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## DECLARATION

This research thesis is my original work and has not been presented for award of any degree in any other university or college.

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## **ACKNOWLEDGEMENT**

My heartfelt thanks go to the Almighty God for providing me with the health and intelligence to see this research through to its conclusion. I would also want to recognize and thank various people who contributed to the success of my thesis. Special appreciation goes to my supervisors Dr. George Otieno Obonyo and Dr. Oscar Ouma Kambona for their professional advice and guidance in coming up with and conclusion of this thesis. I thank my family and the entire staff of Maseno University that made sure that the learning environment was adequately conducive.

## **DEDICATION**

I dedicate this thesis to my family for understanding the importance of education and giving me the opportunity to go to learn. I also dedicate this thesis to my loving children for being the inspiration in this journey.

## ABSTRACT

Rural tourism has grown in prominence over the last decade and is considered as a tool for revitalizing rural economies including Machakos County in Kenya. Machakos County is endowed with vast touristic resources that can be used to package rural tourism products with a view of enhancing socioeconomic development of the community in the county. Despite this, the community is still faced with socioeconomic issues at large. Previous studies have indicated positive relations between rural tourism practices and socioeconomic development. These studies, however, have mainly been done in developed economies with focus on isolated components of rural tourism yet enormous socioeconomic benefit can be realised by integrating agritourism, cultural tourism and ecotourism practices. The main objective of the study was to investigate the effects of rural tourism practices on socioeconomic development of community in Machakos County. Specifically, the study set to determine the effect of agritourism practices on socio economic development of the community in Machakos County; identify the effect of cultural tourism practices on socio economic development of the community in Machakos County; and determine the effect of ecotourism practice on socio economic development of the community in Machakos County. The study adopted a quantitative research approach with an explanatory census survey design. Self-administered questionnaires were distributed to 191 employees drawn from 31 targeted attraction sites in Machakos County. Descriptive statistics was used to understand the data as well as the demographic profile of the respondents. Multiple linear regression analysis was used to address the research objectives and test the corresponding research hypotheses. The study findings indicated that cultural tourism practices ( $\beta = .345$ ,  $t = 3.692$ ,  $p < .001$ ), ecotourism practices ( $\beta = .342$ ,  $t = 2.960$ ,  $p = .004$ ) and agritourism ( $\beta = .296$ ,  $t = 4.389$ ,  $p < .001$ ) were all significant predictors social economic development among the community living in Machakos County, Kenya. The results indicate that all the three main rural tourism practices accounted for 46.8% of the variation in socioeconomic development of community in Machakos County. It was therefore recommended that Machakos county government need to strengthen partnerships with tourism stakeholders and enhance community sensitization while the local community should join in hand together with the tourism authorities to show case their products by setting up a location whereby the tourist can make a stopover and have a look at the display of their products and cultures.

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## **ABBREVIATIONS AND ACRONYMS**

<b>AgMRC:</b>	Agricultural Resource Marketing Centre
<b>AGP:</b>	Agri-Tourism Practice
<b>CBT:</b>	Community Based Tourism
<b>CHT:</b>	Cultural and Heritage Tourism
<b>CIDP:</b>	Integrated Development Plan
<b>CLC:</b>	Country Life Commission
<b>CLM:</b>	Country Life Movement
<b>CTP:</b>	Cultural Tourism Practice
<b>ETP:</b>	Eco-Tourism Practice
<b>GDP:</b>	Gross Domestic Product
<b>GOK:</b>	Government of Kenya
<b>HDI:</b>	Human Development Index
<b>IRD:</b>	Inclusive Rural Development
<b>KRDS:</b>	Kenya Rural Development Strategy
<b>KWS:</b>	Kenya Wildlife Service
<b>MUERC:</b>	Maseno University Ethical Review Committee
<b>NACOSTI</b>	National Commission for Science Technology and Innovation
<b>NALC:</b>	National Agricultural Law Centre
<b>SD:</b>	Standard Deviation
<b>SED:</b>	Socio-Economic Development
<b>SGS:</b>	School of Graduate Studies
<b>SPSS:</b>	Statistical Package for Social Science
<b>TIES:</b>	International Ecotourism Society
<b>UNDP:</b>	United Nations Development Programme
<b>UNESCO:</b>	United Nations Educational, Scientific and Cultural Organization
<b>UNWTO:</b>	United Nations World Tourism Organisation
<b>VIF:</b>	Variance Inflation Factor

## OPERATIONALIZATION OF TERMS

**Agritourism practices:** Activities practiced with agrarian environment with the aim of attracting tourists to those areas.

**Agritourism:** A form of commercial enterprise that links agriculture and tourism in a manner that attracts visitors to farms with an aim of educating, and/or entertaining the visitors while generating income for the farm owners.

**Cultural tourism practices:** Tourism activities that focuses on includes spiritual and emotional elements such as historical and cultural heritage, arts and craft, architecture, literature, music, creative industries and living cultures with their lifestyles, value systems, beliefs and traditions.

**Cultural tourism:** Type of tourism in which people from various background visit specific destinations with rich cultural setting to attend, observe, participate, learn or enjoy cultural events of a particular ethnic group (Sampson, 2018; Quan-Baffour, 2020; Greg, 2018).

**Eco-Based Activities:** This is conceptualised in this study as those ecotourism activities undertaken in the natural set-up that has minimal effect on the environment.

**Ecotourism practices:** Activities undertaken in the spirit of ecotourism, mainly in naturally undisturbed natural environment

**Ecotourism:** An environmentally friendly travel to naturally undisturbed areas for the purpose to enjoy, appreciate and study the natural and cultural attractions in a manner that conserve the environment, encourages active participation and socioeconomic benefits the local population (International Ecotourism Society (TIES), 2015)

**Nature Based Activities:** These are activities that generally takes place in the natural environment and where elements of nature have been incorporated into built environment (Woodcock, 2017; Shanahan et al., 2019). Has been conceptualized in this study to mean any activity undertaken in the natural environment as part of recreation including eco-based activities.

**Rural tourism practices:** A subset of tourism activities such as farm/agricultural tourism, cultural tourism, nature tourism, adventure tourism, and eco-tourism.

**Rural tourism:** A type of tourism activity that anchors visitor experiences on a range of products that are generally linked to nature-based activities, agriculture, rural lifestyle/culture, angling and sightseeing in rural areas. UNWTO (2021)

**Socioeconomic development:** An increase in per capita income associated with an improvement in the indicators of the quality of life, which include access to quality water, health services, education, security, good infrastructure, employment, revenue among others (Chermyanina & Kundius, 2016; UNWTO, 2017; Giaccio, Giannelli, & Mastronardi 2018; Eshun & Tichaawa, 2020; Nematpour & Khodadadi, 2021)

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## **CHAPTER ONE**

### **INTRODUCTION**

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

Tourism is an industry is known to contribute directly and indirectly to the socioeconomic development of a destination through employment creation and revenue generation (Obonyo & Fwaya, 2012; Uniten Nations World Tourism Organisation [UNWTO], 2021, 2017; Gao & Wu, 2017; López-Sanz et al., 2021, Eshun & Tichaawa, 2020; Agayi & Gunduz, 2020). In Kenya, tourism has largely focused on two main tourism products namely wildlife and coastal beaches (Agayi & Gunduz, 2020; GOK, 2018). While most tourism destinations, including Kenya, relies on the traditional tourism like coastal and wildlife tourism (GOK, 2018), there has been increased diversification of the tourism market over the years (Agayi & Gunduz, 2020). This has been due to negative effects attributed to mass tourism such as coastal based tourism. This coupled with the need to improve tourists' experience has led to increased calls for diversification of tourism products, thereby shifting focus on rural tourism (López-Sanz et al., 2021; Agayi & Gunduz, 2020).

Rural tourism is a concept that was incepted some decades ago but has gained wider acceptance over the years as a means of revitalizing the local economy of the rural areas (Obonyo & Fwaya, 2012; Oketch, Haghiri & George, 2012; Lane & Kastenholtz, 2015; Gao & Wu, 2017; Agayi & Gunduz, 2020; UNWTO, 2021; López-Sanz et al., 2021). Rural tourism is in fact attributable to improvement and development of rural areas socially, economically, culturally and environmentally (Polo, 2010; Obonyo & Fwaya, 2012; Marzo-Navaro, 2017; López-Sanz et al., 2021; UNWTO, 2021; Singhania, Swain & George, 2022). According to Singhania et al. (2022,

p.17), “rural tourism is a vital means of rural development... and offers an alternative attraction of rurality as a diversification and regenerative strategy to bring about socioeconomic development with minimal adversity”. UNWTO (2021) in particular acknowledges the potential of rural tourism to stimulate growth of local economies due to its complementarity with other sector of the economy. It thus contributes to a country’s GDP, creates employment opportunities and facilitate the dispersal of demand in time (UNWTO, 2021). Similar sentiments are shared by Oketch et al. (2012), who argue that rural tourism plays an important role in diversifying the rural economy and contributing to the sustainability of the population and the economy of these areas. Despite this, the potential of tourism in rural areas of Kenya has largely been ignored or under-exploited in the past years (GOK, 2018; Agayi & Gunduz, 2020).

However, due to its revitalization and regeneration of the rural economy (Zou, Songshan & Peiyi Ding, 2014; UNWTO, 2021; Fagioli, Diotallevi & Ciani, 2014; Lane & Kastenzholz, 2015; Gao & Wu, 2017), rural tourism is gaining a wider popularity among various tourism destinations globally including Kenya, and more particularly, Machakos County. However, Lane and Kastenzholz (2015) noted that majority of rural tourism related studies have been conducted in developed countries, with United States leading in the research (288) followed by United Kingdom and Spain at 172. South Africa is the only featured African country at position eight with 61 of such kind of published research. This generally points to dearth of such research in developing countries, particularly Kenya in the past decade.

UNWTO (2021) defines rural tourism as a type of tourism activity that anchors visitor experiences on a range of products that are generally linked to nature-based activities, agriculture, rural lifestyle/culture, angling and sightseeing. According to Kumar (2008), rural tourism refers to those tourism practices that display the rural lifestyle including art, culture and heritage at rural locations,

the focus being enriching tourism experience. Similar sentiments are shared by Obonyo and Fwaya (2012) who contends that rural areas form an integral part of the modern tourism experience. Correspondingly, Zou et al. (2014) define rural tourism as a leisure or holiday activities based on rural tourist attractions and other resources that fashions the experience of tourists who visits such areas. According to World Tourism Organization (2017), rural tourism is not just based on agriculture and farming but it includes all the activities done in rural areas such as Farm accommodation, Farm catering, Farmer's markets, eco-tourism, shopping, skiing, biking, nature trekking, adventure, rafting, sports, hunting and fishing as well as art and history. From the definitions, rural tourism is therefore identified with practices such as agriculture, nature-based activities or eco based activities, community socio-cultural and economic practices. The aim of which isn't to only enhance the economy of the local community but also the experience of the tourists taking part in rural tourism activities and practices. Having examined the various definitions of rural tourism, this study adopts the definition put across by UNWTO (2021) with key interest on the practices and activities that makes up rural tourism.

### **1.1.1 Rural Tourism Practices**

From the foregoing above, the components of rural tourism entail a subset of tourism activities such as farm/agricultural tourism, cultural tourism, nature tourism, adventure tourism, and eco-tourism. In this regard, various studies (e.g., López-Sanz et al., 2021; Quan-Baffour, 2020; Marzo-Navaro, 2017; Gao & Wu, 2017; Lane & Kastenholtz, 2015; Buffa, 2015; Obonyo & Fwaya, 2012; Oketch et al., 2012; Irshad, 2010; McGehee & Kim, 2004) have examined rural tourism in varying perspectives worldwide. For instance, López-Sanz et al. (2021), conducted study in Soria, Spain by examining the relationship between rural tourism practices (i.e., cultural tourism and agritourism) in relation to sustainable development. They concluded that attention should be paid



on the drivers of rural tourism in a given destination in order for the destination to experience significant shift in their socio-economic status. While this study focused more on the drivers of rural tourism, and more specifically on cultural aspects, this current study focuses on the identified motivational factors including cultural and natural environment through cultural and ecotourism practices, in addition to agritourism practices.

Similarly, Quan-Baffour (2020) focused on cultural tourism as an aspect of rural tourism in Ghana. Buffa (2015), in his study concluded that motivations for tourists travel to rural areas include need to discover new cultures and artistic heritage, new natural spaces, be in contact with the local population and contact with nature. Similar thoughts are shared by Han, Kim and Kiatkawsin (2017), who points to the importance of nature and natural heritage as motivators for tourist travelling in rural areas. Obonyo and Fwaya (2012) examined rural development in Kenya by integrating tourism that focused on agritourism, nature-based tourism, community-based tourism among others and concluded that such could be used as channels for revitalizing the rural economy. Their study however does not elucidate on the effect of the said rural tourism activities on socio-economic development. From the foregoing, rural tourism practices can be broadly summarised into activities that focuses on cultural tourism, agritourism and ecotourism. This current study, therefore, focuses on rural tourism practices, namely agritourism, cultural tourism and ecotourism practices in Machakos County.

### **1.1.2 Socioeconomic Development**

Socioeconomic development is concerned with a wide variety of aspects relating to the quality of life (Momanyi, 2013). It includes references to healthcare, food, nutrition, safe drinking water, sanitation, shelter, levels of education, human rights, dignity, security and participation in political processes (Drewnowski, 1966 cited in Craigwell-Walkes; 2018). Mudida (2009) define social

economic development as an increase in per capita income associated with an improvement in the indicators of the quality of life, which include access to quality water, health services, education, security, good infrastructure, employment, revenue among others (Chermyanina & Kundius, 2016; UNWTO, 2017; Giaccio, Giannelli, & Mastronardi 2018; Eshun & Tichaawa, 2020; Nematpour & Khodadadi, 2021). The United Nations Development Programme (UNDP) uses human development index (HDI) to quantify average achievement of a country or even a county in three basic dimensions of human development namely health, education and income (UNDP, 2021). According to UNDP (2021), HDI is divided into four tiers: very high human development (0.8-1.0), high human development (0.7-0.79), medium human development (0.55-.70), and low human development (below 0.55). The average HDI value for Kenya in 2021 is 0.575, which is slightly lower than the 2019 HDI value of 0.581 (UNDP, 2021). The Machakos County Integrated Development Plan (CIDP) 2018-2022 estimates the county's HDI at 0.54 (County Government of Machakos, 2017), which falls under the low human development. This indicates that the socioeconomic development in the county is slightly lower in comparison to the UNDP set standards of 0.55 and above.

Rural tourism is, therefore, used as a tool for social economic diversification and sustainability of resources, opening up of new ways to generate income and employment opportunity for the local community, retention of economically active population and young people in rural areas and lower migration flow and establishment of infrastructural (Gao & Wu, 2017; Chermyanina & Kundius, 2016; United Nations World Tourism Organization [UNWTO], 2017). Socio-economic development is thus determined by not only income but also freedoms and opportunities that fulfil one's potential. Such opportunities include access to education, healthcare and democracy.

Studies (e.g., Letoluo & Wangombe, 2018; Chelangat, 2017) have been conducted in Kenya with a focus on the contributions of tourism activities on socio-economic development of the local community. For example, Letoluo & Wangombe (2018) evaluated the socio-economic effects of tourism development on the local community in Narok County, and revealed that the local communities are not fully involved in policy formulation process and most stakeholders do not consider the socio-economic impacts of tourism development on the local community. Their study however, focused on tourism generally and not a critical aspect of the rural economy of Narok County such as rural tourism. Its therefore not clear as to what aspects of tourism should be considered or developed and how these affect the socio-economic development of the local community.

Chelangat (2017) on the other hand examined the contribution of rural tourism initiatives to financial, social, natural and physical capital assets of the community living in Mara Triangle. The study concludes that rural tourism practices initiatives contribute significantly to all the elements of capital assets of the local community. Just like Letoluo and Wangombe (2018), Chelangat (2017) study does not streamline the rural tourism practices and is not clear as to what are the rural tourism practices and how do they affect socioeconomic development.

### **1.1.3 Rural Tourism Practices and Socioeconomic Development**

Extant research (e.g., López-Sanz et al., 2021; Eshun & Tichaawa, 2020; Nooripoor, Khosrowjerdi, & Rastegari, 2020; Gao & Wu, 2017; Lane & Kastenholz, 2015; Barbieri, 2013; Irshad, 2010; Nthiga et al., 2015) has previously linked rural tourism practices to rural development through its auxiliary roles of using and valorising rural areas, countryside and culture. Gao and Wu (2017), for instance, contend that rural tourism is still a vigorous trend throughout the world, which should not be understood merely as a form of tourism, but also as a tool for the

regeneration rural economy and conservation rural culture. These sentiments basically point to the link between rural tourism and socio-economic development of the local populace. In support, Nooripoor et al. (2020) analysed the role of tourism in rural development and found positive significant linkage between the two. Majority of these studies, however, have been done in developed countries.

Moreover, Nthiga et al. (2015) established that rural tourism practices contributes to the community livelihoods, both socially and economically, as well as environmental conservation. Lane and Kastenholz (2015) contend that rural tourism relates to socioeconomic development in two basic ways. First, it provides employment opportunities to rural inhabitants who in turn earn income that they would use to improve their living standards. Secondly, they note that rural tourism entails recycling and revalorizing existing rural infrastructure and as well as heritage resources which act as tourist accommodations and attractions (Lane & Kastenholz, 2015). Similar sentiments are shared by Gao and Wu (2017) who considers the combination of rurality with tourism as an effective global development path. The implication of these sentiments is that rural tourism practices would generally translate to socioeconomic development of a tourism destination. Other studies (e.g., Barbieri, 2013) while advocating for rural tourism, still cast doubts on the link between rural tourism and sustainable valorised countryside.

#### ***1.1.3.1 Agritourism and Socioeconomic Development***

Agritourism also called agrotourism is a form of rural tourism that blends agriculture and tourism (Addinsall, Scherrer, Weiler, & Glencross, 2017; Nematpour & Khodadadi, 2021). The National Agricultural Law Center (NALC) describe agritourism is form of commercial enterprise that links agriculture and tourism in a manner that attracts visitors to farms with an aim of educating, and/or

entertaining the visitors while generating income for the farm owners. The popularity of agritourism worldwide as a tool for rural development has increased in the recent years making agriculture an activity that not only focuses on food production but also an attraction activity for tourists in various destinations.

As a result, various studies (e.g., Barbieri, 2013; Eshun & Tichaawa, 2020; Nematpour & Khodadadi, 2021) have examined the role of agritourism in diversifying income of the rural populace and revitalizing rural economies in various contexts. Barbieri (2013) for instance analysed agritourism by assessing its sustainability in the US. The study while focusing on agritourism sustainability, captured socio-economic development aspects of the local community as part of assessing the suitability. The result of the study indicates that in comparison to other entrepreneurial farms, agritourism had a significant economic benefit to the surrounding communities. Barbieri (2013) study further indicates that agritourism produces significantly more sociocultural benefits by engaging in the preservation of rural heritage.

Although the study focused on agritourism sustainability, Barbieri (2013) still questions the link between rural tourism and sustainable ruralised countryside, implying the need for further studies on these two phenomena. The study also focused on rural tourism in a developed country with different contextual set up from that of Kenya and Machakos County in particular. The focus here was also purely on comparison between agritourism and other farm entrepreneurs and their effect on socio-economic development aspects. The study mainly points out the relevancy of agritourism in revitalizing rural economies both socially and economically but does not depict the effect agritourism has on socioeconomic development of local community.

A more recent study by Eshun and Tichaawa (2020), found similar results with regard to agritourism and socioeconomic development of local community. In their study, they revealed that development of cocoa agrotours had a potential socio-economic benefit to the local community in Ashanti, Ghana. Despite this, Eshun and Tichaawa (2020), however, cautions that such agritourism alone should not be seen as a panacea to rural poverty alleviation. The implication here is that to achieve a state of poverty alleviation, then the community must acquire some level of socioeconomic development which cannot purely be realised by relying on agritourism alone. This therefore, means that to achieve socioeconomic development at the local level through rural tourism, then many other rural tourism practices should be considered.

### ***1.1.3.2 Cultural Tourism Practices and Socioeconomic Development***

Cultural tourism as an element of international tourism accounts for 39% of the global tourist arrivals (Greg, 2018; UNWTO, 2017). Cultural tourism refers to type of tourism in which people from various background visit specific destinations with rich cultural setting to attend, observe, participate, learn or enjoy cultural events of a particular ethnic group (Sampson, 2018; Quan-Baffour, 2020; Greg, 2018). Okumus et al. (2012) defines it as all the movements of people outside their normal place of residence to specific cultural attractions that may include heritage sites, artistic and cultural manifestations, arts and drama. The UNWTO (2017, p. 18) defines cultural tourism as the "...type of tourism activity in which the visitor's essential motivation is to learn, discover, experience and consume the tangible and intangible cultural attractions or products in a tourism destination". It is therefore a form of experiential tourism focusing on the search for and participation in new and deep cultural experiences of an aesthetic, intellectual, emotional or psychological nature (Quan-Baffour, 2020). According to UNWTO (2017) it includes spiritual and emotional elements such as historical and cultural heritage, arts and craft, architecture, literature,

music, creative industries and living cultures with their lifestyles, value systems, beliefs and traditions. Yanev and Zlatarov (2017) in their study examined cultural tourism based on material and intangible elements which included historical landmarks, works of art, painting, music, architecture, museums, language, education, clothing, religion and rituals, crafts and folklore.

Various authors (e.g., Obonyo & Fwaya, 2012; Sampson; 2018; Adom, 2017, 2019; Quan-Baffour, 2020; 2019; Yanev & Zlatarov, 2017; UNWTO, 2017; Petkova, 2017) have acknowledged the contribution of cultural tourism practices to socio economic development of a destination. Obonyo and Fwaya (2012), for instance, attributes cultural tourism to economic attributes such as creation of employment opportunities, entrepreneurship and income generation. Their study despite pointing to the for cultural tourism in revitalization of the rural economy, was qualitative in nature and does not clearly show the effect of cultural tourism on socio-economic development of the local populace.

Similar sentiments are shared by other more recent studies (e.g., Quan-Baffour, 2020, 2019; Adom, 2019; Petkova, 2017; Sampson, 2018) who contend that cultural tourism other than improving the local economic conditions, also serves as an avenue for propagating the rich cultural heritage of local communities. In this view, Greg (2018, p. 2) perceives that cultural tourism is driven by the ‘heritage boom’ implying that for a region to attract cultural oriented tourists, it must have a well-established heritage. While Machakos County has bounty of cultural heritage, including handicraft, traditional song, folklore and dances, it’s not clear as to how these contribute to the socioeconomic development of the communities living in Machakos County given the different cultural set up from other regions studied before.

### ***1.1.3.3 Ecotourism Practices and Socioeconomic Development***

The term ecotourism is attributed to Hector Ceballos-Lascurain who describe it as “that tourism that involves travelling to relatively undisturbed or uncontaminated natural areas with the specific object of studying, admiring and enjoying the scenery and its wild plants and animals” (Ceballos-Lascurain, 1987, p. 13). On a similar note, Ecotourism Kenya (2021) defines ecotourism as the active participation of tourists in environmental conservation activities in a manner promotes socioeconomic wellbeing of the local communities. Similar definition has been presented by other authors (e.g., Agyeman, Yeboah, & Ashie, 2019; Noll et al., 2019; International Ecotourism Society (TIES), 2015) who describes ecotourism as an environmentally friendly travel to naturally undisturbed areas for the purpose to enjoy, appreciate and study the natural and cultural attractions in a manner that conserve the environment, encourages active participation and socioeconomic benefits the local population.

Various studies (e.g., Forje, Tchamba & Eno-Nku, 2021; Agyeman et al., 2019; Noll *et al.*, 2019; Sherpa & Kharel, 2019; Harilal & Tichaawa, 2018; Lonn, Mizoue, Ota, Kajisa, & Yoshida, 2018; Sharma et al., 2018; Chirenje, 2017; Regmi & Walter, 2017; Langoya & Long, 2016; Nsukwini & Urmilla, 2016; Venkatesh & Gouda, 2016) have examined ecotourism using rural development perspectives. Majority of these studies conclude that ecotourism plays acritical role in enhancing the socioeconomic development of the local community through various ecotourism activities and practices. Noll *et al.* (2019) in particular opines that through ecotourism practices, local community can be integrated in service delivery process in form of tour guides, farmers, artisans, among others and in turn benefit socioeconomically. Similar sentiments are shared by Nsukwini and Urmilla (2016) who contend that ecotourism practices result to socioeconomic regeneration of rural populace through employment, revenue generation and poverty alleviation mechanisms.



While these studies point to the possibilities of ecotourism having a link with socioeconomic development local community, these extant studies do not provide a clear link of this relationship and therefore not clear as to whether ecotourism practices affects socioeconomic development, particularly in Machakos county.

## **1.2 Statement of the Problem**

The tourism industry is known for its ability to contribute directly and indirectly to the socioeconomic development of a destination through employment creation and revenue generation. In Kenya, tourism focus has mainly been on two main traditional products namely, wildlife and coastal beaches which are attributed to negative social and environmental effects as well as lack of enhanced tourists' experience. In addition to this, the potential of tourism in rural areas of Kenya has largely been ignored or under-exploited in the past decades. These has led to increased calls for diversification of the tourism products in various tourism circuits in Kenya. The result has been a shift to tourism products that are developed and consumed in the rural areas such as cultural tourism, agritourism and ecotourism thereby propagating the concept of rural tourism in various counties in Kenya, including Machakos County.

Machakos County largely boast of pristine environment, and cultural settings that allows for rural tourism practices to take place. Given the role of rural tourism in revitalizing the socioeconomic conditions of the local populace, the county is, however, experiencing indefinite number of socioeconomic and environmental challenges. These include land degradation, inequality development, conflicts generated by wildlife, food and long drought calamities, water shortage, insecurity, famine, poverty, lack of education and diseases etc. This is evidenced by the counties low HDI value of 0.54 in comparison to the national HDI value of 0.575 for Kenya in 2021 and the UNDP HDI value of 0.55, which indicates low human development.

The shift in demand for tourism that enhances tourists' experiences such as rural tourism has profound implications for the opportunities to enhance socio economic development of the rural populace given that the majority of these tourism practices such as agritourism, cultural tourism and ecotourism takes place in the countryside. The implication is that key attention should be given to rural tourism practices that enhance socioeconomic development of the local populace. Many studies have, therefore, been dedicated to investigating these phenomena and their effects on socioeconomic development. While Machakos presents opportunities for rural tourism, such studies if any are minimal in Machakos County. Similar studies have also been conducted in disjointed manner, without considering an integrated approach of the three aspects of rural tourism practices, namely agritourism, cultural tourism and ecotourism and their effects on socioeconomic development from a developing country's perspective. This study therefore examines the combined effect of agritourism, cultural tourism and ecotourism on socioeconomic development of communities living in Machakos County.

### **1.3 Research Objectives**

#### **1.3.1 Main objective**

The overall objective of the study was to investigate the effects of rural tourism practices on socio economic development of the community living in Machakos County, Kenya

#### **1.3.2 Specific Objectives**

- 1) To determine the effect of agritourism practices on socio economic development of the community in Machakos County, Kenya
- 2) To identify the effect of cultural tourism practices on socio economic development of the community in Machakos County, Kenya

- 3) To determine the effect of ecotourism practice on socio economic development of the community in Machakos County, Kenya

#### **1.4 Hypotheses of the Study**

**H<sub>01</sub>:** Agritourism practices has no significant effect on socio economic development of the community living in Machakos County, Kenya

**H<sub>02</sub>:** Cultural tourism practices has no significant effect on socio economic development of the community living in Machakos County, Kenya

**H<sub>03</sub>:** Ecotourism practice has no significant effect on socio economic development of the community living in Machakos County, Kenya

#### **1.5 Significance of the Study**

The importance of rural tourism practices is accentuated globally by every country in the world. Therefore, the study will be important to various tourism stakeholders, which include scholars, government and county policy makers, tour operators and tourism practitioners. The findings from this research will be used as decision support tools that can help Machakos County and other counties in identifying effects of rural tourism practices on socioeconomic development. The finding can be used by the county government in their strategic planning initiatives focusing on socioeconomic development. It will inform policy planners on relevancy of rural tourism on development initiatives.

Further, the study contributes to the body of knowledge regarding the debate on rural tourism and socioeconomic development of a destination by providing insights on the nature of the relationship and effects between the two main research constructs, i.e., rural tourism and socioeconomic development. The findings of the study serve as instrument for future researchers in the related

field to gather and analyse information on rural tourism practices and socio-economic development. It adds substantial contribution to the inconclusive discussion on rural tourism and socioeconomic development. It will, therefore, offer a new conceptualization and empirical evidence to academician and researchers alike, which seem limited in the extant literature.

### **1.6 The Scope of the Study**

The study focused on rural tourism practices and socio-economic development in Machakos County. The study geographical scope was the eight Sub Counties of Machakos County namely Kangundo, Kathiani, Masinga, Machakos Town, Yatta, Mwala, Mavoko and Matungulu. The study primarily focused on three rural tourism practices namely agritourism, cultural tourism and ecotourism and therefore should be interpreted based on the study variables.

### **1.7 Limitations of the Study**

Limitations of a study are the hurdles a researcher encounters and which he/she has no control over (Kombo, 2006). During data collection, the researcher was faced with some difficulties. Respondents had busy schedule resulting in delayed responses, as there was extreme sluggishness in filling the circulated questionnaires. To mitigate this limitation, the researcher made follow up phone calls to politely remind the respondents to fill the questionnaires.

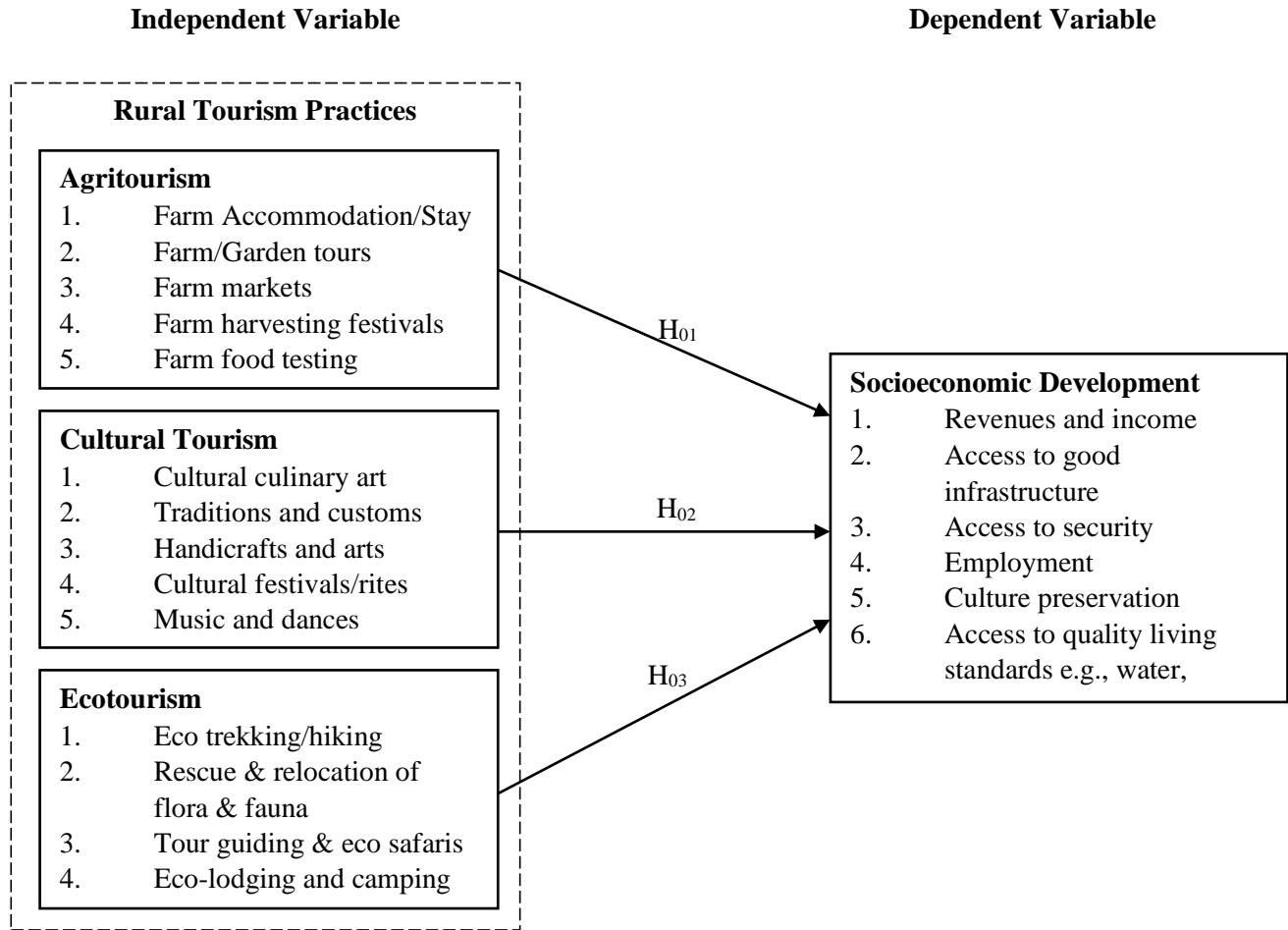
The other limitation was that some respondents were reluctant in providing the information needed which basically led to delayed responses already mentioned above. To counter this, the respondents were assured of confidentiality and that their names would not feature anywhere. This was achieved through number coding of the questionnaires.

## **1.8 Assumptions of the Study**

The research was carried out with the assumption that all the targeted respondents were honest and truthful with their responses to enable the researcher make prudent conclusion on the topic of research.

## **1.9 Conceptual Framework**

Conceptual Framework is a model identifying the relationship between the dependent and independent variables (Black, Hair, Babin & Anderson, 2010). The goal of a conceptual framework is to categorize and describe concepts relevant to the study and map relationships among them (Tromp, 2012). On the basis of the large body of literature review, the conceptual model is designed to explore and assess the relationship level between rural tourism practices and socioeconomic development of the community living in Machakos County. The model has got two groups of variables which include dependent and independent variables. In this study rural tourism practices were the independent variable and can be thought of as an umbrella concept that encompass agritourism practices, cultural tourism practices and ecotourism practices. Socioeconomic development is the dependent variable that is measured using income generation, employment creation among other measures as indicated on Figure 1. In this model, it is hypothesised that rural tourism practices (agritourism, cultural tourism and ecotourism) predict socioeconomic development.



**Figure 1 Relationship Between Rural Tourism Practices and Socioeconomic Development (Author, 2022)**

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1 Chapter Overview**

This chapter focuses on theoretical review by discussing and reviewing relevant theories applicable in this study. It then presents literature review drawn from empirical studies of similar nature by critically analysing the literature and presenting the arguments to bring out the research gaps.

#### **2.2 Theoretical Review**

While many theories exist with regard to tourism and development, tourism has for long been examined through the lens of development theory (Sharpley, 2022, Telfer, 2015; Harrison, 1992, 2014, 2015). The notion of development theory in this regard has been two-pronged, tourism development in itself and the outcome of tourism development to the local community. The latter has been the focus of many studies in the past decades with key emphasis being tourism practices and projects translate to development of a destination (Sharpley, 2003, 2022; Sharpley & Knight, 2009; Sharpley & Telfer, 2015; Telfer & Sharpley, 2016). Development theory and its application to tourism is initially attributed to the works of David Harrison (Harrison, 1988). However, over the years numerous attempts have been made to discuss the trajectory of development theory (Harrison 1988; Mowforth & Munt, 2016; Sharpley & Knight, 2009; Telfer 2015) with different theories coming up. Key among these include modernisation theory, underdevelopment or dependency theory, sustainable development theory and theory of inclusive rural development.

### **2.2.1 Modernisation Theory**

Modernisation theory as a development theory became the dominant perspective in the mid-1970s through 1980s (Sharpley, 2022). Modernization is the term used for the transition from the traditional society of the past to modern society as it is found today in the West (Harrison, 1988). This theory which is attributed to many proponents (e.g., Eisenstadt, 1966; Levy, 1966; Frank, 1966; Harrison, 1988; Inglehart, 1997; Roberts & Hite, 1999) focuses on a nation state in terms of stages of growth, diffusion (growth poles and trickle down) and state interventions. This theory is dominated by western economic models and based on this, developing societies are judged to be developing if they are on the same route as the West (Sharpley, 2022). Despite its popularity in many development studies, there is little use of this theory in tourism research (Harrison, 2015; Sharpley, 2022). Tourism studies that explicitly used a modernisation perspective focused on small islands including the Pacific islands (MacNaught, 1982), the Crete (Andriotis, 2003) and Cyprus (Sharpley, 2003). According to Sharpley (2022), modernisation theory rather offers insights into discussions relating to outcome of tourism development in a tourism destination including commodification, and authenticity challenges. Modernisation theory has also been criticised for overlooking underdeveloped areas and in so doing came the underdevelopment (world systems) theory.

### **2.2.2 Underdevelopment Theory**

Underdevelopment theory also known as dependency theory (Sharpley, 2022) focuses on global system. According to this theory, undeveloped societies are underdeveloped because of the West and that underdevelopment occurs due to unequal exchange (Sharpley, 2022; Frank, 1966). The dependency theorists (e.g., Wallerstein, 1979; Frank, 1966) espouses that a condition of underdevelopment is not intrinsic to a particular society or country, as seen in the modernisation



theory. The proponents of this theory instead contend that development or underdevelopment is a reflection of both internal and external systems and structures that hold them together in a dependent position in comparison to developed countries (Wallerstein, 1979; Frank, 1966). They contend that when it comes to international tourism system, developing countries are susceptible to transnational organisations that exploits such destinations through profit repatriation or leakages associated with imports that cannot be produced locally (Sharpley, 2022). Unlike modernisation theory, underdevelopment theory has found explicit application in tourism studies (Harrison, 2015; Telfer, 2015; Sharpley, 2022). Sharpley (2022), however, notes that underdevelopment theory is adopted by critiques of the role of tourism in development. This theory has, though, been criticised for not being able to explain why some counties are able to achieve socioeconomic development (Harrison, 2015; Sharpley & Knight, 2009). According to Harrison (2015, p. 63), this theory despite being “adopted by groups and movements opposed, in particular, to mass tourism” has failed to explicitly explain the relationship between tourism and development (Sharpley, 2022). Harrison (2015, pp. 65–66) in fact comments that:

“Modernisation theory and underdevelopment theory ...along with environmentalism and sustainable development, have all been found wanting. They continue to co-exist ...but none dominate current development thinking, and for some time attention has been focused on lower level aims and objectives, for example, poverty alleviation, gender equality and basic needs.” (Harrison, 2015, pp. 65–66)

### **2.2.3 Inclusive Rural Development Theory**

The theory of inclusive rural development (IRD) can be traced back to the early twentieth century with the appearance of the Country Life Movement (CLM) in the US. CLM was a social movement

concerned with improving the standard of living in rural areas (Phifer, 1990). This movement was later crystallised into the constitution of the country life commission (CLC) whose main task was to analyse the problems of rural areas and advise the president on the possible solutions (Roth, 2011). In the process, programs were initiated that advocated for local people to take active role in improving their own quality of life. Inclusive development focuses on socioeconomic development and implementation of systems that that unites society towards compliance with the standards and principles of human rights (Sachs, 2004). It therefore implies that inclusive rural development takes into consideration the participation of the rural populace in the development process and practices (in this case rural tourism practices) to enhance their socioeconomic wellbeing (Borodina & Prokopa, 2019). The main focus is on income and employment, general health improvement, infrastructure development, improvement of education standards and environmental conservation. This coincides with the essential features of rural development that focuses on improvement of welfare, quality of life and living standards of the rural population basing on growth of rural economy, environmental conservation and expansion of peoples' access to basic services such as education and health (Borodina & Prokopa, 2019).

The theory of inclusive rural development (IRD) therefore acknowledges that the promotion of the socioeconomic development of community in rural areas requires recognizing the fact that local people themselves are the main implementors of development projects (Borodina & Prokopa, 2019). These projects in this context would include various rural tourism practices such as agritourism, cultural tourism and ecotourism. For this reason, the current study therefore uses this theory to explain the relationships amongst the study variables namely rural tourism practices (agritourism, cultural tourism and ecotourism) and socioeconomic development.

## **2.3 Empirical Review**

### **2.3.1 Rural Tourism Practices**

Since its inception decades ago, rural tourism as a concept has gained wider acceptance over the years as a means of revitalizing the local economy of the rural areas (Singhania et al., 2022; López-Sanz et al., 2021; UNWTO, 2021; Gao & Wu, 2017; Lane & Kastenholz, 2015; Nthiga et al., 2015; Zou et al., 2014; Fagioli et al., 2014; Ivolga, 2014; Obonyo & Fwaya, 2012). Due to its revitalization and regeneration of the rural economy (Singhania et al. 2022; UNWTO, 2021; Zou et al., 2014; Fagioli et al., 2014), the concept has been widely advanced among various tourism destinations globally including Kenya.

In this regard, various authors have attempted to give meaning to the concept of rural tourism. According to Ivolga (2014), rural tourism is a kind of activity, related to organization of dedicated travels to rural areas, which provides tourists with a complex tourist product (accommodation, meals, excursion services and entertainment), reflects and preserves the natural and cultural identity of regions and ensures economic benefits for the host communities through creation of employment opportunities and alternative sources of income. UNWTO (2021) defines rural tourism as a type of tourism activity that anchors visitor experiences on a range of products that are generally linked to nature-based activities, agriculture, rural lifestyle/culture, angling and sightseeing. These activities include farm tours, farm accommodation, farm catering, farmer's markets, ecotourism, shopping, skiing, biking, nature trekking, adventure, rafting, sports, hunting and fishing as well as art and history (UNWTO, 2017).

On a similar note, Kumar (2008) and Gao and Wu (2017) relates rural tourism to those tourism practices that display the rural lifestyle including art, culture and heritage at rural locations, the focus being enriching tourism experience. Correspondingly, Zou et al. (2014) define rural tourism

as a leisure or holiday activities based on rural tourist attractions and other resources that fashions the experience of tourists who visits such areas. These corroborates the thoughts various authors (e.g., Greg, 2018; Chermyanina & Kundius, 2016; Obonyo & Fwaya, 2012) who contends that rural areas form an integral part of the modern tourism experience. From the definitions, rural tourism is therefore identified with practices or activities related to agritourism/agrotourism (Nematpour & Khodadadi, 2021; López-Sanz et al., 2021; Eshun & Tichaawa, 2020; Giaccio et al., 2018; Addinsall et al., 2017; Flanigan et al., 2015; Obonyo & Fwaya, 2012), cultural tourism (López-Sanz et al., 2021; Quan-Baffour, 2020; Adom, 2019; Greg, 2018; Sampson, 2018; Yanev & Zlatarov, 2017; Petkova, 2017; Obonyo & Fwaya, 2012), ecotourism (Forje et al., 2021; Noll *et al.*, 2019; Sherpa & Kharel, 2019; Agyeman et al., 2019; Sharma et al., 2018; Harilal & Tichaawa, 2018; Lonn et al., 2018; Chirenje, 2017; Regmi & Walter, 2017; Nsukwini & Urmilla, 2016; Langoya & Long, 2016; Venkatesh & Gouda, 2016).

### **2.3.2 Rural Tourism and Socioeconomic Development**

A number of studies (e.g., Singhania et al., 2022; Irshad, 2010; López-Sanz et al., 2021; Obonyo & Fwaya, 2012; Marzo-Navaro, 2017; Oketch et al., 2012; Lane & Kastenholtz, 2015; McGehee & Kim, 2004) have been dedicated to the understanding the role of rural tourism worldwide. Rural tourism has, therefore, been examined previously as a tool for improvement and development of rural areas using the social, economic, cultural and environmental lenses (Singhania et al., 2022; López-Sanz et al., 2021; Nooripoor et al. 2020; Marzo-Navaro, 2017; Ivolga, 2014; Polo, 2010).

López-Sanz et al. (2021), for instance examined rural tourism in relation to sustainable development goals in Soria, Spain. They collected and analysed survey data from rural tourists using structural equation modelling to identify variables that have the most influence on tourist behaviour. Their study was, however, interested only on investigating the motives for visitation to

rural areas with the believe that if attention would be paid to the motives that drive tourists to rural tourism destinations, then these destinations would experience significant shift in their socioeconomic status. While their study does provide details on what aspects of rural tourism should be considered, it fails to detail how these affect the rural socioeconomic aspects of the people living in rural areas. Its therefore not enough to just identify rural tourism practices, but further studies need to be conducted to investigate the effects of these practices on socioeconomic development at the local level.

Nooripoor et al. (2020) in their study found a positive notable linkage between rural tourism rural development in Iran. They however, contend that this relationship cab be enhanced by integrating local forces and tourism projects and encouraging local people to take part in tourism activities. This imply that greater socioeconomic development as part of rural development can be attained by integrating various forms of rural tourism and encouraging the local community to take part in them.

From the Kenyan perspective, Obonyo and Fwaya (2012) did a qualitative study on the possibilities of integrating tourism with rural development in western Kenya and found that various subsets of tourism that focuses on rural tourism practices and activities such as agriculture (through agritourism), nature-based activities (through nature-based tourism), community-based tourism among others could be used as channels for revitalizing the rural economy in Western Kenya. Their study was however exploratory in nature through an array of focus group discussions. The study also did not indicate clearly the nature of the effect of the said rural tourism practices on socioeconomic development. Comparable thoughts are shared by Oketch et al. (2012), who opine that rural tourism plays an important role in the diversification of rural economy as well as contribution to the sustainability of the population and the economy of these areas. Oketch et al

examined rural tourism as a sustainable development alternative in Luanda, Kenya. They concluded that rural tourism initiatives offer many financial opportunities to small formal and informal entrepreneurs in Luanda. Their findings just like that of López-Sanz et al. (2021) are also too general and also like that of Obonyo and Fwaya, were qualitative in nature. It would therefore be important to examine the specific effects of rural tourism practices on socioeconomic development using a quantitative lens by integrating local forces and various forms of rural tourism as suggested by Nooripoor et al. (2020)

### ***2.3.2.1 Agritourism and Socioeconomic Development***

Agritourism is component of rural tourism that blends two sectors namely agriculture and tourism (Addinsall et al., 2017; Nematpour & Khodadadi, 2021). It focuses on agricultural activities and practices with an aim of attracting tourists. These include tourism products that are connected with the agrarian environment and products as well as agrarian stays (Mahmoodi, Roman & Prus, 2022; Petrović et al., 2017; Sharpley & Sharpley, 1997). According to Lane and Kastenholtz (2015), agritourism also known as farm holidays, or farm-based tourism (Nematpour & Khodadadi, 2021) is considered an early modern type of rural tourism. It involves staying on a working farm, or, for day visitors, making farm visits (Lane & Kastenholtz, 2015; Flanigan, Blackstock, & Hunter, 2015; Addinsall et al., 2017; Nematpour & Khodadadi, 2021). According to Barbieri and Mshenga (2008), this subset of rural tourism offers a broad range of services ranging from hospitality related services (such as bed and breakfast, food services, farmers markets and farm stays) to farm-based recreational activities (such as fishing, horse riding, recreational self-harvest, and u-pick fruits or vegetables). It also includes education and training related activities that emphasises on personal field experiences, and a variety of extractive (e.g., hunting) and non-extractive (e.g., nature observation) farm recreation activities (Mahmoodi et al., 2022; Barbieri & Mshenga, 2008).

National Agricultural Law Center (NALC) defines agritourism as “a form of commercial enterprise that links agricultural production and/or processing with tourism to attract visitors onto a farm, ranch, or other agricultural business for the purposes of entertaining and/or educating the visitors while generating income for the farm, ranch, or business owner”.

A number of studies (e.g., Mahmoodi et al., 2022; Nematpour & Khodadadi, 2021; Eshun & Tichaawa, 2020; Giaccio et al., 2018; Addinsall et al., 2017; Petrović et al., 2017; Flanigan et al., 2015; Tew & Barbieri, 2012; Barbieri, 2013; Schilling, Attavanich, & Jin, 2014; Schilling, Sullivan & Komar, 2012; Barbieri & Mshenga, 2008) have been dedicated to understanding the role of agritourism in diversifying income of the rural populace and revitalizing rural economies in various contexts. Schilling et al. (2014), in their study examined the relationship between agritourism and firm profitability. However, their study purely focused on analysis of agritourism at firm level by focusing on profitability of such firms and did not examine other socioeconomic parameters which are considered significant socioeconomic development indicators of agritourism (Craigwell-Walkes, 2018).

Other studies have measured agritourism practices using a wide variety of activities and services, including leisure and educational tours, nature contemplation, U-pick vegetables/fruits, on-farm lodging/farm stays, hunting and fishing for a fee, on-farm sales and gift shops, lodging and food services among others (Mahmoodi et al., 2022; Nematpour & Khodadadi, 2021; Addinsall et al., 2017; Petrović et al., 2017; Flanigan et al., 2015; Barbieri, 2013; Tew & Barbieri, 2012). Barbieri (2013) for example conducted a study on agritourism and sustainability in the United States. By conducting a web-based survey with 873 US farms, the study found that in comparison to other entrepreneurial farms, agritourism had a significant economic benefit in terms of generating more revenues, and profits, as well as employment creation to the surrounding communities. While this

study was interested in rural tourism through agritourism, its main focus was on sustainability of agritourism itself despite the end results or targeted outcomes being development of local community. Similar results were reported by Tew and Barbieri (2012), who opines that development of agritourism increases value and revenue of a farm, which in turn supplement the economic requirements of rural families. Barbieri (2013) results also suggested that agritourism produces significantly more sociocultural benefits by engaging in the preservation of rural heritage. The results further point to the positive significance of agritourism to improvement of wildlife habitat and water conservation. The study however focused on rural tourism in a developed country with different contextual set up from that of Kenya and Machakos County in particular. The focus here was purely on agritourism and other farm entrepreneurs. These two studies while uploading the relevancy of agritourism in rural development, does not clearly indicate how agritourism affects socioeconomic development of the population investigated.

Similar results have also reported by Eshun and Tichaawa (2020), who conducted a mixed method research with 120 people selected from four communities in Ashanti in Ghana. Their focus was on cocoa agritours. Their findings also revealed a significant role of agritourism on socioeconomic benefit to the local community in Ashanti, Ghana. The study however, caution that the findings may not be taken to literally mean that cocoa agritourism would lead to poverty alleviation. This imply that other elements of rural tourism may need to be factored in including cultural components as well as components from the natural environment. It would therefore be important to include other aspects of rural tourism and assess their combined effect on socioeconomic development of rural populace.

Nematpour and Khodadadi (2021) surveyed 370 farmers/suppliers through farm visits and e-mail, to investigate their opinions about the socioeconomic impacts of farm tourism in Iran. They applied



multivariate regression analysis to analyse the data collected. The findings revealed that agritourism affected major factors of socioeconomic development namely income generation, thriving local economy, quality of life improvement, community participation, building business competitiveness, learning and educational activities improvements, and cultural development. Giaccio et al. (2018) further demonstrated that agritourism in Italy would impact the local economy through direct selling of farm produce to agritours, food service and public subsidies. Given the contextual differences of the previous studies and the current studies as well as different agritourism practices, the extent of this effect may vary significantly in the context of Machakos County. This contextual difference is emphasised by Mahmoodi et al. (2022). In their study, Mahmoodi et al. (2022) acknowledges the contribution of agritourism to socioeconomic development but argue that the level of contribution would vary in different environmental set up characterised by different culture and agritourism activities. Similar sentiments are shared by Petrović et al. (2017) who argue that the competitive environment of the rural stakeholders is a key consideration to agritourism practices in rural areas and the eventual socioeconomic outcome of such practices. The implication of this is that the benefits of agritourism socioeconomically would vary from one destination to another depending on various factors.

### ***2.3.2.2 Cultural Tourism Practices and Socioeconomic Development***

Cultural and heritage tourism as a component of rural tourism offers an enormous arena within which rural heritage and culture play a robust role (Lane & Kastenholz, 2015; Gerg, 2018; Sampson, 2018). In fact, cultural tourism as an element of international tourism accounts for 39% of the global tourist arrivals (Lane & Kastenholz, 2015; Greg, 2018; UNWTO, 2017). Cultural tourism refers to type of tourism in which people from various background visit specific destinations with rich cultural setting to attend, observe, participate, learn or enjoy cultural events

of a particular ethnic group (Sampson, 2018; Quan-Baffour, 2020; Greg, 2018). Okumus et al. (2012) defines it as all the movements of people outside their normal place of residence to specific cultural attractions that may include heritage sites, artistic and cultural manifestations, arts and drama. The UNWTO (2017, p. 18) defines cultural tourism as the "...type of tourism activity in which the visitor's essential motivation is to learn, discover, experience and consume the tangible and intangible cultural attractions or products in a tourism destination". Yanev and Zlatarov (2017, p. 373) define culture as 'a multiplicity of distinctive spiritual, material, intellectual and emotional traits of a society or a social group'. According to Yanev and Zlatarov (2017) it entails art and literature, ways of life (e.g., farming, dressing, language, religion, symbols, artifacts and festivals), cohabitation, value systems, traditions and beliefs. It is therefore a form of experiential tourism focusing on the search for and participation in new and deep cultural experiences of an aesthetic, intellectual, emotional or psychological nature (Quan-Baffour, 2020). According to UNWTO (2017) it includes spiritual and emotional elements such as historical and cultural heritage, arts and craft, architecture, literature, music, creative industries and living cultures with their lifestyles, value systems, beliefs and traditions. Yanev and Zlatarov (2017) in their study examined cultural tourism based on material and intangible elements which included historical landmarks, works of art, painting, music, architecture, museums, language, education, clothing, religion and rituals, crafts and folklore.

The link between cultural tourism and socioeconomic development has been examined by various authors (e.g., Obonyo & Fwaya, 2012; Sampson; 2018; Adom, 2017, 2019; Quan-Baffour, 2020; 2019; Yanev & Zlatarov, 2017; UNWTO, 2017; Petkova, 2017) in different destination context. Majority of these researchers agree that cultural tourism serves as channels for propagating the rich cultural heritage of local communities and at the same time improving the local socioeconomic

conditions. Obonyo and Fwaya (2012) examined cultural and heritage tourism (CHT) as a component of rural tourism in western Kenya. In their qualitative study, they concluded that if cultural tourism is properly planned and coordinated, it will benefit the community through creation of employment opportunities, entrepreneurship and income generation. Obonyo and Fwaya (2012), however, does not show the clear link between cultural tourism and socioeconomic development given the nature of their study.

Sampson (2018), examined cultural tourism by focusing on role of over 30 traditional festivals and events celebrated by different ethnic groups at different calendar months in Ghana. Sampson (2018) affirms the key role played by cultural tourism in generating foreign exchange earnings and creating jobs. While this study attempts to show the link between cultural tourism and socioeconomic development attributes, it purely focuses on traditional festivals as the only attribute of culture. Different destinations would have different cultural attributes that not only focus on traditional festivals but also other aspects of culture and heritage. In this view, Greg (2018, p. 2) notes the relevancy of ‘heritage boom’ in cultural tourism implying that for a region to attract cultural oriented tourists, it must have a well-established heritage. Greg (2018) however, fails to provide a clear link between heritage boom and socioeconomic development of local communities. Their study is more focused on development of cultural tourism rather than the socioeconomic outcome of such tourism development in a destination.

To overcome such notions, Quan-Baffour (2020) attempted to examine the link between cultural tourism and socioeconomic development of local community in Ghana. Quan-Baffour (2020) conducted qualitative-ethnographic research where interviews and participant observation were employed in investigation of *Apo* festival as a cultural tourism in Ghana. The study revealed that *Apo* festival had a positive impact on the socio-economic development of the Bono Takyiman

Municipality. This study despite showing positive results of cultural tourism on socioeconomic development had narrowly focused on *Apo* festivals alone, which is mainly found in Ghana. Similarly, Adom (2017, 2019) examined the role of cultural tourism through Apo traditional festivals of Bono Takyiman in Ghana. These studies only focused on the biodiversity and environmental conservation through the traditional festivals. While Machakos County has bounty of cultural heritage, including handicraft, traditional song, folklore and dances, it's not clear as to how these would contribute to the socioeconomic development of the communities living in Machakos County given the different cultural set up from other regions studied before.

### ***2.3.2.3 Ecotourism Practices and Socioeconomic Development***

Ecotourism as a component rural tourism is regarded as one of the fastest growing segments of the tourism industry that focuses on environmental conservation and socioeconomic development (Anup, Rijal & Sapkota, 2015). Various definition of ecotourism has been proposed by different authors previously. Ceballos-Lascurain (1987, p. 13) defines it as "...that tourism that involves travelling to relatively undisturbed or uncontaminated natural areas with the specific object of studying, admiring and enjoying the scenery and its wild plants and animals." According to Malek-Zadeh (1996), ecotourism involves some form of physical activity such as hiking, nature walks, among others that calls for interaction with nature. This interaction would however be incomplete without community involvement (Agyeman et al., 2019). Ecotourism Kenya (2021) defines ecotourism as the active participation of tourists in environmental conservation activities in a manner promotes socioeconomic wellbeing of the local communities. Thus, the main focus is active participation, enjoyment, appreciation and conservation of naturally undisturbed environment including the culture of the local people for socioeconomic benefit (Agyeman, et al., 2019; Noll et al., 2019; International Ecotourism Society (TIES), 2015).

A growing body of research have been dedicated to examining the contribution of ecotourism practices/activities on the local communities in various destinations. Majority of these studies (e.g., Forje et al., 2021; Agyeman et al., 2019; Noll *et al.*, 2019; Sherpa & Kharel, 2019; Harilal & Tichaawa, 2018; Lonn et al., 2018; Sharma et al., 2018; Chirenje, 2017; Regmi & Walter, 2017; Langoya & Long, 2016; Nsukwini & Urmilla, 2016; Venkatesh & Gouda, 2016) contend that ecotourism can be used as a tool for enhancing the livelihoods of local communities by promoting rural economies. Noll *et al.* (2019) for instance affirms that ecotourism practices present the opportunity to integrate the local community with tourism stakeholders such as guides, farmers, artisans, among others. Correspondingly, Nsukwini and Urmilla (2016) in their studies found that ecotourism practices would lead to creation of employment opportunities, revenue generation sources, poverty alleviation as well as enhancement of the locals' living standards, which are attributes of socio-economic development. Similar sentiments were shared by Sherpa and Kharel (2019) later who attributed socioeconomic development aspects such as employment, revenue generation, income creation and poverty alleviation to cultural tourism in Kitam Village, South Sikkim. The implication of these studies is that, ecotourism is regarded as an income generating industry with the ability of becoming the focus of many developing tourism destinations (Harilal & Tichaawa, 2018; Langoya & Long, 2016; Venkatesh & Gouda, 2016).

Anup et al. (2015) did qualitative research in Annapurna conservation area, Nepal to investigate the role of ecotourism in environmental conservation and socioeconomic development. Data were collected from 242 households using interviews, focus group discussions and key informant interviews. They results showed that ecotourism had tremendous effect on both environmental conservation and socioeconomic development. Socioeconomically, Anup et al. (2015) reported that ecotourism led to increased employment and entrepreneurship at a local level, which resulted

to increased income and expenditure and eventually enhanced livelihoods. Machakos County is a tourism paradise, which offers a variety of ecotourism attractions including scenic beauty, diverse wildlife, diverse cultures, traditions and many opportunities to explore the outdoors. Despite this, little is known about the contribution of ecotourism practices to socioeconomic development of communities living in Machakos County.

## CHAPTER THREE

### RESEARCH METHODOLOGY

#### 3.1 Study Area

The study was conducted within Machakos County, which covers an area of 5953 km<sup>2</sup>. The county is divided into eight sub-counties namely Kangundo, Kathiani, Machakos Town, Masinga, Matungulu, Mavoko, Mwala and Yatta. The county borders several counties which include: Nairobi and Kiambu counties to north, Kajiado to the South West, Makueni to the South, Kitui to the East, Muranga and Kirinyaga to north west. It is located at latitude 1<sup>0</sup>31' and 0<sup>0</sup> 31' south and longitude 37<sup>0</sup>45' and 36<sup>0</sup> 45' East. The county lies in the arid and semi- arid zones of the eastern region of the country. Machakos has a hot and dry climate with temperature ranging from 21<sup>0</sup>C to 35<sup>0</sup>C. The County experiences erratic and unpredictable rain of less than 800mm annually, with short rains in October through to December and the long rains in late March to May.

Population density of Machakos County is approximately 1099000. The prevailing local climate is semi-arid and the landscape is hilly, rising from an altitude of 1,237 to 2,300 meters above sea level. The poverty levels in the County are at 59.6 % against a national average of 47.2% based on Kenya Integrated Household Budget Survey (2013); this positions the County at 32 out of the 47 counties, while 52% of the population lives in the urban centres, which is way above the national average of 29.9%.

Machakos County is endowed with rich cultural heritage and pristine environment which makes it a suitable destination for rural tourism. The County is very rich in handicraft, traditional song, folklore and dances which have not been fully exploited as part of rural tourism and socioeconomic development. The county is also endowed with attraction sites ranging from national park (e.g., Ol

Donyo Sabuk National Park), beautiful sceneries, cultural heritage sites (e.g., Wamunyu and Muliluni handicrafts in Mwala Sub -county; Second World War platers, Masaku and Muindi Mbingu grave sites in Machakos Town Sub - county; Paul Ngei grave site in Kangundo Sub - county and African heritage house in Mavoko Sub – county) to agritourism sites (e.g., Bishop Masika Farm, in Yatta Sub-County and Kamutunga Farm in Machakos Town Sub -county). In view of this, Machakos County was selected as the area of study.

### **3.2 Research Approach**

According to Creswell and Creswell (2018) and Denzin and Lincoln (2018), there are three types of research approaches namely, quantitative, qualitative and mixed method. These research approaches differ in terms of research paradigms, strategies of inquiry and research method. This study adopted the quantitative research approach. This approach was considered because it allows for collection and analysis of quantifiable data descriptively and inferentially which was the case in this study.

### **3.2 Research Design**

A research design is the general plan of how a researcher intends to answer the research questions of fulfil the research objectives (Saunders, Lewis & Thornhill, 2019). The study adopted an explanatory census survey design. According to Saunders et al. (2019), explanatory research design is used in studies that seeks to establish the causal relationship between variable. The design is concerned with assessing relationship among variables, hypothesis testing and analysis of data using statistical techniques. Explanatory research design is quantitative in nature and hence enables the use of questionnaires, which facilitated rapid collection of data as was the case in this study.



### 3.3 Study Population

According to Machakos County Government (2020) there are 34 tourism attraction sites in Machakos County as indicated in Appendix III. However, only 31 attraction sites were deemed to be of interest in this study as they were either ecotourism oriented, cultural tourism oriented or agritourism oriented. The study therefore targeted tourist stakeholders from the 31 attraction sites of interest. The researcher conducted a reconnaissance study and found that there were at least 7 full time tourist stakeholders in these attraction sites. This was used to project the study population of interest (from the 31 attraction sites) to be 217. The distribution of the population is given in Table 3.1.

**Table 3. 1 Target Population**

<b>Sub-County</b>	<b>No of Attraction Sites of Interest</b>	<b>Population Estimate</b>
Kangundo	3	21
Kathiani	2	14
Machakos Town	14	98
Masinga	1	7
Matungulu	2	14
Mavoko	3	21
Mwala	4	28
Yatta	2	14
Total	31	217

**Source; (Reconnaissance study of Machakos County by Author)**

### **3.4 Sample Size and Sampling Procedure**

The study employed census method to select all the 217 respondents owing to the small number of respondents. A census is a study that involve consideration of every element or case in a population. According to Kothari (2004), a census provides a true measure of the population since there is no sampling error.

### **3.5 Data Collection Instrument**

#### **3.5.1 Questionnaire Structure**

The study adopted self-administered questionnaires to collect data. The questionnaire was developed based on the research objectives using information from literature review. The questionnaire had both open ended and closed ended questions (see Appendix II) which were structured into five sections. Section A focused on respondents' demographic information. Sections B, C and D focused on agritourism practices, cultural tourism practices and ecotourism practices respectively while the last section (E), examined issues to do with socioeconomic development.

#### **3.5.2 Variable Measurements**

The key variables in this study are rural tourism practices (independents variable) and socioeconomic development (dependent variable).

##### ***3.5.2.1 The Independent Variables***

Rural tourism practices as the independent variable in this study was operationalized using three variables namely, agritourism practices cultural tourism practices and ecotourism practices, making a total of three independent variables.

Agritourism practices was measured using five items namely farm accommodation/farm stays, farm/garden tours, farm markets for you-picks/pick-your-own, farm festivals and farm food testing (Farm-Based Education Network, 2019; Agricultural Resource Marketing Centre [AgMRC], 2019). Based on these items, five statements were formulated and the respondents were required to indicate on a five-point Likert scale their level of agreement with the extent to which the agritourism activities were being practiced in Machakos County. The scale continuum ranged from 1- Strongly Disagree (SD) to 5 - Strongly Agree (SA). A value of 5 was given more weight.

Cultural tourism practices were also measured using five items namely cultural festivals/rites, art and craft, tradition and customs, cultural culinary, music and dances (United Nations Educational, Scientific and Cultural Organization [UNESCO], 2014; UNWTO, 2017). Similarly, based on these items, five statements were formulated and the respondents were required to indicate on a five-point Likert scale their level of agreement with the extent to which the cultural tourism activities were being practiced in Machakos County. The scale continuum ranged from 1- Strongly Disagree (SD) to 5 - Strongly Agree (SA). A value of 5 was given more weight.

Ecotourism practices on the other hand were measured using four items, namely eco trekking/hiking, conservation of flora and fauna through recue and reallocation, photo safaris and ecosafaris, as well as ecolodging and camping activities (Ecotourism Kenya, 2020; TIES, 2015). Like the previous variables, based on these items, five statements were formulated and the respondents were required to indicate on a five-point Likert scale their level of agreement with the extent to which the ecotourism activities were being practiced in Machakos County. The scale continuum ranged from 1- Strongly Disagree (SD) to 5 - Strongly Agree (SA). A value of 5 was given more weight.

### **3.5.2.2 The Dependent Variable**

Socio economic development as the dependable variable was measured using six items namely, creation of employment; preservation of culture; infrastructure; security; quality living standards through access to healthcare, water, and education; as well as generation of revenues and income. These items were derived from Craigwell-Walkes (2018) indicators of social and economic Development. These fall within the three UNDP (2021) human development index (HDI) indicators, namely health, education and income. Based on these items also, six statements were formulated requiring the respondents to indicate on a five-point Likert scale their level of agreement with the extent to which they believe there is socioeconomic development in Machakos County. The scale continuum ranged from 1- Strongly Disagree (SD) to 5 - Strongly Agree (SA). A value of 5 was given more weight.

### **3.6 Pilot Study**

A Pilot study was carried out before the actual conduct of the research. Pilot study helps to ascertain whether there is vagueness in any test item (Borg *et al.*, 2003). According to Cooper and Schilder (2011) participants of a pilot study should constitute at least 10% of the study sample, in this case the study population (217). When computed, 10% of 217 is 22 (when rounded up). For equal representation from each of the 31 targeted attraction sites, participants for the pilot study were drawn using simple proportionate sampling as shown in Table 3.2. This was achieved by dividing 22 (the computed sample for the pilot study) by 217 (to total target sample for the study) to obtain the constant 0.10 which was then used to obtain pilot study participant per sub county by multiplying it by the target population per sub – county.

**Table 3. 2 Participants of the Study**

<b>Sub - County</b>	<b>No of Attraction Sites of Interest</b>	<b>Population Estimate</b>	<b>Pilot Study Participants</b>
Kathiani	2	14	2
Kangundo	2	14	2
Machakos Town	13	91	10
Masinga	1	7	1
Matungulu	2	14	2
Mavoko	7	49	5
Mwala	3	21	3
Yatta	1	7	1
	<b>Total</b>	<b>217</b>	<b>26</b>

For instance, in Kathiani sub – county, the participant for the pilot study is obtained by multiplying 14 by 0.10 which gives 1.4. Since the study is dealing with human participants, this is rounded up to 2 (See Table 3.2). Due to rounding up, the maximum participants that could be retrieved for pilot study is 26, and not 22, which is the least recommended for this study (Cooper & Schilder; 2011). Simple random sampling was then used to retrieve participants. The 26 participants were excluded in the main survey. Pilot study was necessary to evaluate validity and reliability aspects of the questionnaire before conducting the main survey.

Test-retest method was used in the assessment of the questionnaire. This was to help with assessment of both content and face validity of the data collection tool. First, the questionnaire was given to the 26 participants in the pilot study to fill. The participants were given freedom to note any difficulty in questionnaire understanding, wording and even the format in the first round. After one week, the questionnaires were collected back and response evaluated. While all the 26

participants made efforts to respond to the questionnaires, the researcher noted that some sections of the questionnaire were not filled due to difficultness or lack of understanding as expressed by the participants. The affected questions were reworded appropriately. For example, rather than just indicating “Traditions and customs” which was thought to be ambiguous by respondents, the statement was rephrased to “Local traditions and customs are attractive to tourists”. After the questionnaire was corrected, it was then administered a second time to the same group who successfully completed it without problems.

### **3.7 Reliability and Validity**

#### **3.7.1 Reliability of the Study**

Reliability refers to the consistency that a research instrument demonstrates when applied repeatedly under similar situation. It is the accuracy of the instrument when it measures the same variable more than once (Creswell & Creswell, 2018). Reliability was carried out to ensure the consistency of the research instruments both in the pilot study and main survey. The responses of the pilot study were subjected to reliability analysis in SPSS using Cronbach’s alpha threshold of 0.70 (Saunders et al., 2019; George & Mallery, 2019). The results in Table 3.3 provides Cronbach’s coefficients ranging between .72 and .77, an indication that all the items were consistent in measuring their respective construct in the pilot study. The reliability results for the main survey are reported in Chapter Four.

**Table 3. 3 Reliability Test Statistic for the Questionnaire in the Pilot Study**

<b>Concept Measurement</b>	<b>Number of Items</b>	<b>Cronbach's Alpha (N = 26)</b>
Agritourism Practices	5	.75
Cultural Tourism Practices	5	.77
Ecotourism Practices	4	.73
Socioeconomic Development	6	.72

### **3.7.2 Validity of the study**

Validity refers to the ability of the research instrument to test what is supposed to be tested. It is the extent to which research results actually represents the phenomenon under study and are credible (Mugenda, 2008, Golafshani, 2003; Saunders, Lewis & Thornhil, 2019). Content validity of the instrument was evaluated in this study. According to Saunders et al (2019), content validity is the extent to which the questions in the questionnaire, provides adequate coverage of the investigative questions. This was achieved through careful definition of the research through the literature reviewed, pilot study and prior discussion with the faculty supervisors (Saunders et al., 2019). The discussion involved evaluation whether the questionnaire questions were essential. Only those questions that were deemed essential and useful by the faculty supervisors as well as participants of the pilot study were retained.

The study tested for criterion-related validity. This validity has to do with how well the scores from the instrument predict a known outcome they are expected to predict (Salkind, 2017, Saunders et al., 2019). Correlation was used to determine if criterion-related validity existed. Scores from the instrument in question was correlated with an item they are known to predict

(Saunders et al., 2019), in this case living standards of the community. The results of the correlation ranged between 0.61 and 0.77, an indication that criterion related validity existed since all the correlations were  $> 0.60$  (Saunders et al., 2019).

### **3.8 Questionnaire Administration**

After receiving approval from Maseno University School of Graduate Studies (SGS) board and the Maseno University Ethical Review Committee (MUERC) and a study authorization from the National Commission for Science, Technology, and Innovation (NACOSTI), data collection using questionnaire was commenced. The final questionnaires (191) were distributed to the targeted responding using trained research assistants. The questionnaires were administered through drop and pick method. The questionnaire came with instructions on how to complete it. The respondents were assured of strict confidentiality. The respondents were given up to three weeks to fill the questionnaires. Three weeks was deemed adequate enough for the respondents to have completed the questionnaires. Follow ups and personal visits were made by the research assistants throughout the three weeks period with an aim of improving the response rate.

### **3.9 Data Analysis**

Once complete questionnaires were received back, data was coded and entered into Statistical Package for Social Science (SPSS). The data was first screened and cleaned before being subjected to descriptive and inferential analysis techniques.

#### **3.9.1 Data Screening and Cleaning**

Data entered into SPSS v. 24 was first explored for completeness, normality and outliers. Cleaning and screening the data involved checking for inconsistencies, missing responses and other errors to ensure accuracy and completeness. To assess data completeness and suitability, frequencies



were computed for each questionnaire item to assess cases missing data. To assess cases of outliers in the data, box plots were generated in SPSS and observed. The initial results indicated cases of outliers with close analysis of the affected data indicating the cause of outliers to be wrong data entry. For example, there were cases of data being captured as 50 instead of 5, 20 instead of 2 and so on. These were corrected and another round of box plots generated again. The final resulting output indicated no cases of outliers. Normality of the data was assessed using skewness and kurtosis threshold of +2 and -2. The data also averagely exhibited normal distribution with majority of the skewness and kurtosis falling in the range of +2 and -2 thresholds as evidenced in Table 4.2 in Chapter Four. Further results are highlighted in Chapter Four.

### **3.9.2 Descriptive Statistics**

Descriptive statistics consisting of frequencies and means were used to describe the distribution of data as well as to describe the characteristics of the respondents' demography. Demographic characteristics are facts about the makeup of a population. In this study, these characteristics included gender, age and average income per month. These were considered important variables in this study in assessment on the respondents' background information.

To have a general outlook of which items were ranked highly by the respondents, mean ranking of the measurement items for all the key study variables, namely agritourism practices, cultural tourism practices and ecotourism practices was done. The results for the same is presented in Chapter Four.

The construct mean scores were also computed by first transforming the data and generating composite variables that assumed the study construct names namely agritourism practices, cultural tourism practices, ecotourism practices and socioeconomic development. This was deemed

relevant for subsequent regression analysis and address the three specific research objectives as well as their corresponding hypotheses. For instance, the final agritourism construct had four measurement items that were deemed reliable. These were 'Farm accommodation are available for farm stays within Machakos County (AGP1); Farm and garden tours for education and recreation are conducted in Machakos County (AGP2); Farm markets for u-picks are available in Machakos County (AGP3); and Farm food testing activities are conducted in Machakos County (AGP5). The mean scores of these items were obtained through variable transformation option in SPSS to arrive at one variable called agritourism. The same procedure was applied to the other constructs and their measurement items.

### **3.9.3 Regression Analysis**

To determine the effect of rural tourism practices on socio economic development, the constituent variables of rural tourism practices namely, agritourism practices, cultural tourism practices and ecotourism practices were regressed on socioeconomic development using multiple regression analysis in SPSS as guided by the three research objectives.

First was to assess the effect of agritourism practices on socioeconomic development of the host community in Machakos County, Kenya. Second, was to establish the effect of cultural tourism practices on socioeconomic development of the host community in Machakos County, Kenya. Finally, the study aimed to examine the effect of ecotourism practice on socioeconomic development of the host community in Machakos County, Kenya. As already mentioned, three research hypotheses were formulated as follows:

**H<sub>01</sub>:** Agritourism practice has no significant effect on socio economic development of the community living in Machakos County, Kenya.

**H<sub>02</sub>:** Cultural tourism practice has no significant effect on socio economic development of the community living in Machakos County, Kenya.

**H<sub>03</sub>:** Ecotourism practice has no significant effect on socio economic development of the community living in Machakos County, Kenya.

### ***3.9.3.1 Regression Analysis Assumptions***

The researcher tested several assumptions of regression model. This is because if the assumptions are not met the results may not be trustworthy which may result in a Type I or Type II error, over-estimation of significance or effect sample size(s) (Pallant & Manual, 2010). Before subjecting the data to regression analysis, the data was first assessed for multicollinearity, normality, linearity, autocorrelation and homoscedasticity.

#### **Linearity**

Nonlinear relationships typically appear as curves when Y is plotted as a function of X, although other forms of nonlinearity are possible. The aim of the linearity test is to determine whether or not the relationship between each of the predictor variables and the expected variable is related (Zientek, Kim & Bryn, 2016; Zikmund et al., 2013). The linearity assumption is important because its violation jeopardizes the meaningfulness of the interpretation of the regression coefficient (Darlington, 1990). The rule of thumb is that, the predictor variables in the regression should have a straight-line relationship with the outcome variable. To check whether there is linear relationship in the data, scatter plots were generated for the data, with the dependent variable, socioeconomic development, plotted on the vertical axis and the independent variables, agritourism practices,

cultural tourism practices and ecotourism practices, plotted on the horizontal axis. The scatter plots results are presented using *Figures A, B and C in Appendices*. Further, Pearson's bivariate correlation was conducted in SPSS to ascertain the relationship between the variable of interest. The results are presented in *Table 4.5* in Chapter Four.

### **Multivariate Normality**

Normality is a critical assumption in multivariate analysis (Hair et al., 2007). It assumes that the errors in the prediction value of Y (dependent variable) are normally distributed. Multivariate normality was assessed by generating Quantile-Quantile plots (Q-Q plots) in SPSS. The Q-Q plots are presented using *Figures D, E, F and G in Appendices*. As already described, normality was also assessed using the skewness and kurtosis techniques in SPSS with threshold  $\pm 2$  for both kurtosis and skewness. The results are presented in Chapter Four.

### **Multicollinearity**

Multi-collinearity occurs if two or more variables are highly correlated not independent of each other) thus affecting the estimation of the regression parameters (Zikmund *et al.*, 2013; Hair et al., 2014). Multicollinearity makes it impossible for one to assess the exact contribution of the respective predictor variables to dependent variable variances (Zikmund *et al.*, 2013; Hair et al., 2014; Palaniappan, 2017). Presence of multi-collinearity negatively affects and raise the probability of type II errors in the hypothesis testing (Hair et al., 2014), which frustrate interpretations of the model coefficients (Gujarati & Porter, 2003), thus providing incorrect regression results (Palaniappan, 2017). According to Hair et al. (2014), multicollinearity issues in research can be evaluated by computing tolerance or variance inflation factor (VIF) or both, where tolerance represents the amount of variance of one indicator not explained by the other indicators in the same block. VIF on the other hand is the reciprocal of tolerance. A tolerance value  $\leq .20$  and

a VIF value  $\geq 5$  would indicate a potential collinearity problem (Hair et al., 2014). This study used both tolerance and VIF to check for multi-collinearity among the study variables. The results are presented in Chapter Four

### 3.9.3.2 Multiple Linear Regression Analysis

To address the research hypotheses, multiple linear regression analysis using the enter method was conducted in SPSS with socioeconomic development as the dependent variable (outcome variable) and agritourism practices, cultural tourism practices and ecotourism practices as the independent variables (predictors). The multiple regression analysis was used to test the level of significance of the study variables (Vitiis et al., 2014). The coefficient of determination ( $R^2$ ) was used to measure the amount of variation in the dependent variable (socioeconomic development) accounted for by the independent variables agritourism practices, cultural tourism practices and ecotourism practices. The F-ratio generated in the ANOVA table was used to measure the best fit line. The p-value generated should be less than 0.05 for the equation to be statistically significant at 5% significance level. The following multiple regression model was adopted.

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \epsilon \dots\dots\dots \text{Equation 3.1}$$

Where by:

- Y represents the dependent variable (Socioeconomic Development)
- $\alpha$  is the constant of equation (represents the changes that cannot be explained by independent variables in the model)
- $X_1$ ,  $X_2$  and  $X_3$  represents agritourism practices, cultural tourism practice and ecotourism practices respectively
- $\beta_1$ ,  $\beta_2$  and  $\beta_3$  are the coefficients of independent variables agritourism practices, cultural tourism practices and ecotourism practices respectively
- $\epsilon$  - error term.

The results of the multiple linear regression indicate are presented in Chapter Four.

### **3.10 Ethical Considerations**

The researcher sought permission and authorization for data collection from Maseno University School of Graduate Studies (SGS) board , the Maseno University Ethical Review Committee (MUERC) and National Commission for Science, Technology and Innovation (NACOSTI). Clearance certificate to conduct research was issued by MUERC while NACOSTI issued the research permit. The researcher proceeded to the field for data collection and sought consent from the participants after informing them of the purpose of the study. Participation was on a voluntary basis and no one was coerced. The study participants were informed of their freedom to withdraw from the participation at any stage.

#### **3.10.1 Informed consent**

The four elements of informed consent (see Appendix I) were applied in the study. These are the disclosure of essential information to participants, ensuring that participants understand the information, and voluntary participation and the right to withdraw from the study at any stage without prejudice. Generally, any study participant does not need to be known.

#### **3.10.2 Confidentiality**

Participants were protected by keeping their information confidential. The researcher ensured that the information collected remain anonymous. Identification codes were given to each tool rather than names. Right to privacy was achieved through anonymity by ensuring the names of the participants are not written on the questionnaires except the codes. This kept the information anonymous and no links were made to the informants.

### **3.10.3 Justice**

This principle applies to the right to fair treatment and the right to privacy. The study ensured fair treatment by giving the participants the researchers' contacts to allow clarification of information at any time in the study and ensuring respectful and courteous treatment at all times.

### **3.10.4 Respect for Human Dignity**

Respect for human dignity was articulated in the right to self-determination and the right to full disclosure. In this study, participants had the right to decide voluntarily whether to participate in the study without risking any penalty as much as the right to ask questions. They had the right to make informed, voluntary decisions about study participation that requires full disclosure.

### **3.10.5 Beneficence**

This principle ensures the participants are free from physical, psychological, economic and social harm. This was minimized by carefully phrasing the questions in a non-judgmental way; participants were informed to withdraw whenever they feel uncomfortable. The participants were informed that their participation did not have any direct benefit but it would provide information that might enable educationists and policymakers to come up with strategies that would help improve rural tourism.

### **3.10.6 Data Storage**

In this scenario, the respondents were willing to provide their views and insights about the topic of the study signed the informed consent forms. The collected information was stored in .sav file extension and excel file maintained on a password protected flash memory data storage device. The hardcopies of the transcripts including the signed consent form (see Appendix I) and instrument paper which include the participant feedback is kept in sealed envelope and stored in a locked cabinet, which only the researcher has the access.

## **CHAPTER FOUR**

### **RESULTS AND DISCUSSION**

#### **4.1 Chapter Overview**

This chapter describes the study results by highlighting on the methodology used and then presents the results in line with the research objectives. The chapter begins by reporting on the questionnaire response rate then follows it with questionnaire reliability results. Preliminary results of the data are presented that include assessment of the data in terms of missing values and outliers. Descriptive statistics results are also presented to understand the data in terms of distribution, as well as to present a general overview of the respondents' demographic profile. The chapter also presents inferential statistics results that relates to the research objectives and hypotheses including regression analysis results.

#### **4.2 Questionnaire Response and Reliability**

The main objective of this study was to investigate the effects of rural tourism practices on socio economic development of the community living in Machakos County, Kenya. Rural tourism practices as the independent variable in this study were operationalized using three key variables namely, agritourism practices, cultural tourism practices and ecotourism practice. On this basis, three research objectives and hypotheses were formulated. To address the objectives, a total of 191 questionnaires were distributed to the respondents to fill out of which 176 complete questionnaires were received back for analysis. This represents 92.21% response rate, which is an acceptable response rate for subsequent analysis of data (Saldivar, 2012).

As already described in chapter three, internal consistence of the data collection instrument was assessed using the Cronbach's alpha is SPSS. According to George and Mallery (2019), Cronbach's



Alpha values range below 0.50 are unacceptable, value range of 0.50 are considered poor, value range of 0.60 are questionable, value range of 0.70 are acceptable, value range of 0.80 are good and values above 0.90 indicates excellent internal consistency. Table 4.1 indicates that the measurement items used for the four key research variables were consistent given that the Cronbach's Alpha registered for each of the variable was  $> .70$ , an indication a high reliability standard for the instrument. However, some items were dropped from the analysis for resulting in lower Cronbach's coefficient value of  $< 0.70$ . One item was excluded for agritourism practices and two items for socioeconomic development.

**Table 4. 1 Reliability Test**

<b>Concept Measurement</b>	<b>Number of Items</b>	<b>Cronbach's Alpha (N = 176)</b>
Agritourism Practices	4	.702
Cultural Tourism Practices	5	.706
Ecotourism Practices	4	.713
Socioeconomic Development	4	.823

### **4.3 Data Assessment Results**

Analysis of data completeness indicated that there were no cases of missing values for the data set entered into SPSS v.24. Final assessment of the box plots in SPSS as already described in Chapter Three indicated no cases of outliers in the data. The data also averagely exhibited normal distribution with majority of the skewness and kurtosis falling in the range of +2 and -2 thresholds as evidenced in Table 4.2.

**Table 4. 2 Skewness and Kurtosis**

Variables	Skewness		Kurtosis	
	Statistic	Std. Error	Statistic	Std. Error
ETP3	-0.472	0.183	-0.408	0.364
CTP5	-0.663	0.183	0.476	0.364
ETP1	-0.294	0.183	0.573	0.364
CTP4	-0.320	0.183	-0.213	0.364
SED4	-0.981	0.183	0.368	0.364
SED1	-0.850	0.183	-0.152	0.364
ETP4	-0.495	0.183	-0.268	0.364
CTP2	-0.588	0.183	0.554	0.364
ETP2	-0.535	0.183	1.522	0.364
AGP2	-0.492	0.183	-0.517	0.364
SED5	-0.933	0.183	1.033	0.364
CTP3	-0.363	0.183	-0.729	0.364
CTP1	-0.544	0.183	-0.797	0.364
SED6	-0.747	0.183	-0.466	0.364
AGP3	-0.827	0.183	0.188	0.364
AGP1	-0.366	0.183	-0.438	0.364
AGP5	-0.514	0.183	-0.714	0.364

*Note:* N = 176;

ETP3: Tour guiding and Eco safari activities are frequently organised in Machakos County; CTP5: Local music and dances performance are organised in Machakos County; ETP1: Travel to natural areas through eco trekking/hiking are encouraged in Machakos County; CTP4: Festivals/Rites of interest to tourists are practiced; SED4: Local communities in Machakos County get to be employed through tourism-oriented activities; SED1: Local community get revenues and income from tourist related activities; ETP4: Eco lodging and camping activities are conducted in Machakos County; CTP2: The local traditions and customs are attractive to tourists; ETP2: Rescue and relocation of flora and fauna as a recreational activity is done in Machakos County; AGP2: Farm and garden tours for education and recreation are conducted in Machakos County; SED5: Community culture get preserved through tourism; CTP3: Community in Machakos County are engaged in handicrafts and arts business; CTP1: The cultural culinary activities are attractive to tourists; SED6: Local community has access to quality living standards e.g., access to water, education, food, healthcare etc.; AGP3: Farm markets for u-picks are available in Machakos County; AGP1: Farm accommodations are available for farm stays within Machakos County; AGP5: Farm food testing activities are conducted in Machakos County

#### 4.4 Respondents Demographic Characteristics

Table 4.3 displays demographic information of respondents in frequency counts and percentages. As evidenced by the table, the majority of the respondents (63.6%) in this study were male. Most of the respondents (45.5%) in this study were aged between 20 – 35 years followed closely by those in the age bracket of 36 – 50 years, at 44.3%. The table further reveals that the majority of the respondents (63.6%) earned between KES 15,000 and KES 30,000.

**Table 4. 3 Respondents' Demographic Characteristics**

<b>Demographic variables</b>		<b>Frequency</b>	<b>Percent</b>
<b>Gender</b>	Male	112	63.6
	Female	64	36.4
	Total	176	100.0
<b>Age group (Years)</b>	20- 35	80	45.5
	36 -50	78	44.3
	Above 50	18	10.2
	Total	176	100.0
<b>Monthly Income (KES)</b>	1,000 – 15,000	48	27.3
	15,000– 30,000	112	63.6
	Above 30,000	16	9.1
	Total	176	100.0

#### 4.5 Mean Ranking of Rural Tourism Practices

To have a general outlook of which items were ranked highly by the respondents, mean ranking of the measurement items for all the key study variables, namely cultural tourism practices, ecotourism practices and agritourism practices was done. The results are summarized in Table 4.4. The table show that of all the four measurement items used for ecotourism practices, ‘Tour guiding and Eco safari activities...’ (ETP3) ranked high ( $M = 4.136$ ,  $SD = .759$ ). ‘Rescue and relocation of flora and fauna...’ (ETP2) ranked the list in this category ( $M = 3.909$ ,  $SD = .578$ ). For cultural tourism practices, ‘Local music and dances performance...’ (CTP5) ranked the highest

( $M = 4.023$ ,  $SD = .763$ ) with the least ranked item in this category being ‘Cultural culinary activities’ (CTP1) ( $M = 3.824$ ,  $SD = 1.024$ ). With regard to agritourism practices, ‘Farm and garden tours for education and recreation...’ (AGP2) was ranked the highest of the four measurement items ( $M = 3.898$ ,  $SD = .908$ ) with the least ranked item in this category being ‘Farm food testing activities...’ (AGP5) ( $M = 3.438$ ,  $SD = 1.160$ ).

**Table 4. 4 Descriptive Statistics**

<b>Variables</b>	<b>Min</b>	<b>Max</b>	<b>Mean</b>	<b>SD</b>
ETP3: Tour guiding and Eco safari activities are frequently organised in Machakos County	2	5	4.136	0.759
CTP5: Local music and dances performance are organised in Machakos County	2	5	4.023	0.763
ETP1: Travel to natural areas through eco trekking/hiking are encouraged in Machakos County	2	5	4.011	0.623
CTP4: Festivals/Rites of interest to tourists are practiced	2	5	3.983	0.737
SED4: Local communities in Machakos County get to be employed through tourism-oriented activities	1	5	3.966	1.008
SED1: Local community get revenues and income from tourist related activities	2	5	3.955	0.973
ETP4: Eco lodging and camping activities are conducted in Machakos County	2	5	3.949	0.837
CTP2: The local traditions and customs are attractive to tourists	2	5	3.926	0.733
ETP2: Rescue and relocation of flora and fauna as a recreational activity is done in the County	2	5	3.909	0.578
AGP2: Farm and garden tours for education and recreation are conducted in Machakos County	2	5	3.898	0.908
SED5: Community culture get preserved through tourism	2	5	3.858	0.761
CTP3: Community in Machakos County are engaged in handicrafts and arts business	2	5	3.835	0.927
CTP1: The cultural culinary activities are attractive to tourists	2	5	3.824	1.024
SED6: Local community has access to quality living standards e.g., water, education, food, healthcare.	1	5	3.801	1.156
AGP3: Farm markets for u-picks are available in Machakos County	2	5	3.796	0.864
AGP1: Farm accommodations are available for farm stays within Machakos County	2	5	3.756	0.864
AGP5: Farm food testing activities are conducted in Machakos County	1	5	3.438	1.160

**Note:** N = 176; Min – Minimum; Max – Maximum; SD – Standard Deviation

## 4.6 Effects of Rural Tourism Practices on Socio Economic Development

Multiple regression analysis was used to test the three research hypotheses as set out in chapter one.

### 4.6.1 Regression Analysis Assumption Results

Before conducting regression analysis, regression analysis assumptions were assessed to ascertain whether the data met the assumptions. These included linearity, multivariate normality and collinearity. The results for these are presented next in that order.

**Linearity:** The scatter plots results indicated a good linear relationship (see **Figures A, B and C in Appendices**). Further, Pearson's Bivariate Correlation was conducted in SPSS to ascertain the relationship between the variable of interest. **Table 4.5** indicates that both the dependent and independent variables were correlated at  $p < 0.001$ .

**Table 4.5 Correlation Between the Dependent and Independent**

	ATP	CTP	ETP	SED
Agritourism Practices (ATP)	1			
Cultural Tourism Practices (CTP)	.401**	1		
Ecotourism Practices (ETP)	.603**	.643**	1	
Socioeconomic Development (SED)	.562**	.549**	.603**	1

\*\* . Correlation is significant at the 0.001 level (2-tailed); N = 176

DV = Socioeconomic Development

**Multivariate normality:** The Q-Q plots (see **Figures D, E, F and G in Appendices**), shows that the data appears to be normally distributed with no much significant deviation from the diagonal. The skewness and kurtosis results also indicate fairly acceptable range of  $\pm 2$  for both kurtosis and

skewness. The results indicate that the data is fairly normally distributed and that multivariate normality is not a serious issue for this data set.

**Collinearity:** Table 4.8 shows the collinearity results for both tolerance and VIF. Tolerance values range between .445 and .637 while the VIF values range between 1.571 and 2.246. Since both the tolerance values for the  $> .20$  and the VIF values are  $< 5$ , collinearity is not a major issue in this study.

#### **4.6.2 Regression Analysis Results**

This study set out to address three specific research objectives. As already mentioned, three research hypotheses were formulated as follows:

**H<sub>01</sub>:** Agritourism practice has no significant effect on socio economic development of the community living in Machakos County, Kenya.

**H<sub>02</sub>:** Cultural tourism practice has no significant effect on socio economic development of the community living in Machakos County, Kenya.

**H<sub>03</sub>:** Ecotourism practice has no significant effect on socio economic development of the community living in Machakos County, Kenya.

To address the research hypotheses, multiple linear regression analysis using the enter method was conducted in SPSS with socioeconomic development as the dependent variable (outcome variable) and agritourism practices, cultural tourism practices and ecotourism practices as the independent variables (predictors).

The results of the multiple linear regression indicate (See Tables 4.6 and 4.7) agritourism practices cultural tourism practices and ecotourism practices had collective significant effect on socio

economic development, ( $F [3, 172] = 50.429, p < .001, R^2 = .468$ ). This imply that the three predictors, namely cultural tourism practices, ecotourism practices and agritourism practices together explain for 46.8% of the variance in socio economic development of the community living in Machakos County.

**Table 4. 6 Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.684 <sup>a</sup>	.468	.459	.51337

Note: Predictors: (Constant), Agritourism Practices, Cultural Tourism Practices, Ecotourism Practices

**Table 4. 7 ANOVA**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	39.871	3	13.290	50.429	.000 <sup>b</sup>
	Residual	45.330	172	.264		
	Total	85.201	175			

**Note:** Dependent Variable: Socio Economic Development

Predictors: (Constant), Agritourism Practices, Cultural Tourism Practices, Ecotourism Practices

Further examination of the individual predictor (see Table 4.8) shows that agritourism ( $\beta = .296, t = 4.389, p < .001, \text{confidence interval} = [.163, .429]$ ); cultural tourism practices ( $\beta = .345, t = 3.692, p < .001, \text{confidence interval} = [.161, .530]$ ); and ecotourism practices ( $\beta = .342, t = 2.960, p = .004, \text{confidence interval} = [.114, .571]$ ) were all significant predictors of socioeconomic development.

The final predictive model was:

Socioeconomic Development = .083 + (.296\*Agritourism Practices) + (.345\*Cultural Tourism Practices) + (.342\*Ecotourism Practices)



**Table 4. 8 Multiple Regression and Collinearity Results**

Model	Unstandardized		Standardized	t	Sig.	95.0% Confidence		Collinearity Statistics	
	Coefficients		Coefficients			Interval		Tolerance	VIF
	B	Std. Error	Beta			Lower	Upper		
(Constant)	.083	.329		.251	.802	-.566	.731		
Agritourism Practices	.296	.067	.306	4.389	.000	.163	.429	.637	1.571
Cultural Tourism Practices	.345	.094	.268	3.692	.000	.161	.530	.587	1.704
Ecotourism Practices	.342	.116	.247	2.960	.004	.114	.571	.445	2.246

*Note:* Dependent variable is Socioeconomic Development

#### ***4.6.2.1 Effects of Agritourism Practices on Socioeconomic Development***

The first objective of this study was to assess the effect of agritourism practices on socioeconomic development of the local community in Machakos County, Kenya. Agritourism, also known as farm-based tourism (Nematpour & Khodadadi, 2021) generally involves tourist visitation to agricultural farms in a destination for education, enjoyment or get involved in a special agricultural activity. Activities include fish farming, horticulture, and animal husbandry among others. Farm-based tourism has been thought of as an effective strategy for revitalizing not only the economy of the local populace by providing them with financial income, but also cultural heritage and historical places (Nematpour & Khodadadi, 2021).

The results from multiple regression analysis indicates that agritourism could potentially contribute to socioeconomic development of the community living in Machakos County. The most ranked agritourism practice in this case was farm tours that allowed for education and recreation. Farm tours are conventional activities that provide opportunities for agritourists to learn various agriculture practices and at the same time recreate. Kamuthanga farm for instance is a farm practicing mixed farming and boast as the largest fish farm in East Africa. The farm attracts visitors who would want to learn different aspects of fish farming. Those who visit the farm often look for accommodations within the farm for the period they are visiting. Thorough farm tours and provision of farm accommodations to visitors who have come to tour farms, the local community earns revenue which they would channel in facilitating other socioeconomic activities within the community. The resulting effect would be continued sustenance of such farms as the community believes that they would contribute positively to their socioeconomic wellbeing. The findings are similar to previous research (e.g., Nematpour & Khodadadi, 2021; Giaccio et al., 2018; Addinsall et al., 2017; Flanigan et al., 2015; Schilling et al., 2014; Barbieri, 2013; Obonyo & Fwaya, 2012;

Tew & Barbieri, 2012; Schilling et al., 2012) who reported that agritourism practices effectively contribute to socioeconomic development of the local community. Obonyo and Fwaya (2012) for instance noted that fish farming in Western Kenya would not only serve as tourist attraction but would provide food for consumption by both the visitors and the local community as well as act as revenue centres for the local community. Similarly, the findings corroborate extant research who believes that development of farm-based tourism introduces growth stimulus for local economies through employment, income generation and revenue (Nematpour & Khodadadi, 2021; Giaccio et al., 2018; Addinsall et al., 2017; Flanigan et al., 2015; Schilling et al., 2014; Barbieri, 2013; Schilling et al., 2012; Tew & Barbieri, 2012).

#### ***4.6.2.2 Effects of Cultural Tourism Practices on Socioeconomic Development***

The second objective of this study was set to establish the effect of cultural tourism practices on socio economic development. The results from regression analysis shows that cultural tourism significantly affects socioeconomic development. Local music and dances performance ranked high among the cultural tourism activities in Machakos County. Other activities included cultural festivals, handicrafts and art including culinary art. While these activities form the basis of cultural tourist attractions in Machakos County, they also provide opportunities for the local community to gain revenues through selling art pieces to the tourists as souvenirs. The local dances and music not only help with cultural preservation but also avenues for tourists to interact and appreciate the local music and dance, thus enhance their experience. While immersing themselves into the host culture by consuming both tangible and intangible products of cultural tourism in the destination, tourists tend to show appreciation of this in monetary form.

This in turn would positively impact on their socio-economic status as the money realized from these events and activities can be channelled to other aspects of the community. Cultural tourism would therefore support creation of employment through self-employment. For example, those involved in art and craft would design their cultural products knowing very well that there would be market for products. The revenue generated would then be used to offset other socioeconomic requirements including food, healthcare, education among other requirements that would enhance socioeconomic life of the community.

The study findings support that of Quan-Baffour (2020) who found out that cultural tourism in encourages self-employment initiatives among the communities in Bono Takyiman area in Ghana. This current study finding generally conforms with previous research (e.g., Adom, 2017, 2019; Lane & Kastenholtz, 2015; Greg, 2018; Sampson, 2018; Okumus et al., 2012; Yanev & Zlatarov, 2017; Petkova, 2017) who acknowledge the capacity of cultural tourism in significantly contributing to socioeconomic development of host community in a tourism destination. The authors also contend that cultural tourism generally serves as a channel for promoting local culture, cultural preservation and improving the local economy of the host communities. All this extant research though conducted in different contextual set up share similar school of thought that cultural tourism facilitates the creation of employment in rural communities, particularly farming customs, lifestyles, handicrafts and arts initiatives as well as local music and dances.

#### ***4.6.2.3 Effects of Ecotourism Practices on Socioeconomic Development***

The last objective of this study was set to examine the effect of ecotourism practice on socioeconomic development of the community in Machakos County, Kenya. Ecotourism is viewed as a tool for socioeconomic development and poverty reduction as it provides opportunities for selling additional goods and services thereby creating opportunities for local economic

diversification. According to Anup et al. (2015), it is based on cultural, wildlife and landscape assets that belong to a destination. In Machakos County, these include tour guiding, eco trekking, eco lodging, eco safaris among other ecotourism activities. In this regard, tour guiding and Eco safari activities was highly ranked among the ecotourism activities in Machakos County. Machakos County is endowed with vast natural attractions including hilly terrain and breath-taking scenery that provides platform for ecotourism activities. Ecotourism activities such as eco trekking in undisturbed terrain particularly in areas such as Ol Donyo Sabuk, Kilima Mbogo, Lukenya hills and Iveti Forest Reserve requires guides would therefore offer opportunities for tourists to interact with nature. This kind of interaction always requires guided tours. Since the local community understand the terrain better, they can always be employed as tour guides as part of the interaction engage tourists on other aspects of the community including cultural heritage.

In return, the tourists would appreciate the local guides with monetary rewards which serve as their source of income. The money realised can then be spent in acquiring other community requirements including food, healthcare, education among others. As part of cultural appreciation, the local communities would be more encouraged to develop their cultural assets, such as customs, handicrafts, architecture, food, and local knowledge, for their own benefit. The study therefore indicates that ecotourism servers as an avenue for employment creation to the host community as tour guides, as well as handicraft business enterprises. Through ecotourism practices, revenue flow and income for the community is assured. This involvement of the local community in ecotourism would therefore facilitate awareness creation on the importance of natural and cultural resource protection in Machakos County.

The findings agree with that of Sherpa and Kharel (2019) who found that community-based ecotourism largely practiced in the state of Sikkim in India raised awareness on the importance of

protection of ecotourism resources as they benefited the local community both socially and economically. The study findings also generally corroborate with findings from previous researchers (e.g., Nsukwini & Urmilla, 2016; Anup et al., 2014; Agyeman et al., 2019; Harilal & Tichaawa, 2018; Lonn et al., 2018; Chirenje, 2017; Regmi & Walter, 2017; Sharma et al., 2018; Forje et al., 2021; Noll *et al.*, 2019) who found that ecotourism practices would lead to creation of employment opportunities, revenue generation sources, poverty alleviation as well as enhancement of the locals' living standards, which are attributes of socio-economic development. Socioeconomically, Anup et al. (2014) for example, reported that ecotourism led to increased employment and entrepreneurship at a local level, which resulted to increased income and expenditure and eventually enhanced livelihoods.

## **CHAPTER FIVE**

### **CONCLUSIONS AND RECOMMENDATIONS**

#### **5.1 Chapter Overview**

This chapter presents the conclusions and recommendation based on the objectives of the study.

#### **5.2 Conclusions**

The study sought out to investigate the effects of agritourism practices, cultural tourism practices and ecotourism practices on socioeconomic development of the community living in Machakos County. The study surveyed a total of 176 tourist stakeholders of 31 targeted attractions within Machakos County. To fully address the objectives, three research hypotheses were formulated namely: “Agritourism practices has no significant effect on socio economic development of the community living in Machakos County, Kenya; Cultural tourism practices has no significant effect on socio economic development of the community living in Machakos County, Kenya; and Ecotourism practice has no significant effect on socio economic development of the community living in Machakos County, Kenya”

The hypotheses were tested using multiple regression analysis with the results indicating that each of the three components of rural tourism i.e., agritourism, cultural tourism and ecotourism had a significant effect on socio economic development of the community living in Machakos County. Agritourism seeks to promote agricultural practices that serves to attract agritourists who are concerned with learning and recreation at the same time. In this study, agritourism practices was examined using availability of farm accommodation for farm stays, conducting farm and garden

tours for education and recreation, availability of farm markets for u-picks, organised farm harvesting/picking festivals and farm food testing activities. The results indicates that all these generally affect socioeconomic development of the community living in Machakos County. During their visits, the agritourists get to learn different agricultural practices and even partake in agricultural products through farm markets, farm catering and testing. They even buy commodities and even spend nights within the farm houses and accommodation facilities through farm stays. In doing so, they spend money which is used by the local community in enhancing their livelihoods. At the same time, locally grown products and experiences provided by the agricultural heritage can enhance the exceptional quality of life.

With regard to cultural tourism, the study indicate that cultural heritage is a key component of rural tourism that serves as an avenue for promoting and revitalizing the rural economy of people living in Machakos County. Cultural tourism practices in this context was examined through cultural culinary activities, local traditions and customs, handicrafts and arts business, cultural festivals, local music and dances performance that are organised in Machakos County. The result indicate that these practices generally affect socioeconomic development of community living in Machakos County. Through cultural tourism, locals can participate in tourism through preservation of their culture as they believe it provides them with economic benefits. Tourists immerse themselves in the culture through dances and music, handicraft and artefacts which are purchased as souvenir. The local community help the cultural tourist understand local cultural orientation, cultural lifestyle, customs and traditions who are in tern appreciated in monetary forms. The money gained can then be channelled by the community in accessing food, education, healthcare among other requirements.



Finally, on the effect of ecotourism practice on socioeconomic development of the community, the study indicated that nature-based activities that include tour guiding, eco trekking/hiking, as well as cultural preservation provides opportunities for income generation from natural resources without destroying the environment. Hence, the community would be able to find ways to develop the economy of their community thus improve living standards and preserve cultural heritage and social values.

### **5.3 Recommendations of the Study**

In view of these conclusions, the following recommendations were made

#### **5.3.1 Recommendations for Practice**

From the study, it was clear that rural tourism practices namely, agritourism, cultural tourism and ecotourism are significant predictors of socioeconomic development in terms creation of job opportunities, income generation, enhanced living standards amongst other indicators of socioeconomic development. There is therefore the need to bring all tourist stakeholders involved in the three rural tourism practices, mainly the local community, to take active role in agritourism, cultural tourism and ecotourism practices in order to realise socioeconomic benefit. Agritourism can be enhanced by encouraging the local community to partake in agrarian activities within Machakos County. Through such activities, they would not only be focusing on agricultural production but can incorporate tourism as part of the process through firm tours, homestays and farm stays among other activities of interest. Buy doing so they would earn extra revenues and incomes which would supplement revenues from the agriculture itself.

Similarly, local community can be sensitised and encouraged to uphold their cultural practices in a manner that that would stimulate tourism influx into the county with interest on culture and heritage. There's need to preserve, conserve and promote the various cultural aspects in Machakos

County. Through visitations to such cultural places, the community would gain both economically and sociocultural in form of revenues and cultural preservation.

Lastly, ecotourism sites within Machakos County should be protected and local community encouraged to take part by providing ecotourism related services. This would be in the form of tour guiding and also explaining various cultural attributes in Machakos county and their significance as part of educating visitors to such destinations. In doing so, such services would earn the community extra revenue which they would channel in uplifting their living standards, health, education and accessibility to food.

It is therefore recommended that, Machakos County government through Ministry of tourism and wildlife strengthen partnerships with the local business sector, the local community sector and general stakeholders, as well as the policy-makers to ensure a faster integrated tourism development process.

### **5.3.2 Recommendations for Future Studies**

The current study was heavily reliant on quantitative data. Future studies should seek to employ mixed methods designs that can allow for qualitative and quantitative approaches to investigation of the phenomena.

It will also be interesting to get opinions of different players in the field and therefore there is a need to include opinions from various households, and key industry players in Machakos County.

Further, rural tourism practices such as cultural tourism and agritourism can best be understood through longitudinal studies that allows the research to delve deeper into issues such as seasonality

and authenticity of such practices within the study area. The study therefore recommends that future research can be done using a longitudinal perspective and the results compared with that of the current study

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## APPENDICES

### Appendix I: Consent Form

Dear Sir/Madam,

#### **REF: AUTHORITY TO CONDUCT RESEARCH**

I am a Masters student in Maseno University pursuing Masters of Science degree in Tourism Management, undertaking academic survey of rural tourism practices on socioeconomic development of community' in Machakos County. The results of this study will be used by the tourism developers in Machakos County to adopt feasible planning, development and integrating strategies as recommended by the researcher. The results will also assist the researcher in developing a Masters Research project which form part of academic requirement for the award of Masters of Science degree in Tourism Management of Maseno University. Please note that your views inform of answers will be considered highly confidential and will take few minutes. Feel free as you give your responses.

Once you understand and agree to be in the study, I will request you to sign your name on this form. You should understand the general principles which apply to all participants in medical research:

- i) Your decision to participate is entirely voluntary
- ii) You may withdraw from the study at any time without necessarily giving a reason for your withdrawal
- iii) Refusal to participate in the research will not have an effect to either you or the researcher.

May I continue? YES / NO

#### **WHAT IS THE PURPOSE OF THE STUDY?**

The researcher listed above is interviewing employees of tourism attraction sites, community leaders (ward administrators) and Key personnel in the department of tourism and culture Machakos County who include chief officer tourism and culture, principal cultural officer, head of tourism promotion and events, head of county parks and recreational facilities and head of county image willing to participate after giving informed consent. The purpose of the interview is

to assess rural tourism practices on socioeconomic development of community' in Machakos County.

### **WHAT WILL HAPPEN IF YOU DECIDE YOU WANT TO BE IN THIS RESEARCH STUDY?**

If you agree for to participate in this study, the following things will happen:

You will be asked to fill in questionnaires by a trained interviewer in a private area where you feel comfortable answering questions. The questionnaire will last approximately 30 minutes.

### **ARE THERE ANY BENEFITS BEING IN THIS STUDY?**

The information you provide will help us better understand the effects of rural tourism practices on socioeconomic development of community' in Machakos County. This information is a major contribution to science and the government in improving the socio-economic development of the citizens by formulating appropriate policies.

### **WILL BEING IN THIS STUDY COST YOU ANYTHING?**

**The study will involve spending time at the study site as the researchers continue with their work therefore it will cost a-bit of your time.**

### **ARE THERE ANY RISKS, HARMS, DISCOMFORTS ASSOCIATED WITH THIS STUDY**

**One potential risk of being in the study is loss of privacy. We will keep everything you tell us as confidential as possible. Also, answering questionnaire may be uncomfortable for you. If there are any questions you do not want to answer, you can skip them. You have the right to refuse the interview or any questions asked during the interview.**

### **IS THERE REIMBURSEMENT FOR PARTICIPATING IN THIS STUDY?**

There will not be direct material gain from the study.

### **WHAT IF YOU HAVE QUESTIONS IN FUTURE?**

If you have further questions or concerns about this study, please call or send a text message to the study staff at the number provided at the bottom of this page.



For more information about your rights as a research participant you may contact the Secretary/Chairperson, on [sgs@maseno.ac.ke](mailto:sgs@maseno.ac.ke) .The study staff will pay you back for your charges to these numbers if the call is for study-related communication.

**WHAT ARE YOUR OTHER CHOICES?**

Your decision to participate in this research is voluntary. You are free to decline or withdraw participation in the study at any time without injustice or loss of benefits.

You do not have to give reasons for withdrawing if you do not wish to do so.

For more information contact Mr Simiyu Wanyama Ronald on 0722-992-551 from \_\_\_\_\_8am\_\_\_\_\_ to \_\_\_\_5pm\_\_\_\_\_

**CONSENT FORM (STATEMENT OF CONSENT)**

You are being asked to give your permission to participate in this study.

I have read this consent form or had the information read to me. I have had the chance to discuss this research study with a study counselor. I have had my questions answered by him or her in a language that I understand. The risks and benefits have been explained to me. I understand that I will be given a copy of this consent form after signing it. I understand that my participation in this study is voluntary and that I may choose to withdraw it any time.

I understand that all efforts will be made to keep information regarding my personal identity confidential.

By signing this consent form, I have not given up my legal rights as a participant in this research study.

I voluntarily agree to participate in this research study:

Yes/ No

Thumb stamp: \_\_\_\_\_ Date \_\_\_\_\_

Printed name: \_\_\_\_\_

**Researcher's statement**

I, the undersigned, have fully explained the relevant details of this research study to the participant named above and believe that the participant has understood and has knowingly given his/her consent.

Printed Name: \_\_\_\_\_ Date: \_\_\_\_\_

Signature: \_\_\_\_\_

Role in the study: \_\_\_\_\_ [i.e., study staff who explained informed consent form.]

Witness Printed Name (If witness is necessary) \_\_\_\_\_

Signature: \_\_\_\_\_ Date; \_\_\_\_\_

Yours faithfully,

**SIMIYU WANYAMA RONALD**

**0722-992-551**

**Appendix II: Questionnaires**

**SECTION A: PERSONAL INFORMATION (Tick where appropriate)**

1) Please indicate your gender

Male [ ]      Female [ ]      Others\_\_\_\_\_

—

2) Specify your age

< 20 Years [ ]    20 – 35 Years [ ]    35 – 50 Years [ ]    > 50 Years [ ]

3) Indicate your average income per month (Kshs)

< 1,000 [ ]    1,000 – 15,000 [ ]    15,000 – 30,000 [ ]    > 30,000 [ ]

4) Do you think communities practice rural tourism in Machakos County?

Yes [ ]      No [ ]

5) If yes, what roles do you think they should play in rural tourism practices?

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**Section B: Agritourism Practices**

Agritourism practices entails active engagement in the operation, management, or promotion of an agriculturally-related tourism activities that's open to the public. Based on this notion, kindly respond to the question below:

Indicate on a scale of 1 – 5 your level of agreement with the extent to which the following agritourism activities are practiced in Machakos County, where by

*1 - Strongly Disagree (SD); 2 - Disagree (D); 3 – Neither Agree nor Disagree (NAD); 4 – Agree (A); 5 – Strongly Agree (SA)*

<b>Agritourism Activities Practiced</b>		<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
AGP 1	Farm accommodation are available for farm stays within Machakos County					
AGP 2	Farm and garden tours for education and recreation are conducted in Machakos County					
AGP 3	Farm markets for u-picks are available in Machakos County					
AGP 4	Farm harvesting/picking festivals are organised in Machakos County					
AGP 5	Farm food testing activities are conducted in Machakos County					

**Section C: Cultural Tourism Practices**

Culture tourism includes movements of persons for essentially cultural motivations such as study tours, performing arts and other cultural tours, travel to festivals and other cultural events, visit to sites and monuments travel to study nature folklore or art or pilgrimages Based on this notion, kindly respond to the question below:

Indicate on a scale of 1 – 5 your level of agreement with the extent to which the following cultural tourism activities are practiced in Machakos County, where by

*1 - Strongly Disagree (SD); 2 - Disagree (D); 3 – Neither Agree nor Disagree (NAD); 4 – Agree (A); 5 – Strongly Agree (SA)*

<b>Cultural Tourism Practices</b>		<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
CTP1	The cultural culinary activities are attractive to tourists					
CTP2	The local traditions and customs are attractive to tourists					
CTP3	Community in Machakos County are engaged in handicrafts and arts business					
CTP4	Festivals/Rites of interest to tourists are practiced					
CTP5	Local music and dances performance are organised in Machakos County					

<b>Section D: Ecotourism Practices</b>						
Indicate on a scale of 1 – 5 your level of agreement with the extent to which the following ecotourism activities are practiced in Machakos County, where by						
<i>1 - Strongly Disagree (SD); 2 - Disagree (D); 3 – Neither Agree nor Disagree (NAD); 4 – Agree (A); 5 – Strongly Agree (SA)</i>						
<b>Ecotourism Practices</b>		<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
ETP1	Travel to natural areas through eco trekking/hiking are encouraged in Machakos County					
ETP2	Rescue and relocation of flora and fauna as a recreational activity is done in Machakos County					
ETP3	Tour guiding and Eco safari activities are frequently organised in Machakos County					
ETP4	Eco lodging and camping activities are conducted in Machakos County					

<b>Section E: Socioeconomic Development</b>						
Indicate on a scale of 1 – 5 your level of agreement with the extent to which the following socioeconomic development have been raelised in Machakos County, where by						
<i>1 - Strongly Disagree (SD); 2 - Disagree (D); 3 – Neither Agree nor Disagree (NAD); 4 – Agree (A); 5 – Strongly Agree (SA)</i>						
<b>Socioeconomic Development</b>		<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
SED1	Local community get revenues and income from tourist related activities					
SED2	Local community has access to good infrastructure					
SED3	Local community has access to security					
SED4	Local communities in Machakos County get to be employed through tourism-oriented activities					
SED5	Community culture get preserved through tourism					
SED6	Local community has access to quality living standards e.g., access to water, education, food, healthcare, etc.					

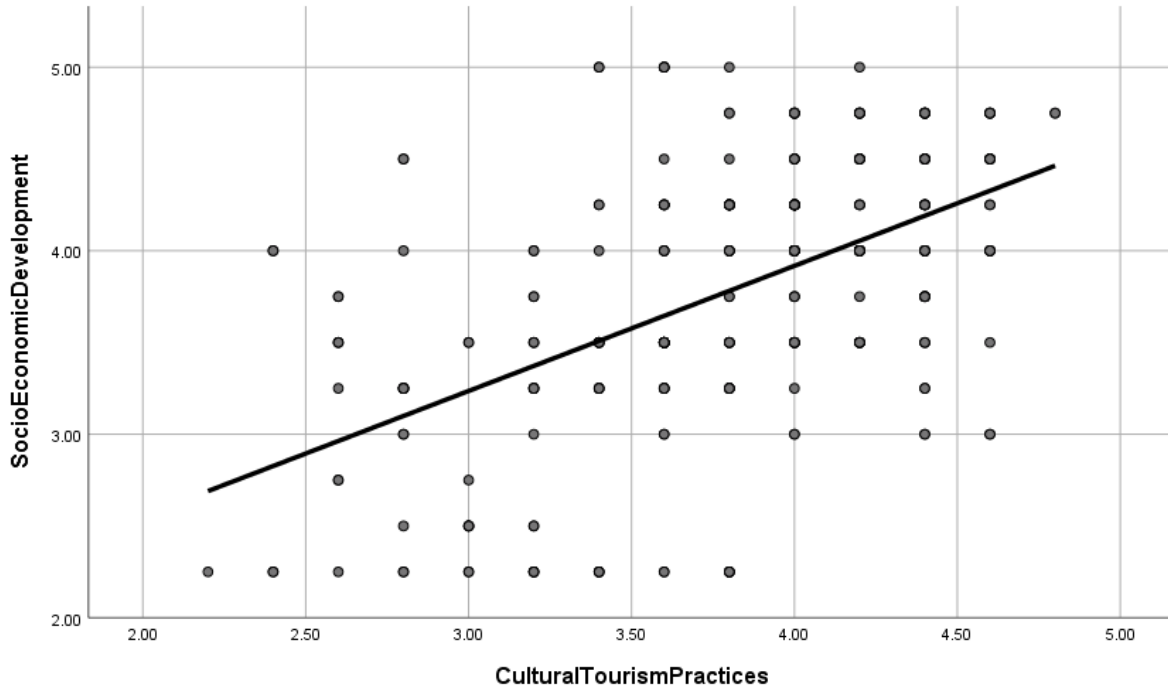
**Thank you**

### Appendix III: List of Tourists Attraction Sites in Machakos County

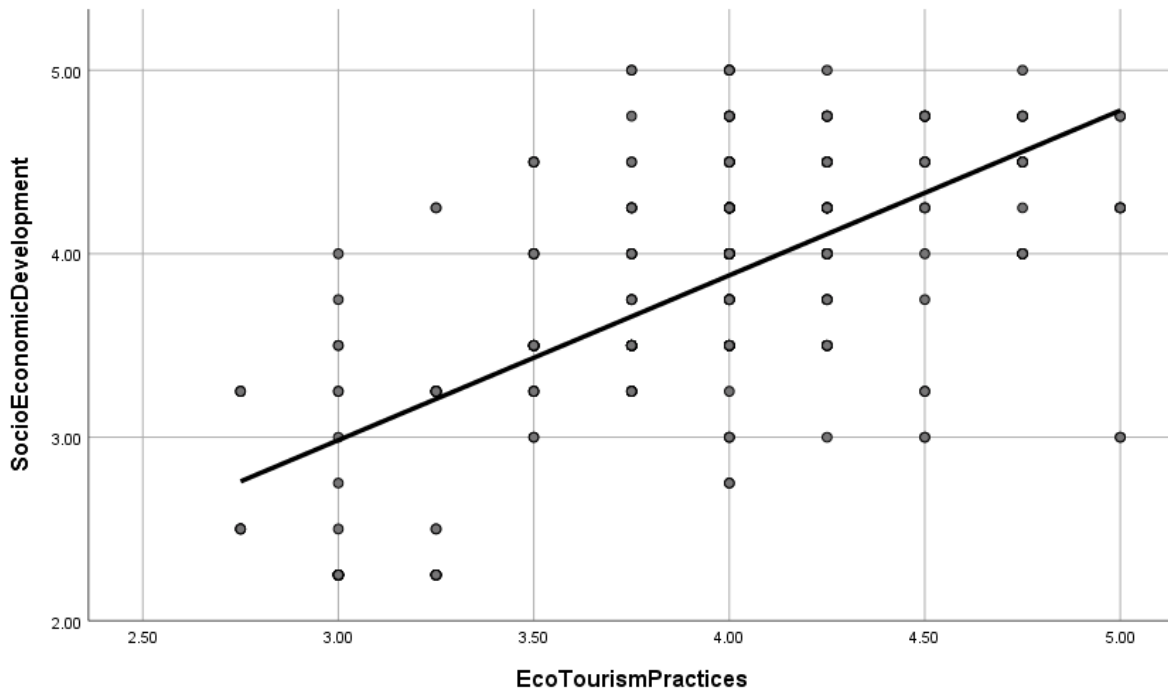
SN	Sub County	Attraction site	Classification
1	Kangundo	Hyena caves	Adventure/ Scenic
2	Kangundo	Thue Rock	Adventure/ Scenic
3	Kangundo	Kamarock Shrine	Adventure/Religious
4	Kathiani	Gen Mulinge Dam	Adventure/Ecotourism
5	Kathiani	Women Basketry (Kauti)	Adventure/Culture
6	Machakos	Iveti Forest Reserve	Adventure/Ecotourism
7	Machakos	Mau Hills	Adventure/Ecotourism
8	Machakos	Kituluni Hill/Kyamwilu Hill	Adventure/Ecotourism
9	Machakos	Oi Donyo Sabuk National Park	Adventure/Ecotourism
10	Machakos	Maanzoni Sanctuary	Adventure/Ecotourism
11	Machakos	Kiima Kimwe Hills	Adventure/Ecotourism
12	Machakos	Fourteen Falls	Adventure/Ecotourism
13	Machakos	Mwania Rocks river	Adventure/Ecotourism
14	Machakos	Masaku Footprint Rock	Adventure/Ecotourism
15	Machakos	Kamuthanga farm	Agritourism
16	Machakos	Eteina Farm & Resort	Agritourism
17	Machakos	Kalam Museum	Culture
18	<b>Machakos</b>	<b>Machakos People's Park</b>	<b>Recreation</b>
19	Machakos	ACK Kamuthanga	Religious/Adventure
20	Machakos	Katoloni Prayer Mountain	Religious/Adventure
21	<b>Machakos</b>	<b>AIC Mumbuni (the first church in Machakos)</b>	<b>Religious</b>
22	<b>Machakos</b>	<b>The Kenyatta Stadium</b>	<b>Sports and Recreation</b>
23	Masinga	Masinga Dam	Adventure/Education
24	Matungulu	Lord Macmillan's Castle	Culture and Heritage
25	Matungulu	Yathui traditional shrine	Culture and Heritage
26	Mavoko	Lukenya Hill and Caves	Adventure/ Scenic
27	Mavoko	African Heritage House	Culture and Heritage
28	Mavoko	Divine Mercy Shrine	Religious/Adventure
29	Mwala	Nthike farm cottages	Agritourism/Ecotourism
30	Mwala	Wamunyu Hand craft	Culture
31	Mwala	Mililuni Handcrafts	Culture
32	Mwala	Vicarage House	Religious/heritage
33	Yatta	Bishop masiska farm	Agritourism
34	Yatta	Katangi Women Basket Weavers	Culture

*Note:* Three attractions in bold were not considered in the study

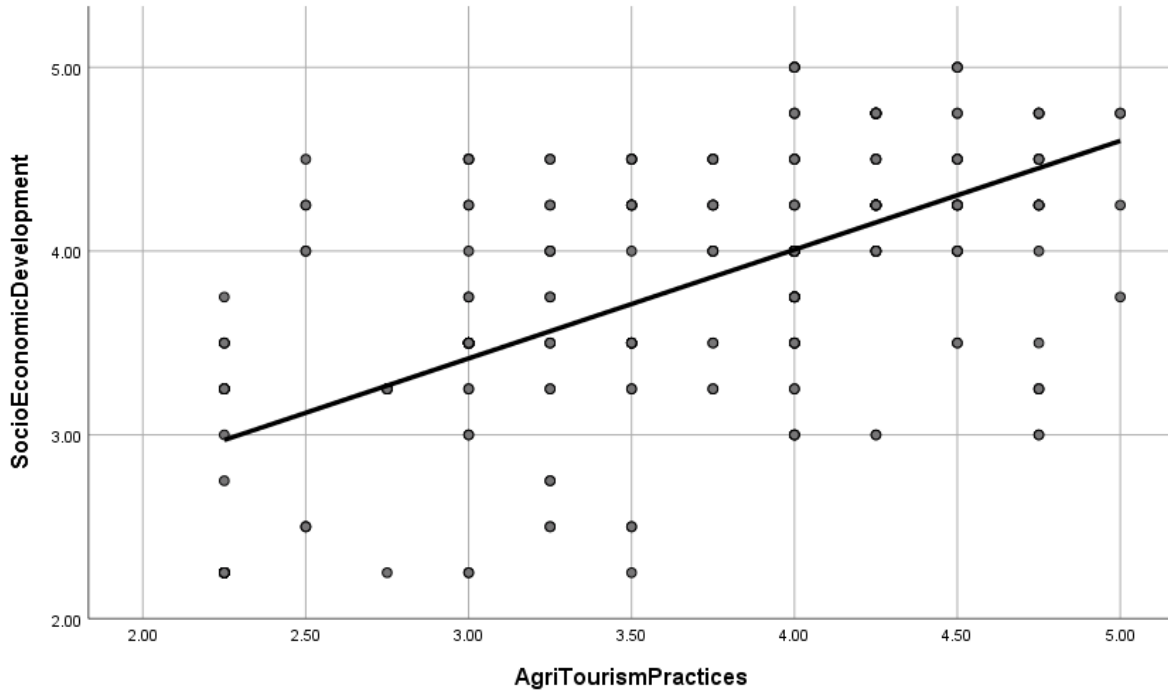
## Appendix VI. Regression Analysis Assumption Results



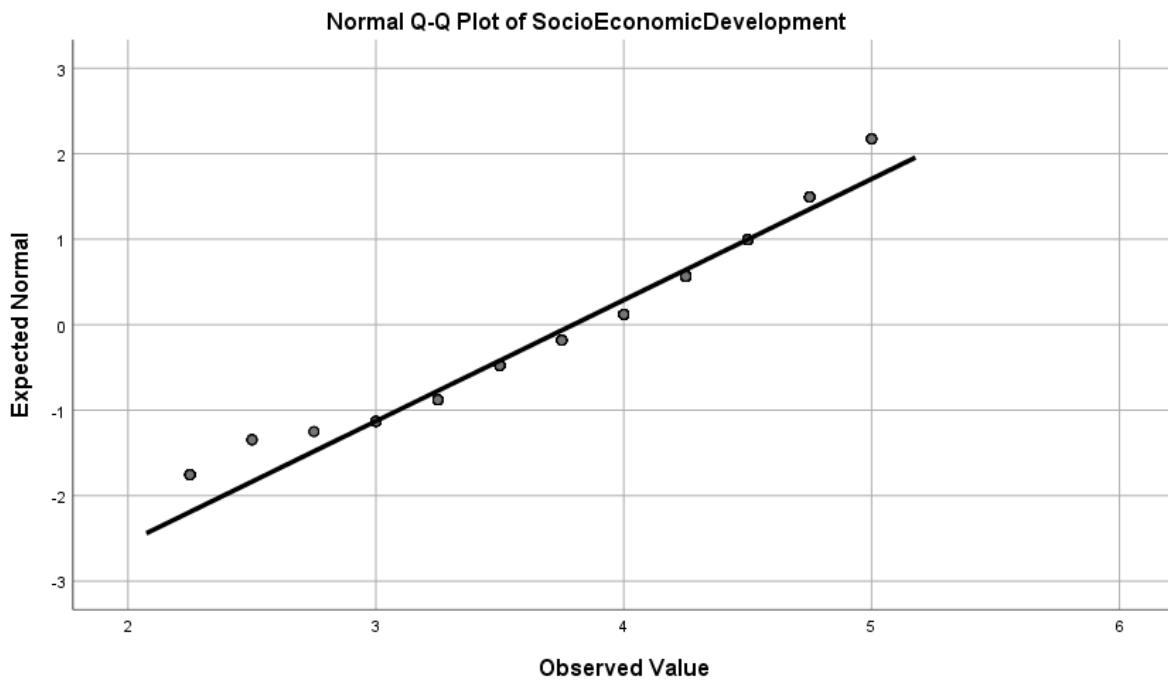
*Figure A. Scatter plot for socio economic development and cultural tourism practices*



*Figure B. Scatter plot for socio economic development and Ecotourism practices*



*Figure C. Scatter plot for socio economic development and agritourism practices*



*Figure D. Q-Q plot for socio economic development*



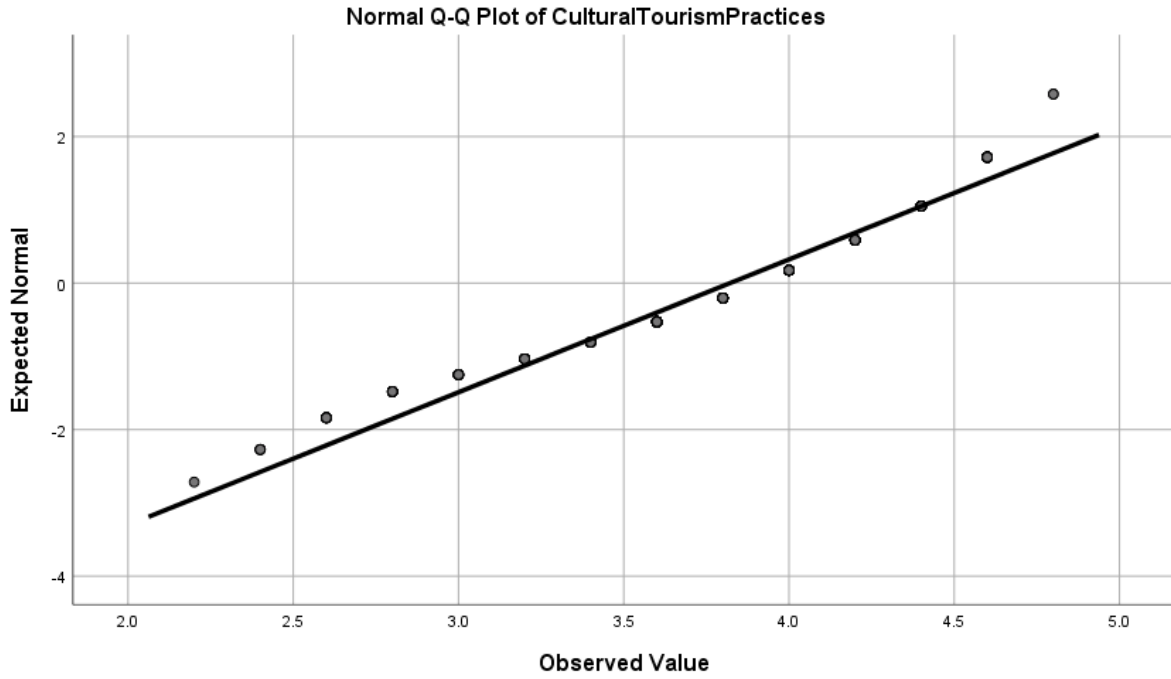


Figure E. Q-Q plot for cultural tourism practices

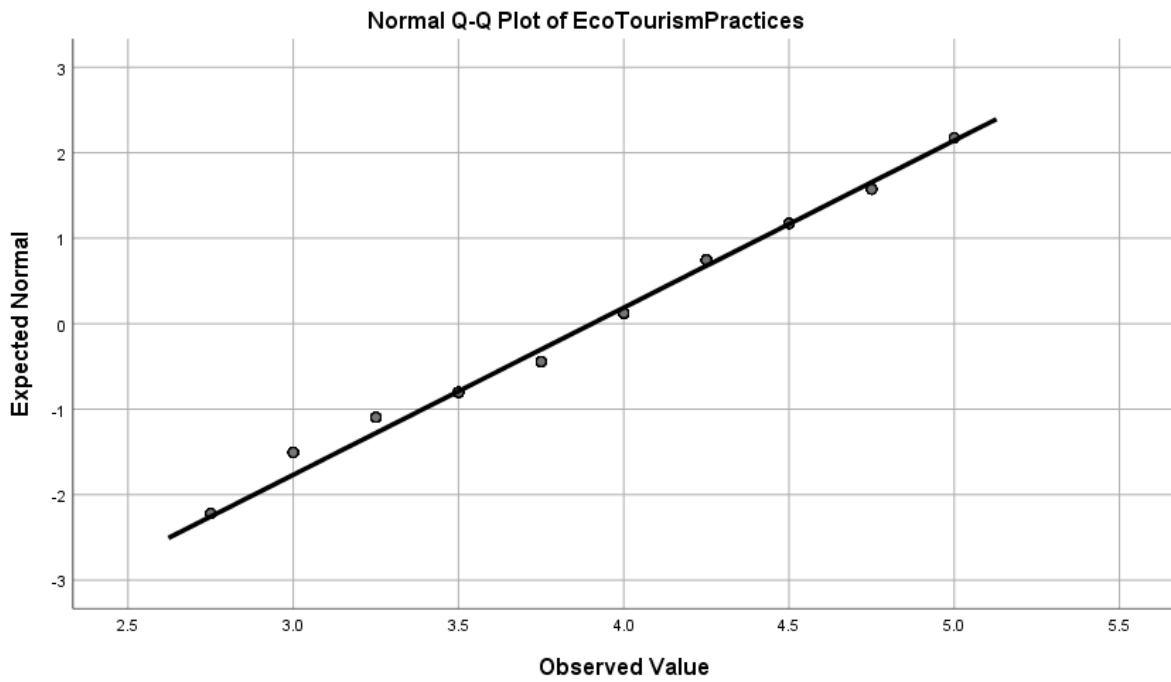
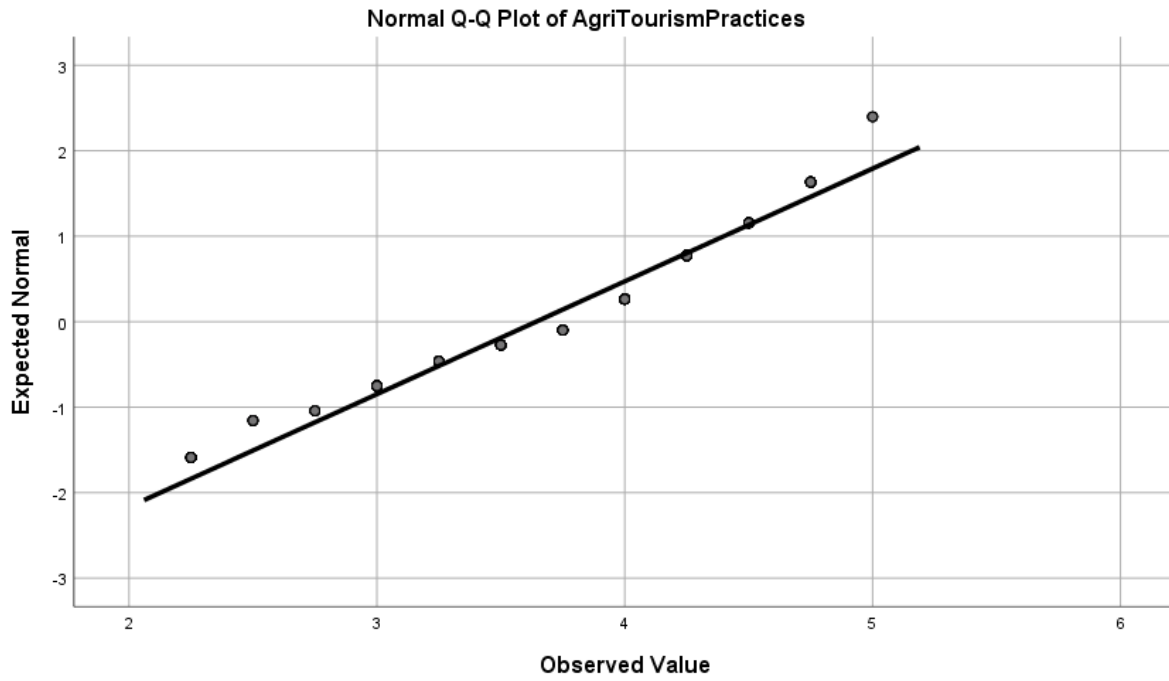


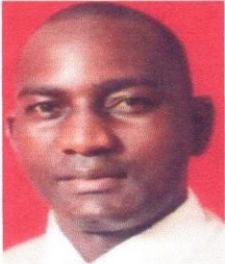




Figure F. Q-Q plot for ecotourism practices



*Figure G. Q-Q plot for agritourism practices*

**Appendix VII: RESEARCH LICENCE NACOSTI PERMIT**

 REPUBLIC OF KENYA	 NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY & INNOVATION
Ref No: 871454	Date of Issue: 15/October/2021
<b>RESEARCH LICENSE</b>	
	
<p>This is to Certify that Mr.. RONALD Wanyama SIMIYU of Maseno University, has been licensed to conduct research in Machakos on the topic: EFFECTS OF RURAL TOURISM PRACTICES ON SOCIO-ECONOMIC DEVELOPMENT OF KAMBA COMMUNITY IN MACHAKOS COUNTY for the period ending : 15/October/2022.</p>	
License No: NACOSTI/P/21/13607	
871454 Applicant Identification Number	 Director General NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY & INNOVATION
	Verification QR Code 
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## Appendix VIII: ETHICAL REVIEW APPROVAL LETTER



### MASENO UNIVERSITY ETHICS REVIEW COMMITTEE

Tel: +254 057 351 622 Ext: 3050  
Fax: +254 057 351 221

Private Bag – 40105, Maseno, Kenya  
Email: muerc-secretariate@maseno.ac.ke

REF: MSU/DRPI/MUERC/00996/21

Date: 6<sup>th</sup> October, 2021

TO: Simiyu Wanyama Ronald  
EL/EHM/01401/2018  
Department of Ecotourism, Hotel and Institution Management  
School of Business and Economics  
Maseno University  
P.O. Box, Private Bag, Maseno, Kenya

Dear Sir,

**RE: Effects of Rural Tourism Practices on Socio-Economic Development of Kamba Community in Machakos County**

This is to inform you that Maseno University Ethics Review Committee (MUERC) has reviewed and approved your above research proposal. Your application approval number is MUERC/00996/21. The approval period is 6<sup>th</sup> October, 2021 – 5<sup>th</sup> October, 2022.

This approval is subject to compliance with the following requirements;

- i. Only approved documents including (informed consents, study instruments, MTA) will be used.
- ii. All changes including (amendments, deviations, and violations) are submitted for review and approval by Maseno University Ethics Review Committee (MUERC).
- iii. Death and life threatening problems and serious adverse events or unexpected adverse events whether related or unrelated to the study must be reported to Maseno University Ethics Review Committee (MUERC) within 24 hours of notification.
- iv. Any changes, anticipated or otherwise that may increase the risks or affected safety or welfare of study participants and others or affect the integrity of the research must be reported to Maseno University Ethics Review Committee (MUERC) within 24 hours.
- v. Clearance for export of biological specimens must be obtained from relevant institutions.
- vi. Submission of a request for renewal of approval at least 60 days prior to expiry of the approval period. Attach a comprehensive progress report to support the renewal.
- vii. Submission of an executive summary report within 90 days upon completion of the study to Maseno University Ethics Review Committee (MUERC).

Prior to commencing your study, you will be expected to obtain a research license from National Commission for Science, Technology and Innovation (NACOSTI) <https://oris.nacosti.go.ke> and also obtain other clearances needed.

Yours sincerely

Prof. Philip O. Owuor, PhD, FAAS, FKNAS  
Chairman, MUERC



MASENO UNIVERSITY IS ISO 9001: CERTIFIED

