

# **DETERMINANTS OF SUSTAINABILITY OF COMMUNITY BASED ECOTOURISM DEVELOPMENT PROJECTS IN KENYA: A CASE OF NORTHERN RANGELAND TRUST CONSERVANCY, MERU COUNTY**

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## **ABSTRACT**

The primary purpose of the study was to determine the factors influencing sustainability of community based ecotourism development projects in Kenya. Specifically, the study focused on Northern Rangeland Trust Conservancy in Meru County. The study specifically focused on the influence of community participation, stakeholders' collaborations, project management practices and financial viability on sustainability of Northern Rangeland Trust Conservancy Projects in Meru County. The reviewed theories included agency theory, stakeholder theory and resource based theory. The research used descriptive research design in the collection of data on the factors influencing sustainability of community based ecotourism development projects in Kenya. The target population for this study was 144 respondents comprising of project staff in Northern Rangeland Trust Conservancy in Meru County. Krejcie and Morgan approach was used to determine the sample size of 105 respondents. This study adopted a stratified and simple random sampling technique. Data was acquired both from primary and secondary sources. Structured questionnaires were distributed to the targeted population. Data was analyzed using Statistical Package for Social Sciences (SPSS Version 25.0). All the questionnaires received were referenced and items in the questionnaire were coded to facilitate data entry. After data cleaning which entailed checking for errors in entry, descriptive statistics such as frequencies, percentages, mean score and standard deviation were estimated for all the quantitative variables.

The qualitative data from the open ended questions was analyzed using conceptual content analysis and presented in prose. Inferential data analysis was done using multiple regression analysis. Information was presented in form of tables. The study found that community participation influences the sustainability of community based ecotourism projects in Meru County very greatly. The study also found that networking with tourism expertise; and facilitating links to market influence sustainability of community based ecotourism projects in Meru County to a great extent. Local innovations were found to influence sustainability of community based ecotourism projects in Meru County to a low extent.. The study also found that transparent management of financial resources affect sustainability of community based ecotourism projects in Meru County to a very great extent. The study concluded that community participation had the greatest influence on sustainability of community based ecotourism development projects in Meru County, followed by financial viability, then stakeholders' collaborations while project management practices had the least influence on the sustainability of community based ecotourism development projects in Meru county. The study there is need for the government and NGO's to encourage the local community to diversify their income generating activities and venture into bee keeping and supply of goods and services among others. The Community Based Ecotourism Projects' stakeholders or partners in Meru should also promote information flow, awareness and communication amongst themselves so as to ensure transparency and

accountability which are key to the success of community-based enterprises. County government should adopt a more collaborative approach when dealing with community based county projects.

**Key Words:** *sustainability, community based ecotourism development projects, Northern Rangeland Trust Conservancy, Meru County, Kenya*

## **INTRODUCTION**

The Community based tourism (CBT) concept is a recent one in Kenya having been born through the promotion of Eco-tourism and community driven conservation efforts. The CBT concept ensures that tourism activities in a given area seek to empower the resident locals of such an area enabling them to participate in decisions that shape tourism in their area. As such assertion holds that CBT efforts aim at allowing the locals to have stake in the tourism resources in their area with an intention of promoting sustainable use of the same. This then brings us to the concept of sustainable CBT thus developing Sustainable Community Based Tourism (SCBT) (Zhang & Lei, 2012).

Ecotourism has emerged as a form of sustainable tourism as one solution to help protect the ecological and cultural resources of tourism sites, provide local economic opportunity and give travelers greater environmental awareness. Ecotourism is noted to incorporate elements of nature based, adventure, alternative or green tourism (Lepper & Schroenn, 2010). The World Ecotourism Summit in Quebec City in 2002 noted that ecotourism if carried out responsibly can be a valuable means of promoting the social economic development of host communities while generating resources for the preservation of natural and cultural assets (García, Gómez & Molina, 2012). In this way, ecologically fragile areas can be protected with the financial returns of ecotourism activities.

Community-based ecotourism (CBE) has been advocated by many as one of the potential solutions to the economic development of rural impoverished communities which have natural resource assets which could be sustainably utilised for the economic development of these peripheral communities. Ecotourism is defined as responsible travel to natural areas that conserves the environment and improves the well-being of local people (Das & Chatterjee, 2015). CBE therefore implies that communities have substantial control over and involvement in the tourism project and that the largest portion of the benefits remain within the community (DePuy, 2011). Tourism is seen as an important mechanism for local communities to benefit from protected areas, however these ventures need to manage their environmental impacts, their economic viability and social partnerships and environment very carefully to ensure that tourism does not become a self-destructive process that destroys the resources it is based upon. Major concerns have been raised regarding the ineffectiveness, potential unsustainability and the failure of community-based ecotourism ventures (Claiborne, 2010).

In global perspective, tourism involves multinational corporations, geo-politics, changes in economic forces and interactions with the locals i.e. workers, residents, visitors, entrepreneurs and

governments. CBT for over 30 years has been promoted to meet the social, environmental and economic needs of local communities through the offering of a tourism product. However, in third world countries, most of CBE programs are financed by internationally affiliated NGOs. There are strong arguments in support of ecotourism playing a central role in conservation and rural development in sub-Saharan Africa.

In United States, Community-based ecotourism (CBE) has become a popular tool for biodiversity conservation; based on the principle that biodiversity must pay for itself by generating economic benefits, particularly for local people. There are many examples of projects that produce revenues for local communities and improve local attitudes towards conservation, but the contribution of CBE to conservation and local economic development is limited by factors such as the small areas and few people involved, limited earnings, weak linkages between biodiversity gains and commercial success, and the competitive and specialized nature of the tourism industry. In United Kingdom, many CBE projects cited as success stories actually involve little change in existing local land and resource-use practices, provide only a modest supplement to local livelihoods, and remain dependent on external support for long periods, if not indefinitely.

In Africa, the growth of tourism has been among the strongest in the global market during the past ten years, making it an increasingly important industry in many countries in East and Southern Africa. Most tourism enterprises in the region are based on natural resources – wildlife, forests, deserts, and coral reefs – creating important economic incentives for local and national investments in conserving biodiversity (Osman, Ahmad, Ahmad, Khin, Abu Bakar, Husin & Tanwir, 2010). Tourism activities using natural attractions in remote rural areas can be an important source of economic diversification and livelihood opportunity. Thus tourism is increasingly a component of both economic development and biodiversity conservation strategies in sub-Saharan African countries (Mtapuri & Giampiccoli, 2013).

The rapid growth of tourism in northern Tanzania over the last 10 years has been accompanied by a proliferation of commercial ventures on community lands located outside the traditional national park destinations. This has occurred primarily as a result of the industry's expansion and need to diversify its products beyond the core circuit of national parks. But government authorities have also supported the growth of community-based tourism, recognising its potential to both reduce rural poverty and conserve biodiversity. A number of themes emerge which are relevant not only to development and conservation in northern Tanzania, but also more generally to natural resources governance and rural livelihoods in East Africa. First, an increasing number of rural communities in northern Tanzania are signing commercial agreements with private operators to develop ecotourism ventures on their land. These agreements offer important new economic opportunities. But the ability of local people to benefit from them is being compromised by other parties also wishing to develop and benefit from alternative forms of wildlife-based tourism on community lands. The struggles and conflicts that arise from this competition illustrate some of the fundamental governance challenges to community-based natural resource management and ecotourism in Tanzania (Kahle & Gurel-Atay, 2013).

In Kenya, tourism is considered an important sector in the development process (GOK, 2016). It accounts for 12 percent of the Gross Domestic Product (GDP), making it the third largest contributor of wealth after agriculture and manufacturing, and the third largest foreign exchange earner after tea and horticulture. In 2007, the sector had about a million arrivals, an increase of 12.5 percent from the previous year, earning Kshs. 65.4 billion, an increase of 11.6 percent. In 2010, the sector realised Kshs. 73.6 billion in revenue from an approximately 1.1million arrivals. The sector accounts for nine percent of total wage employment in the country and is a major source of government revenue. Further, tourism is identified as one of the key drivers for achieving the goals of Kenya's development blueprint, the Vision 2030 (GOK, 2013).

Tourism in Kenya has witnessed the emergence of CBET activities, mainly in the rangelands of the country. These are the drier regions of the country that are traditionally inhabited by indigenous pastoral communities and are habitat for variety of wildlife making them preferred destinations for nature based tourism. Paradoxically, despite Kenya being among world leaders in this sector, poverty and marginalization still dominate major tourist destinations in the rangelands (Mwambeo & Maitho, 2015). These areas face a myriad of socio-economic and environmental problems such as degradation, inequality, human-wildlife conflicts, food insecurity, drought, famine, poor infrastructure, water shortage, poverty, illiteracy and diseases, among others (Morelli, 2011). In Meru County, CBET activities have been introduced as a viable way of improving livelihoods and conserving the environment.

## **STATEMENT OF THE PROBLEM**

Community based ecotourism is regarded as a means to enterprise development at the same time a pathway to sustainability of social, economic and environmental aspects. CBET is important in helping diversify tourism thus reducing congestion and over reaching of the mainstream tourism products. CBET is also important in influencing the immediate community's socio-economic status for the better. Notwithstanding these, the success or lack of it of CBET in the world exhibits numerous varying results, suggesting that there are areas in which CBET has been regarded successful while in other areas it has been regarded unsuccessful (Zhang & Lei, 2012). CBET faces numerous challenges that limit the utmost utilisation of tourism resources. For Kenya, this has come at a great price where communities among whom the tourism resources are located languish in poverty while other investors benefit from the resources. In some cases, the exploitation of tourism resources has been done unsustainably thus leaving the surrounding communities suffering from negative effects. Such has been witnessed in Kenya especially on the coastal strip where tourism resources are utilised unsustainably thus leaving communities suffering from negative effects (GOK, 2013). In Kenya, Very few of CBETs which have been phased-out, have had major impacts on the community members' overall living standards. This is attributed to them not becoming self-reliant. This may be due to poor management and not achieving sustainability by the community members as noted by. The new CBET being initiated now are likely to join the graveyard path of other community based projects (CBPs) in failing to impact community beyond

the planned intervention phase. Those that plan these CBETs may systematically fail to work out their sustainability as evidenced by many stalled projects in Meru County. This is a worrying trend in a county riddled with high levels of poverty, unemployment and poor infrastructure leading to underdevelopment. Literature reviews on related issues showed that ecotourism has not been beneficial to local communities. Northern Rangeland Trust Conservancy in Meru County is comprised of community, institutional and private-sector members. Support depends on conservancies undertaking a pro-active programme of improving the ecology within their respective areas and undergoing independent financial audits. Where these conditions are not met, community members may have support suspended. NRT does not have sustained funding for community enterprises and conservation management. The implementation and actualisation of adopted strategies has failed owing to lack of funding terming the sector as un-governed thus limiting significant engagements with stakeholders. Therefore NRT seeks to establish long-term partnerships in order to sustain its projects so as to improve the living standards of the communities. Studies such as Githinji (2009) studied the factors that affect the sustainability of CBPs in Mutomo District of Kitui County; Wilder (2016) did a study on an assessment of ecotourism as an effective tool for sustainable forest management: The case of Adaba-Dodola, Ethiopia; Ekwale (2014) studied the Assessment of Local Community Involvement in Community Based Ecotourism Planning and Development: The Case of Takamanda National Park. South West Region, Cameroon; Jepchirchir (2016) assessed the attitude and perception of local community towards ecotourism in Laikipia County and Gaitho (2014) focused on the impact of CBET on households' livelihoods and environmental management in Il Ngwesi and Lekurruki Group Ranches in Laikipia County. These studies however did not elaborate on the factors that influence sustainability of community based ecotourism development projects and hence presented a gap that this current seeks to fill. The study therefore sought to establish the determinants of sustainability of community based ecotourism development projects in Kenya. Specifically, the study focused on Northern Rangeland Trust Conservancy in Meru County.

## **PURPOSE OF THE STUDY**

The primary purpose of the study was to establish the determinants of sustainability of community based ecotourism development projects in Kenya. Specifically, the study focused on Northern Rangeland Trust Conservancy in Meru County.

## **OBJECTIVES OF THE STUDY**

1. To establish influence of community participation on sustainability of Community Based Ecotourism Projects in Meru County, Kenya.
2. To determine how stakeholders collaborations influence sustainability of Community Based Ecotourism Projects in Meru County, Kenya.
3. To assess how project management practices influence sustainability of Community Based Ecotourism Projects in Meru County, Kenya.

4. To evaluate how financial viability influence sustainability of Community Based Ecotourism Projects in Meru County, Kenya.

## **LITERATURE REVIEW**

### **Sustainability of Community Based Ecotourism Projects**

Over the years, the definition of sustainability in development literature has varied widely and broadened in scope. The concept arose in response to economic growth models that characterized development approaches over the last half century. It was eventually recognized that such models did not adequately address social inequalities and led to environmental degradation. The concept gained wider use after the World Commission on Environment and Development published our common future (Hennink, Kiiti, Pillinger & Jayakaran, 2012). According to IFAD, sustainability is defined as ensuring that the institutions supported through projects and the benefits realized are maintained and continue after the end of the project (IFAD, 2013). IFAD's Office of Evaluation adds to this definition by considering resource flows. It acknowledges that assessment of sustainability entails determining "whether the results of the project will be sustained in the medium or even longer term without continued external assistance". It further expands on the concept of programme sustainability by distinguishing among several factors that either contribute to or detract from the long-term impact of IFAD interventions (IFAD, 2013).

An operational definition which permits some degree of ordinal ranking by sustainability will have to be narrow and specific. For instance, in a study of three African countries, Hart (2015) defined sustainability in terms of outcomes persisting at least two years after project termination; and in a comparative study of five countries in Africa and Central America, he defined it as outcomes at least three years after project termination. Morelli (2011) in a study of sustainability of integrated rural development projects, defined it in terms of "the percentage of project-initiated goods and services that is still delivered and maintained five years past the termination of donor resources." This latter definition appears empirically verifiable but in practice will be complicated by multiple outputs and lack of agreement about the verification of 'delivery' and 'maintenance.' Based on the knowledge of sustainability, the concept of sustainable community based tourism therefore identifies with tourism practices that not only seek to engage and benefit the communities, but also ensure that the available resources are utilized with consideration of the future users and effect on surrounding.

Development of tourism and livestock markets is providing conservancies with revenue streams, a portion of which are used to fund local schools, health care facilities, and conservancy operational costs, including ranger salaries and vehicle maintenance. Improvements in rangeland conditions are allowing pastoralists to expand the sizes of their herds and the numbers of livestock sold to NRT, further increasing annual income for communities. Restored rangelands in turn attract more wildlife, broadening eco-tourism development options for communities. Payment for

ecosystem services (PES) schemes have the potential to provide an additional revenue stream for conservancies in the future (Kangiri, 2015).

The sustainability of a project is pointed out by its continuous operation and maintenance of the system (O&M). The O&M embraces project diversity and inclusivity of all the sectors required to sustain the project. According to Besel, Charlotte and Klak (2011), sustainability of Projects is usually constrained by the inadequacy of financial resources that are needed to implement the same. Due to the imperatives of budgetary policies it is difficult to establish and resource project structures and associated institutions essential for effective implementation and the achievement of goals, except over the long haul. However, the situation can be mitigated by strong and effective capacities at the national level to manage and coordinate project financing which adequately project implementation and management.

According to Bowman (2011), studies have shown that inclusiveness and active involvement of all stakeholders nurtures a deep sense of pride and ownership of the joint venture rather than the one-man-syndrome. The active participation ensures that the venture can outlive its existence to future generations (Okorley & Nkrumah, 2012). The one-man-show approach robs the venture of its momentum as individuals are weighed down by the heaviness of responsibilities. The resource support provided by the local community groups particularly with respect to the technical efficiency and financial support is essential to community venture continuity. In addition, the involvement of community groups in supporting project in areas of customer preference, effectiveness in design construction and maintenance of project facilities and equipment is equally important in project sustainability. Moreover, the participation of diverse community groups and training of staff on efficient use and management of project assets, improved skills and increased incomes of the beneficiaries and the local community will be reasons enough to sustain their interest in the project (Okorley & Nkrumah, 2012).

### **Community Participation and Sustainability of Community Based Ecotourism Projects**

According to a report by Armstrong (2012), Community participation is a matter of global concern and the international community has been persuading the developing countries to engage the people in addressing issues that affect their own lives. Community participation approaches have become a major demand by the development agencies the world over; the United Nation, World Bank and other donors. The bottom-up approach has gained currency for its gains in project performance and sustainable development, it makes implementation better than the top-bottom approach. In the global scene, it is acknowledged that the bottom-up approach makes people close to the development activities and entrenches ownership.

The need for community participation has been found to be increasingly important in the successful performance of a project. Indeed, Hausler (2010) found that the degree to which stakeholders are personally involved in the implementation process will cause great variation in their support for that project. Therefore, ecotourism represented a paradigm shift in tourism by



focusing more directly on raising local income, sustainable development, community participation and empowerment (Ebrahimi & Khalifah, 2014). It is seen as a means of empowering the local community through incentives for conserving the biological resources in their environment subject to benefits for individual families or households; thereby making ecotourism a means for rural development.

Local communities' participation in tourism in Kenya has been low and mainly confined to the supply of goods and services, sale of handicrafts and entertainment by traditional dancers; where the local people must contend with competition by entrepreneurs from other parts of the country who are better prepared to do business and have access to credit. The local community decried the status quo and expressed the need for their involvement in tourism activities in their regions (Claiborne, 2010).

Galaski (2015) observed that community participation in resource management for tourism has the potential capacity of increasing income and employment, and of developing skills and institutions for empowering local people. Ecotourism is therefore perceived as a factor for economic growth, equitable distribution of resources and a process of alleviating poverty. Hausler (2010) observes that the greater priority of ecotourism should be on socio-economic objectives generally and to poverty reduction in particular. Morelli (2011) argued that community participation therefore is an integral part of tourism in order to help increase community's carrying capacity by reducing negative impacts while enhancing positive effects.

The emphasis on community participation in tourism has hence introduced a new horizon in the scope and practice of ecotourism leading to the concept of Community Based Ecotourism (CBET). Arguably, CBET represents the social dimension in the definition of ecotourism (Duffy, 2013). It makes tourism harmonious with the social climate where residents benefit from tourism and not become its victims. For instance, in Namibia community-based ecotourism enterprise development has played a central role in the generation of community revenues, employment and additional benefits (Chaiyatorn, Kaoses & Titphat, 2010). It is the aspect of community involvement underscored in CBET that formed a basis for this study. As the principal stakeholders, the local people are considered as the main bearers of CBET outputs. It was this niche that this study sought to examine while focusing on effects of households livelihoods and environmental management.

In any community development there is need for cooperation between the organization and the community. Most of the communities which community based projects operates in are characterized by social problems, which include poverty, unemployment and other social evils. In view of the prevalence of the socio-economic problems and geo-physical characteristics, the people in these communities have limited options for their development needs. Consequently these people remain backward and the mass living in these backward pockets are affected socially and physically. This has resulted in the shaping of their behavior in tune to the prevailing conditions (Armstrong, 2012).

## **Stakeholders Collaborations and Sustainability of Community Based Ecotourism Projects**

Stakeholder collaboration is a process that will go through many iterations. Full collaboration or partnership is not always going to be the outcome. Instead, the process that stakeholders go through may reveal that other forms of action campaigns, education, policy development, or advocacy are more appropriate given the conservation goals and objectives identified, and the roles, positions, and interests of the various parties involved. A well-managed stakeholder engagement process helps the project stakeholder to work together to increase comfort and quality of life, while decreasing negative environmental impacts and increasing the economic sustainability of the project. Stakeholder engagement should therefore be taken as a core element of any “sustainable development” plan (Zhang & Lei, 2012). The issue of sustainability relating to development activities started to become important to government, donors and development theorists from the 1980s.

Report by Gunderson (2011) emphasized that such stakeholder participation should be gender sensitive and include women throughout the project cycle. Women should be a special target group as they critically contribute to economic development. Having stakeholders set vision and prioritize results will they have the best ideas during planning in the best way and how the results would continue to remain relevant to them. They must therefore be involved in identifying the information that is needed during implementation. Inadequate stakeholder involvement hinders beneficiaries’ participation and weakens their capacity to influence project outcomes hence poor performance. The involvement of stakeholders in project initiation, project planning, project implementation and monitoring and evaluation is critical for better project performance (Bray, 2010).

In the Philippines, an evaluation of a World Bank project, found out that during a ten year period, the National Irrigation Administration shifted from a top down government approach to heavy reliance on the local farmers in the design, operation and maintenance of local irrigation systems. It was discovered that the canals and structures worked better, rice yields were 20% higher and the irrigated area 35% greater than in control groups without participation. Brass (2010) stated that major public private partnership (PPP) initiatives in the United States has reportedly failed due to stakeholder opposition. As a result, it reveals that stakeholder s' participation in project is the key to project success and without their input the outcome may not be favorable. In essence, different stakeholders have different levels and types of investments and interests in the project which sometimes results to conflicts among the stakeholders (Ndegwa, 2015).

In Sub-Saharan Africa, a report by Nalubiri (2010) cite a case where in 1968, a community of 2000 people in Malawi started work on a novel water supply system. Community members began the panning, construction and operation of their own water supply and distribution. Field staff for the project was recruited locally, traditional community groups formed the basis for water communities, and government support was limited. Virtually, all of the more than 6000 standpipes

installed nationwide are still in working order. An analysis of rural and urban development over thirty years found high correlation between project performance and level of participation.

Maina (2013) did a study in Nakuru and established a positive relationship between stakeholder participation in project identification and selection, participation in project planning, participation in project implementation and participation in project monitoring and evaluation and success of the Economic Stimulus Programs, participation was looked at wholly without paying attention to the levels. Golicha (2010) conducted a study in Garissa and found out that the level of participation of the stakeholders was not adequate in the most important stages of project formulation, design and implementation, the study did not assess the outcome of the low levels of stakeholder participation on the project. Kituu (2015) conducted a study in Turkana and established that stakeholders' participated actively in project risk management oriented activities which are tagged to a monetary value. The study demonstrate a link between the level of participation and civic responsibility which ensures project stability. Nonetheless, the study did not bring out clearly the different levels of participation and how it would influence project sustainability. M'ikiugu (2014) did a study in Meru and established that participation of the head teachers, teachers, parents and children proves to be of great importance to the success of academic performance in the public primary schools. The levels of participation and the sustainability of the school performance did not come out. An evaluation by Plan international in 2014 revealed that community projects are hardly sustainable beyond six months when funding ceases, the study attributes the poor sustainability to weak stakeholder participation. The evaluation used a qualitative approach and did not establish the relationship between the various levels of participation and sustainability of community development projects. The researcher did come across any other study on stakeholder participation and sustainability of community development projects in Homa Bay Town Sub-county.

### **Project Management Practices and Sustainability of Community Based Ecotourism Projects**

Management of projects involves increasing the alignment of development projects with host communities priorities and coordinating aid efforts at all levels (local, national, and international) to increase ownership and efficient delivery of services. It is therefore basically offering leadership to achieve certain laid objectives. According to Karanja (2014), good management ensures that sufficient local resources and capacity exist to sustain the project in the absence of outside resources. Community based projects are complex and require multifaceted management skills. A project manager team has to manifest not only project management related skills but also technical and expertise as required by the project (Nalubiri, 2010). Project management activities include but are not limited to defining project scope and requirements gathering, managing resources and relevant training issues within a project, advising about technical architecture, identifying specific and general project management practices and escalation procedures, estimating project schedule and budget, ascertaining and managing risks within a project and preparing risk mitigation.

The matching or fit between a Project Manager and project extends not only to the technical skills as enumerated above, but also to other general project. A project manager is likely the most senior person within a project and is often perceived as a sounding board for technical and architectural decisions made for the project. In addition, the project manager is also expected to demonstrate a deep knowledge of the business objectives of the project being undertaken. Prior literature has shown that task familiarity helps in improving performance and increasing sustainability of a project. Prior exposure to the project characteristics such as technology, or methodology would make the current task more familiar to the Project Manager, and hence improve sustainability. Karanja (2014) indicated that individuals with good management skill are considered to be good leaders and therefore, through their leadership organizations are steered to prosperity. Precise nature of leadership and its relationship to key criterion variables such as subordinate satisfaction, commitment, and performance is still uncertain, leadership does remain pretty much of a 'black box' or unexplainable concept." However, not all leaders are good managers. Therefore, in the quest to establish effect of management skills on sustainability of community projects, leadership should be distinguished from management (Yang, Lee & Chang, 2011).

Project management teams have to influence all that they interact with so that project sustainability can be achieved; therefore they need not only to possess good management skill but leadership skills as well. The Project management teams have to interact with many stakeholders, they have to not only manage internal project activities, their peers and superiors, but also interact with clients, using skills that are essentially non-technical in nature, and which may not be easily imitable. These include but are not limited to organizational knowledge, implied knowledge in handling people within the organizational structure, leadership and management skills, and customer handling skills (Kerine, 2015).

Within project teams, as individuals' progress from technical roles to more managerial roles, these skills come into play, and help in effective project management. Karanja and Karuti (2014) focus on skills that are tacit, and gained through experience rather than being taught in a classroom. They classify these skills as related to managing self, others, and career. They find that differences in these skills between a novice and an expert are consequential for career performance in professional and managerial career pursuits. Kerine (2015) has highlighted that successful project management requires both hard and soft skills. Hard skills comprise technological skills, domain expertise, experience as well as project management experience, and project management skills such as planning, monitoring, risk management and scheduling.

### **Financial Viability and Sustainability of Community Based Ecotourism Projects**

One of the key rudiments in project sustainability is the availability resources that are required for community-based projects. This means, selecting resources that should be available for the projected future, minimizing the possibility of project failure once it is up and running, due to inadequate essential materials. In many cases, this will mean identifying secondary sources of those materials that can be pressed into action. Inadequate funding detracts from a project's ability

to be sustained (Mmuriungi, Ngugi & Muturi, 2015). However, there are many ways that funding can be linked to a project's ability to be sustained. Waiganjo, Ng'ethe and Mugambi (2012) support developing local resources for enhanced sustainability emphasizing the importance of adequate local capacities to generate funds after external funding ceases.

Waiganjo et al. (2012) asserts that planning for future funding needs to be in place early and needs to be continually developed during the life of the project; while Tomno (2013) discusses the need for longer initial funding periods to allow time for sustainability to be nurtured. As a result, projects have constantly to re-invent themselves so that they qualify again for set-up funding. Some projects are trapped in this cycle; this is not only time-consuming but hinders the natural development of the project. This is where generating increasing levels of income through trading may help some community projects break from this cycle of funding dependency.

The challenge facing NGOs in Kenya and most developing countries is for them to emerge as valuable forces to effect development so as to improve the living conditions of the people in the communities. The search for funding is therefore necessary for the survival and the development of NGOs. This is because NGOs require a substantial amount of funds and other resources to successfully carry out their programs and activities. Availability of funds to NGOs is without doubt one of the factors that determined and led to the growth of the sector (Tomno, 2013). However, most NGOs fail worldwide, even after promising initial periods, owing to problems with financing. The impact of global financial and economic crisis on developing countries was a clear signal of the danger associated with their dependence on foreign resources. The impact of financial dependence on foreign donor funding is that once donors withdraws their financial support, NGOs wind up while projects developed during their period of operation eventually collapse.

Okorley and Nkrumah (2012) agreed that the most sustainable financing strategy is to diversify income sources. A sustainable approach to NGO financing is one that avoids dependency on any single source of revenue, external or internal. There is difficulty in determining a formula for the percentages that need to be derived from various sources in order to come up with the optimum mix. However, maintaining a balance between externally and internally generated resources is necessary to allow an organization to meet its operating and administrative expenses while maintaining the freedom to determine its program priorities and projects, irrespective of donor preferences (Yang, Lee & Chang, 2011).

Zhang and Lei (2012) argue that building a truly "sustainable" NGO is a multidimensional challenge entailing both internal factors of strengthening organizational capacity, as well as external factors of establishing a more supportive regulatory environment and secure resources for NGO initiative. In fact, Lepper and Schroenn (2010) stressed that an NGO must achieve organizational, self-governing capacity before it can attempt to achieve financial sustainability, and that a good legal framework for the NGO sector is a prerequisite condition for both. However, while ensuring organizational sustainability requires for more than simple ensuring financial sustainability, the question of how to generate a stable source of financing is indeed one of the

most universally recurrent and confounding obstacles for NGO professionals, fund-raisers, and policy analyst in almost all regions of the world.

Generally, NGOs can obtain funds to run their programs through three channels: - Interest third parties, who give to the NGOs in return, primarily for the personal satisfaction from doing good (grants and donations); Beneficiaries of the NGOs programs, who value their participation more than the cost (cost recovery); and Unrelated third parties, who will pay the NGO in return for objects of value that can make or do for them (commercial ventures). All forms of grants and donations are categorized as “External” funding sources, while cost recovery methods and commercial ventures are categorized as “internal” funding sources. Similarly, evidence was also given by García et al. (2012) that feasibility analysis of potential funding sources using these critical factors varies from one NGO to another depending on NGO’s legal, organizational and operational characteristics. Yet, Das and Chatterjee (2015) said that experiences of NGOs in many countries around the world suggest that international funding is in decline and therefore cannot be relied upon for long-term financial sustainability. On the other hand, levels of domestic resources and self-financing appear to be increasing and are therefore more reliable components in long-term sustainability strategy.

A promising method for nonprofit organizations to overcome reliance on limited external funding sources is to think more creatively about their fundraising strategies and consider the role of nontraditional philanthropic organizations or individuals. One such approach is the role of giving circles in the financial viability of nonprofit organizations: Giving circles involve groups of individuals pooling their resources and then deciding together where to give them away. They also frequently include social, educational, and volunteer engagement components that seem to increase members' awareness about community issues and philanthropic processes (DePuy, 2011). Giving circles can also be identity-based (for example, an African American or women's giving circle). Data suggest that giving circles have been successful at engaging younger and female participants in philanthropic roles and that they are growing in popularity among various racial, ethnic tribal, and other identity groups.

Claiborne (2010) puts it that, NGOs often operate within the communities that they serve, creating a unique challenge of promoting ownership and collaboration among community members while maintaining programmatic and mission integrity. Establishing and engaging community board leadership and a system of community volunteers provides NGOs a resource of varied experiences and expertise while bringing a sense of ownership to the communities that they serve. Sustainability is a challenge that most NGOs must address; managing financial viability in an evolving funding landscape, contending with "competing" NGOs while establishing collaborative partnerships, demonstrating value and accountability to funders and supporters, and maximizing the contribution of leadership within the community.

However, Mtapuri and Giampiccoli (2013) argues that, these challenges become exacerbated, if not overshadowed by other factors for nonprofits serving those communities that are most in need.

NGOs serving high-need or low-income, and sometimes minority, populations are faced with balancing multiple community challenges that reach far beyond the mission of the organization (that is economic challenges, poor education, poor health, crime or safety issues, housing concerns, lack of business or community development). Kahle and Gurel-Atay (2013) stressed that, understanding the interaction between the economic and cultural contexts of low-income communities and the sustainability challenges that NGOs face is necessary to maximize strategies to address financial sustainability challenges and ultimately improve nonprofit services for communities of the greatest need. Most nonprofits receive funds from multiple sources (that is government, foundations, private donors) and streams (that is grants, contracts, membership fees). Substantial cutbacks in both government and foundational funds suggest that NGOs should develop or revisit their fundraising plans to support financial sustainability.

Developing a coherent fundraising plan to address the challenges and best promote the mission of the organization is imperative. A strategic fundraising plan provides an opportunity to examine what is working well and where there are opportunities for improvement, encourages nonprofits to set specific goals, and motivates nonprofits to make a commitment to focus on the big picture. Developing the fundraising plan should be integrated into other planning efforts, such as strategic planning, program planning, and budgeting. Bray (2010) suggest the following tasks in developing a fundraising plan: “Determine a reasonable dollar goal to work toward, Evaluate your organization's greatest fundraising assets, Create a strategy that uses these assets to most effectively reach potential funding sources and Write down your strategy in a short, easy-to-understand document to keep everyone on plan. “In some cases, nonprofit organizations have found success in starting small, particularly in communities where residents may be less familiar with the mission of the organization or where residents may have less to give on a consistent basis. In these cases, the notion of "all donations count" is important (Bray, 2010).

## **THEORETICAL REVIEW**

### **The Agency Theory**

Agency theory was posited by Mitnick (1991). It extends the analysis of the firm to include separation of ownership and control and managerial motivation. In the field of participation in projects, management agency issues have been shown to influence managerial attitudes toward participation (Bray, 2010). The theory explains how best to organize relationships in which one party determines the work and the other party do the work. It also explains a possible mismatch of interest between shareholders, management and debt holders due to asymmetries in earning distribution, which can result in the firm taking too much risk or not engaging in positive net value projects (Armstrong, 2012).

Consequently, agency theory implies that defined hedging policies can have important influence on firm value (Bray, 2010). The Assumption of agency theory is a pragmatic contribution to the social sciences, incorporating central ideas about how human–machine interaction. Agency theory

assumes both the principal and the agent are motivated by self-interest. This assumption of self-interest dooms agency theory to inevitable inherent conflicts. It becomes necessary to carefully identify the challenges that may occur over the life of the project, from conception to operation, and allocate those tasks to the participants who are best able to manage them (Maina, 2013). This study examines the support of management in project success. Therefore, this theory was relevant in understanding the influence of project management team on performance of wildlife conservation projects.

### **Resource Based View Theory**

This theory was developed by Wernerfelt (1982). The resource-based view (RBV) provides valuable insights into why firms with valuable, rare, inimitable, and well organized resources at their disposal may have a competitive edge over the others and enjoy superior performance. Resources are either tangible or intangible in nature. Barney (1995) observes that the RBV formulates the firm to be a bundle of resources, in other words, it is these resources and the way that they are combined that distinguishes firms from each other. It is essentially an inside-out approach of analyzing the firm implying that the starting point of the analysis is the internal environment of the organization.

The RBV theory relies on the firms' internal attributes to explain firms' heterogeneity in strategy and performance. Based on this view, a firm can be taken as an organized, unique set of factors known as resources and capabilities which are related sources of advantages to the firm. Resources are a firm's accumulated assets, including anything the firm can use to create, produce, and/or offer its products to a market. As pointed out by Amit and Schoemaker, (1993), resources are eligible for legal protection (as such, firms can exercise property rights over them); can operate independently of firm members; and can intervene as factors in the production process to convert input into output that satisfies needs (Grant, 1991). As Barney (1995) contends, resources such as capital, equipment, and the skills of individual employees, patents, finance, and talented managers form the necessary inputs into a firm's production process.

The two critical assumptions of RBV are that resources must also be heterogeneous and immobile. The first assumption is that skills, capabilities and other resources that organizations possess differ from one company to another. Moreover, the resource-based view is grounded in the perspective that a firm's internal environment, in terms of its resources and capabilities, is more critical to the determination of strategic action than is the external environment (Camisón, 2005). Instead of focusing on the accumulation of resources necessary to implement the strategy dictated by conditions and constraints in the external environment the resource-based view suggests that a firm's unique resources and capabilities provide the basis for a strategy. The business strategy chosen should allow the firms to best exploit its core competencies relative to opportunities in the external environment (Robert, 2008).



This theory is suitable for examining the financial sustainability of the NGOs and will, therefore, be adopted in this research since it focuses on the firms' internal environment. The environment in this case is the ability of NGOs to have diverse sources of funds, have competent staff and prepare financial strategic plans. Non-Governmental Organizations are considered as economic institutions in spite of the fact that they are nominally non-profit making institutions. In many NGOs, the revenue structure has been unilateral in a traditional aspect; however, there is a growing need to diversify the revenue base to sustain their operations (Barney, 1991). Presently, the concept of economic rent and the view of the company as a collection of capabilities dominate the business strategy resource-based theory or resource-based view (RBV) of firms. Kay (2005) points out that this approach to competitive strategy has a coherence and integrative role that places it well ahead of other mechanisms of strategic decision making.

### **Social Capital Theory**

This theory was established by (Putnam, 1995; Coleman, 1988; Portes 1998; Portes and Landolt, 1996) Social capital was considered as a medium through which local communities invested their asset base of material, human, cultural and financial resources in ecotourism activities (Putnam, 1995; Coleman, 1988; Portes 1998; Portes and Landolt, 1996, 2000). In this context, social capital represents the connections within (bonding) and between (bridging) social networks (Aldridge, Halpern, and Fitzpatrick, 2002). It entails social contacts that affect productivity of an individual and/or a group. It underscores the importance of community participation for common success and describes the tangible substances that account for the daily lives of people in terms of goodwill, fellowship, sympathy and social intercourse among individuals and families who make up a social unit (Putnam, 2000). Social capital is seen as a public good that consists of social structures that facilitate certain actions by actors within a given setup.

The core assumption guiding social capital research is that the good-will of others toward us is a valuable resource to be harnessed. Adler and Kwon (2002) define goodwill as the sympathy, trust, and forgiveness that friends and acquaintances offer us; thus they see it as the substance of social capital. According to Putnam (1995), social capital is a producer of civic engagement and a factor for resource possession by a group based on norms and trust. On the other hand, Arefi (2003) argues that social capital leads to consensus building hence shared interests and agreement among various actors and shareholders in order to induce collective action.

Therefore, collective actions are indicators of increased social capital. However, Portes and Landolt (2000) caution that social capital may lead to negative consequences such as exclusion of outsiders, excess claim on group members, restriction on individual freedom and downward levelling norms. Figure 2.1 depicts the conceptual framework where various variables interact in the context of CBET to generate outputs on households livelihoods and environmental management.

## **RESEARCH METHODOLOGY**

### **Research Design**

The research used descriptive research design in the collection of data on the factors influencing sustainability of community based ecotourism development projects in Kenya. Descriptive research is defined as the process of gathering data in order to test hypothesis or to answer questions concerning the current status of the element of the study (Lewis, 2015). Descriptive research design was chosen because a descriptive study ensures complete description of the situation, making sure that there is minimum bias in the collection and interpretation of data (Creswell & Creswell, 2017). Descriptive studies help to demonstrate associations or relationships between things around the world.

### **Target Population**

A target population is classified as all the members of a given group to which the investigation is related, whereas the accessible population is looked at in terms of those elements in the target population within the reach of the researcher. Based on the recommendations of Gorard (2013) in defining the unit of analysis for a study, the target population for this study was 144 respondents comprising of project staff in Northern Rangeland Trust Conservancy in Meru County, Project committee members and project beneficiaries.

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

The sampling plan describes the sampling unit, sampling frame, sampling procedures and the sample size for the study. The sampling outline depicts the list of all populace units from which the specimen were chosen (Creswell & Creswell, 2017). As indicated by Wang (2015), sampling includes selecting a given number of subjects from a characterized population in order to represent to the whole population. Sampling frame is a list of all the units of the population of interest. It is a complete list of everyone or everything to be studied (Creswell & Creswell, 2017). For any research, the sample size of the study must be determined during its designing stage. However, before determining the size of the sample that is needed to be drawn from the population, a few factors must be taken into consideration namely, how much sampling error can be tolerated, population size, how varied the population is with respect to the characteristics of interest, and the smallest subgroup within the sample for which estimates are needed (Lewis, 2015). Using the above methods as a guideline, Krejcie and Morgan approach was used to determine the sample size of a population.

$$n = (X^2NP (1-P)) / (d^2 (N-1) + X^2P (1-P))$$

Where: n = Required Sample size; X = Z value (1.96 for 95% confidence level yield maximum); N = Population Size; P = Population proportion (expressed as decimal), assumed to be 0.5 (50%)

as magnitude yielding maximum; d = Degree of accuracy (5%), expressed as a proportion (0.05); It is the margin of error.

Hence the sample size of the study was:

$$S = (1.96^2 * 144 * 0.5 (1-0.5)) / (0.05^2 * (144-1) + 1.96^2 * 0.5 (1-0.5)) = 105$$

The sample size was hence 105 respondents.

The sampling ration was =  $105/144=0.73$  and was used for establishing the distribution of the respondents under various categories.

This study adopted a stratified and simple random sampling technique. Stratified random sampling was chosen because it's unbiased sampling method of grouping heterogeneous population into homogenous subsets then selecting within the individual subset to ensure representativeness. In the determination of the sample size in this study, Wang (2015) criterion on selection of sample size was considered by taking 73% of the total population in each case.

## **Research Instruments**

Data was acquired both from primary and secondary sources. According to Creswell and Creswell (2017), primary data refers to data that the researcher collects from respondents while secondary data refers to data from other sources like records and documents, thus primary data would be considered more reliable and up to date. Primary data was collected using a semi-structured questionnaire containing open and close-ended questions. Secondary data was obtained from the organization's published reports.

## **Data Collection Procedures**

The data collection instrument that was used for this study was a structured questionnaire developed by the researcher and observations. Structured questionnaires were distributed to the targeted population. The researcher booked appointment with respondent organizations at least two days before visiting to administer questionnaires. The questionnaires were personally administered to the respondents so as to have an in-depth understanding of how each respondent articulates issues relating to the projects. Each respondent received the same set of questions in exactly the same way and were completed and collected after a period of two weeks. Secondary data was collected from published and non-published materials, from internet, journals, past research papers, and books this enhanced theoretical aspects of this research.

## **Data Analysis Techniques**

After the data collection, the researcher pre-processed the data to eliminate unwanted and unusable data which was contradictory or ambiguous, develop a coding scheme by creating codes and scales from the responses which was then be summarized and analyzed. Data was analyzed using

Statistical Package for Social Sciences (SPSS Version 25.0). All the questionnaires received were referenced and items in the questionnaire were coded to facilitate data entry. After data cleaning which entailed checking for errors in entry, descriptive statistics such as frequencies, percentages, mean score and standard deviation was estimated for all the quantitative variables and information was presented in form of tables. The qualitative data from the open ended questions was analyzed using conceptual content analysis and presented in prose. Inferential data analysis was done using multiple regression analysis. Multiple regression analysis was used to establish the relations between the independent and dependent variables. The multiple regression model was chosen because it is useful in establishing the relative importance of independent variables to the dependent variable (Creswell & Creswell, 2017). Multiple regressions were used because it is the procedure that uses two or more independent variables to predict a dependent variable. Since there are four independent variables in this study the multiple regression model generally assumed the following equation;

$$Y = \beta_0 + \beta_1 X_1 + \epsilon ; Y = \beta_0 + \beta_2 X_2 + \epsilon ; Y = \beta_0 + \beta_3 X_3 + \epsilon ; Y = \beta_0 + \beta_4 X_4 + \epsilon$$

Where: Y= Sustainability of Community Based Ecotourism Projects;  $\beta_0$ =constant;  $\beta_1, \beta_2, \beta_3$  and  $\beta_4$  = regression coefficients;  $X_1$ = Community participation;  $X_2$ = Stakeholders collaborations;  $X_3$ = Project management practices;  $X_4$ = Financial viability;  $\epsilon$ =Error Term

## **RESEARCH RESULTS**

The study sought to establish influence of community participation on sustainability of Community Based Ecotourism Projects in Meru County, Kenya. The study found that community participation influences the sustainability of community based ecotourism projects in Meru County very greatly. The study also found that participation in decision-making processes; sharing of benefits among members; sense of ownership of the initiative among the community members; empowerment of community members; and collective responsibility influence sustainability of community based ecotourism projects in Meru County to a great extent. The study also established that sharing of resources influence sustainability of community based ecotourism projects in Meru County to a moderate extent while land management/governance as influence sustainability of community based ecotourism projects in Meru County to a low extent.

The research aimed at determining how stakeholders collaborations influence sustainability of Community Based Ecotourism Projects in Meru County, Kenya. The study found that stakeholders collaborations influences sustainability of community based ecotourism projects in Meru County greatly. The study also found that networking with tourism expertise; and facilitating links to market influence sustainability of community based ecotourism projects in Meru County to a great extent. The study also found that collaboration with the private sector influences sustainability of community based ecotourism projects in Meru County to a moderate extent and assistance from enablers (government, funding institutions) influence sustainability of community based ecotourism projects in Meru County to a low extent.

The study sought to assess how project management practices influence sustainability of Community Based Ecotourism Projects in Meru County, Kenya. Further, it was found that project management practices influence sustainability of community based ecotourism projects in Meru County to a great extent. The study also found that scale of tourism development; capacity building; accurate market research/ access to market information; and project monitoring and evaluation influence sustainability of community based ecotourism projects in Meru County to a great extent. The study further found that touristic product development suitable to demand influence sustainability of community based ecotourism projects in Meru County to a moderate extent. Local innovations were found to influence sustainability of community based ecotourism projects in Meru County to a low extent.

The study sought to evaluate how financial viability influence sustainability of Community Based Ecotourism Projects in Meru County, Kenya. The study also found that financial viability influences sustainability of Community Based Ecotourism Projects in Meru County to a great extent. The study also found that transparent management of financial resources affect sustainability of community based ecotourism projects in Meru County to a very great extent. The research also found that financially feasible planning; finance skills of the management; and adequacy of financial resources affect sustainability of community based ecotourism projects in Meru County to a great extent. The study also indicated that access to funding affect sustainability of community based ecotourism projects in Meru County to a moderate extent.

The research also sought the trend of the aspects of sustainability of community based ecotourism projects in Meru County, Kenya for the last five years. The study found that standards of living/ livelihoods; social benefit and equity; community satisfaction; recorded growth; adaptive management system; and objectives met had improved over the last five years. The research also found that the level of income was constant for the last five years.

## **INFERENCE STATISTICS**

The researcher conducted a multiple regression analysis so as to test relationship among variables that is independent and dependent variables. The independent variables included community participation, stakeholders' collaborations, project management practices and financial viability while the dependent variable was the sustainability of community based ecotourism development projects in Meru county. The findings were presented in Table 1, 2 and 3.

**Table 1: Model Summary**

<b>Model</b>	<b>R</b>	<b>R Square</b>	<b>Adjusted R Square</b>	<b>Std. Error of the Estimate</b>
1	0.857	0.735	0.720	1.200

From the findings, the independent variables were statistically significant predicting the dependent variable since adjusted R square was 0.720. This implied that 72.0% variations in sustainability of

community based ecotourism development projects in Meru County are explained by community participation, stakeholders’ collaborations, project management practices and financial viability. Other factors influencing sustainability of community based ecotourism development projects in Meru county that were not covered in this study accounted for 28.0% which form the basis for further studies.

**Table 2: ANOVA Test**

<b>Model</b>	<b>Sum of Squares</b>	<b>df</b>	<b>Mean Square</b>	<b>F</b>	<b>Sig.</b>
Regression	299.121	4	74.780	49.846	.000
Residual	108.017	72	1.500		
Total	407.138	76			

From the ANOVA Table, p-value was 0.000 and F-calculated was 49.846. Since p-value was less than 0.05 and the F-calculated was greater than F-critical (2.4989), then the regression relationship was significant in determining how community participation, stakeholders’ collaborations, project management practices and financial viability influenced sustainability of community based ecotourism development projects in Meru county.

**Table 3: Regression Coefficients**

<b>Model</b>	<b>Unstandardized Coefficients</b>		<b>Standardized Coefficients</b>	<b>t</b>	<b>Sig.</b>
	<b>B</b>	<b>Std. Error</b>	<b>Beta</b>		
(Constant)	1.267	0.582		2.177	0.031
Community participation	0.823	0.269	0.714	3.059	0.003
Stakeholders’ collaborations	0.724	0.288	0.611	2.514	0.013
Project management practices	0.681	0.242	0.462	2.814	0.005
Financial viability	0.796	0.312	0.672	2.551	0.012

The established model for the study was:

$$Y = 1.267 + 0.823X_1 + 0.724X_2 + 0.681X_3 + 0.796X_4$$

Where: Y= Sustainability of community based ecotourism development projects; X<sub>1</sub>= Community participation; X<sub>2</sub>= stakeholders’ collaborations; X<sub>3</sub>=project management practices; X<sub>4</sub>=financial viability

The regression equation above has established that taking (community participation, stakeholders’ collaborations, project management practices and financial viability) at constant, sustainability of community based ecotourism development projects in Meru county will be 1.267. The findings presented also show that increase in the community participation leads to 0.823 increase in the score of sustainability of community based ecotourism development projects in Meru county if all other variables are held constant. This variable was significant since the p-value 0.003<0.05.

Further, it was found that if stakeholders' collaborations increases, there is a 0.724 increase in sustainability of community based ecotourism development projects in Meru county. This variable was significant since its p-value 0.013 was less than 0.05. Further, the findings show that a unit increases in the scores of project management practices would lead to 0.681 increase in the scores of sustainability of community based ecotourism development projects in Meru county. The variable was also significant as its p-value  $0.005 < 0.05$ . The study also found that a unit increase in the score of financial viability would lead to a 0.796 increase in the scores of sustainability of community based ecotourism development projects in Meru county . The variable was significant as its p-value  $0.015 < 0.05$ .

Overall, community participation had the greatest influence on sustainability of community based ecotourism development projects in Meru County, followed by financial viability, then stakeholders' collaborations while project management practices had the least influence on the sustainability of community based ecotourism development projects in Meru county. All the variables were significant since their p-values were less than 0.05.

## **DISCUSSION OF THE FINDINGS**

### **Community Participation and Sustainability of Community Based Ecotourism Projects**

The study found that community participation influences the sustainability of community based ecotourism projects in Meru County very greatly. The findings conform to Hausler (2010) who found that the degree to which stakeholders are personally involved in the implementation process causes great variation in their support for that project. The study also found that participation in decision-making processes; sharing of benefits among members; sense of ownership of the initiative among the community members; empowerment of community members; and collective responsibility influence sustainability of community based ecotourism projects in Meru County to a great extent. Ebrahimi and Khalifah (2014) stated in relation to the findings that community participation is seen as a means of empowering the local community through incentives for conserving the biological resources in their environment subject to benefits for individual families or households; thereby making ecotourism a means for rural development. The study also established that sharing of resources influence sustainability of community based ecotourism projects in Meru County to a moderate extent. In addition, Morelli (2011) argued that community participation therefore is an integral part of tourism in order to help increase community's carrying capacity by reducing negative impacts while enhancing positive effects. The research also found that land management/governance as influence sustainability of community based ecotourism projects in Meru County to a low extent. Similarly, Galaski (2015) observed that community participation in resource management for tourism has the potential capacity of increasing income and employment, and of developing skills and institutions for empowering local people.

### **Stakeholders Collaborations and Sustainability of Community Based Ecotourism Projects**

The study found that stakeholders' collaborations influences sustainability of community based ecotourism projects in Meru County greatly. This is in consonance with Garcia (2012) who stated that stakeholder participation is increasingly becoming a part of project practice in order to deliver excellent project outcomes. The study also found that networking with tourism expertise; and facilitating links to market influence sustainability of community based ecotourism projects in Meru County to a great extent. Bray (2010) added that the involvement of stakeholders in project initiation, project planning, project implementation and monitoring and evaluation is critical for better project performance. The study also found that collaboration with the private sector influences sustainability of community based ecotourism projects in Meru County to a moderate extent and assistance from enablers (government, funding institutions) influence sustainability of community based ecotourism projects in Meru County to a low extent. In relation to the results, Brass (2010) stated that major public private partnership (PPP) initiatives in the United States have reportedly failed due to stakeholder opposition. As a result, it reveals that stakeholder s' participation in project is the key to project success and without their input the outcome may not be favorable. Inadequate stakeholder involvement hinders beneficiaries' participation and weakens their capacity to influence project outcomes hence poor performance.

### **Project Management Practices and Sustainability of Community Based Ecotourism Projects**

Further, it was found that project management practices influence sustainability of community based ecotourism projects in Meru County to a great extent. This is in accordance with Karanja (2014) who noted that good management ensures that sufficient local resources and capacity exist to sustain the project in the absence of outside resources. The study also found that scale of tourism development; capacity building; accurate market research/ access to market information; and project monitoring and evaluation influence sustainability of community based ecotourism projects in Meru County to a great extent. This correlates to Kerine (2015) who found that the project management teams have to interact with many stakeholders, they have to not only manage internal project activities, their peers and superiors, but also interact with clients, using skills that are essentially non-technical in nature, and which may not be easily imitable. These include but are not limited to organizational knowledge, implied knowledge in handling people within the organizational structure, leadership and management skills, and customer handling skills. The study further found that touristic product development suitable to demand influence sustainability of community based ecotourism projects in Meru County to a moderate extent. Local innovations were found to influence sustainability of community based ecotourism projects in Meru County to a low extent. Karanja (2014) asserts that individuals with good management skill are considered to be good leaders and therefore, through their leadership organizations are steered to prosperity.



## **Financial Viability and Sustainability of Community Based Ecotourism Projects**

The study also found that financial viability influences sustainability of Community Based Ecotourism Projects in Meru County to a great extent. These findings agree with Mmuriungi, Ngugi and Muturi (2015) who noted that inadequate funding detracts from a project's ability to be sustained. The study also found that transparent management of financial resources affect sustainability of community based ecotourism projects in Meru County to a very great extent. The research also found that financially feasible planning; finance skills of the management; and adequacy of financial resources affect sustainability of community based ecotourism projects in Meru County to a great extent. This was as per Claiborne (2010) who stated that sustainability is a challenge that most NGOs must address; managing financial viability in an evolving funding landscape, contending with competing NGOs while establishing collaborative partnerships, demonstrating value and accountability to funders and supporters, and maximizing the contribution of leadership within the community. The study also indicated that access to funding affect sustainability of community based ecotourism projects in Meru County to a moderate extent. The findings relate to Waiganjo et al. (2012) who assert that planning for future funding needs to be in place early and needs to be continually developed during the life of the project.

## **CONCLUSIONS**

The study concluded that community participation influence sustainability of Community Based Ecotourism Projects in Meru County significantly. The study concluded that inequitable participation in benefit sharing and decision-making processes has engendered power struggles and social conflicts which threaten not only to tear the community apart but also to compromise the chances of the Meru community members prospering from the resources in their area and their involvement in ecotourism. Further, in conclusion, stakeholders' collaborations were found to positively and significantly influence sustainability of Community Based Ecotourism Projects in Meru County. The study concluded that ecotourism, if cautiously designed and managed, can provide a sustainable return, much of which can be retained within the local community and thus contribute to development.

The study also deduced that project management practices significantly influence sustainability of Community Based Ecotourism Projects in Meru County. The study concluded that adequate project management skills both at the project management and staff level contributes to the sustainability of the Community Based Ecotourism Projects. The research concluded that financial viability influence sustainability of Community Based Ecotourism Projects in Meru County significantly. This study concluded that proper financial management enhances accountability. Community Based Ecotourism Projects ought to look at how they get their funding and establish whether they can avail local resources for their projects. This is critical for sustainability of the project even after donor exit as the community is responsible for financing the projects.

## **RECOMMENDATIONS**

Further the study recommends that a better option might be collaboration with development-oriented NGOs such as OXFAM or SNV that have gained experience in the field of tourism over the last decade. These organisations will preferably have an established link with a local network as developed in, for example, Botswana, Namibia and recently also in Kenya. The Kenya Community Based Tourism Network (KCBTNet) has brought together over fifty grass-roots organisations. Its objective is to create a forum for local communities involved in tourism, to mobilise their capacities, learn from each other, and make informed decisions about how to control activities that affect their lives and their own environment. In so doing, the communities should become actors rather than just passive subjects in the tourism industry.

There is also need for the government and NGO's to encourage the local community to diversify their income generating activities and venture into bee keeping and supply of goods and services among others. This will ensure that the community is not entirely dependent on tourism and that they will not suffer the consequences of fluctuations in tourist arrivals as well as other eventualities. The study recommended that communities should preferably finance and build basic facilities and infrastructure themselves. Starting small with one's own resources and slowly building up is preferable. Setting aside nicely located, safe camping areas and the development of ecotourism facilities would be a good starting point.

The government and NGOs should educate and encourage the Meru community to take their children to school so as to improve the literacy levels in the area. Improved education levels are a sure way of driving the community to economic/ development benefits and conservation of their environment. The Community Based Ecotourism Projects' stakeholders or partners in Meru should also promote information flow, awareness and communication amongst themselves so as to ensure transparency and accountability which are key to the success of community-based enterprises.

County government should adopt a more collaborative approach when dealing with community based county projects. The county governments should sensitize the communities and engage them before projects are conducted to gauge relevance of the projects and also form steering committees that can well run the projects even after exits of its funds.

## **REFERENCES**

- Armstrong, R. (2012). *An analysis of the conditions for success of community based tourism enterprises. International Centre for Responsible Tourism, Occasional Paper.* Leeds: LBU.
- Besel, K., Charlotte, L. W., & Klak, J. (2011). Non-profit Sustainability During Times of Uncertainty. *Non-profit Management and Leadership*, 22(1), 53-65.
- Bowman, W. (2011). Financial Capacity and Sustainability of Ordinary Nonprofits. *Nonprofit Management and Leadership*, 22(1), 37-51.

- Brass, J. (2010). *Surrogates for Government? NGOs and the State in Kenya*. Doctoral dissertation, University of California, Berkeley.
- Bray, I. (2010). *Effective fundraising for Non-profits: Real-World Strategies That Work*. Berkley.
- Chaiyatorn, S., Kaoses, P., & Titphat, P. (2010). The Developmental Model of Cultural Tourism Homestay of the Lao Vieng and Lao Song Ethnic Groups in the Central Region of Thailand. *Journal Social Science*, 6(1), 130-132.
- Claiborne, P. (2010). *Community Participation in Tourism Development and the Value of Social Capital-the case of Bastimentos*, Bocas del Toro, Panam.
- Das, M. & Chatterjee, B. (2015). Ecotourism: A panacea or a predicament?. *Tourism Management Perspectives*, 14(1), 3-16.
- DePuy, W. (2011). *Topographies of power and international conservation in Laikipia, Kenya*. University of Michigan.
- Duffy, R. (2013). *A trip too far: Ecotourism, politics and exploitation*. Routledge.
- Ebrahimi, S. & Khalifah, Z. (2014). Community supporting attitude toward community-based tourism development; non-participants perspective. *Asian Social Science*, 10(17), 29-35.
- Galaski, K. (2015). *Tour Operator's Plan for Sustainable Tourism: Final Report on Model (Inter-American Development Bank Report)*. Toronto: G Adventures & Planeterra Foundation.
- García, J. A., Gómez, M. & Molina, A. (2012). A destination-branding model: An empirical analysis based on stakeholders. *Tourism management*, 33(3), 646-661.
- Golicha, T. D. (2010). *Assessment of stakeholder's participation in projects formulation: a case of NGOs supporting secondary education projects in Garissa District*. Unpublished Masters project. Nairobi: University of Nairobi.
- Government of Kenya (2013). *Ministry of Environment, Water and Natural Resources Kenya: The National Wildlife Conservation and Management Policy*. 6-9.
- Government of Kenya. (2016). *Tourism, Vision 2030 and pro-pastoralist livelihoods in north-eastern Kenya*. 1-3
- Gunderson, C. (2011). *Best Practices for Not-for-Profit Internal Controls: Enhancing Your Internal Control Environment*. First Nonprofit Foundation.
- Hart, D. (2015). *Indicators of sustainability*. from Sustainable Measures website: [www.sustainablemeasures.com/indicators](http://www.sustainablemeasures.com/indicators).
- Hausler, N. (2010). *Gaps and Challenges within the Concept of Community Tourism*. Leeds Metropolitan University.
- Hennink, M., Kiiti, N., Pillinger, M., & Jayakaran, R. (2012). Defining empowerment: perspectives from international development organisations. *Development in Practice*, 22(2), 202-215.
- IFAD. (2013). *Smallholders, food security and the environment*. Rome: International Fund for Agricultural Development.
- Kahle, L. R. & Gurel-Atay, E. (Eds.). (2013). *Communicating sustainability for the green economy*. ME Sharpe.
- Kangiri, H. (2015). *Strategies for Financial Sustainability of Civil Society Organizations: Case Study of Nairobi County*. Doctoral dissertation, United States International University-Africa.

- Karanja, J. (2014) Assessment of Factors Influencing Financial Sustainability of Non-Governmental Organisations in Isiolo County, Kenya. *International Journal of Economics, Commerce and Management*, 2(9), 1-14.
- Karanja, J. G., & Karuti, J. K. (2014). Assessment of Factors Influencing Financial Sustainability of Non-Governmental Organizations in Isiolo County, Kenya. *International Journal of Economics, Commerce and Management United Kingdom*, 2(9),1-14.
- Kerine L. O. (2015) Factors Influencing Financial Sustainability of Non-Governmental Organizations: A Survey of NGOs in Nakuru County, Kenya. *International Journal of Economics, Commerce and Management*, 3(9), 704-743.
- Kituu, M. C. (2015). *Assessing the level of stakeholders' participation in project risk management in mineral exploration in kenya. A case of tallow oil in Turkana county.* Unpublished Masters project, University of Nairobi.
- Lepper, C. M., & Schroenn, G.J. (2010). Community-based natural resource management, poverty alleviation and livelihood diversification: A case study from northern Botswana. *Development Southern Africa*, 27(5), 725-739.
- M'Ikiugu, F. M. (2014). *Factors Influencing Implementation Of Child Fund International School Feeding Programme In Public Primary Schools In Isiolo Central Division, Isiolo County, Kenya* Doctoral dissertation, University of Nairobi.
- Maina, B. M. (2013). *Influence of stakeholders' participation on the success of the economic stimulus programme: a case of education projects in Nakuru County, Kenya.* Unpublished MA Project Planning and Management Research Project.
- Mitnick, B. M. (1991). Agency theory. *Wiley encyclopedia of management*, 1-6.
- Mmuriungi, K. C., Ngugi, K., & Muturi, W. (2015). Influence of Donor Funded Projects on Social-Economic Welfare of the Rural Communities in Kenya. *European Journal of Business Management*, 2(1), 103-388.
- Morelli, J. (2011). Environmental sustainability: A definition for environmental professionals. *Journal of environmental sustainability*, 1(1), 2-13.
- Mtapuri, O. & Giampiccoli, A. (2013). Interrogating the role of the state and nonstate actors in community-based tourism ventures: Toward a model for spreading the benefits to the wider community. *South African Geographical Journal*, 95(1), 1-15.
- Mwambeo, H. M. & Maitho, T. (2015). Factors Influencing Elephants to Destroy Forest Trees Especially *Olea africana*: The Case of Ngare Ndare Forest Reserve in Meru County, Kenya. *Ethiopian Journal of Environmental Studies and Management*, 8(4), 398-407.
- Nalubiri, A. G. (2010). *Sustaining Local NGO Social Intervention-Benefits in Uganda.* The Hague, Netherlands: International Institute of Social Studies (ISS).
- Nalubiri, A. G. (2010). *Sustaining Local NGO Social Intervention-Benefits in Uganda.* The Hague, Netherlands: International Institute of Social Studies (ISS).
- Ndegwa, A. (2015). *Factors influencing the sustainability of KEMRI HIV/AIDS Grants funded projects in Kenya.* University of United State International Africa.
- Northern Rangelands Trust–NRT. (2013). The story of the Northern Rangelands Trust.
- Okorley, E. L. & Nkrumah, E. (2012). Organizational Factors Influencing Sustainability of Local Non-Governmental Organizations: Lessons from a Ghanaian context. *International Journal of Social Economics*, 39(5), 3-10.

- Okorley, E. L., & Nkrumah, E. (2012). Organizational Factors Influencing Sustainability of Local Non-Governmental Organizations: Lessons from a Ghanaian context. *International Journal of Social Economics*, 39(5), 3-10.
- Osman, I., Ahmad, Z.A., Ahmad, N.H., Khin, S., Abu Bakar S., Husin, A. & Tanwir, N.D. (2010). *Understanding Motivation, Empowerment and Sustainability Outcomes of Women Entrepreneurs in West Malaysia: A preliminary analysis*. Penang: Universiti Sains Malaysia.
- Tomno, K. P. (2013). *Influence of Funding on the Sustainability of Local Non-Governmental Organizations' Programs in Baringo County, Kenya*. Unpublished Master's Thesis, University of Nairobi.
- Vågen, T. G., & Winowiecki, L. A. (2014). *Northern Rangelands Trust: baseline assessment of rangeland health-Kalama and Namunyak conservancies*.
- Waiganjo, E., Ng'ethe, J., & Mugambi, D. N. (2012). An Investigation into the Strategies adopted by Non-Governmental Organizations in Kenya. *International Journal of Current Research*, 1(1), 1-4.
- Wernerfelt, B. (1982). On the role of the RBV in marketing. *Journal of the Academy of Marketing Science*, 42(1), 22-23.
- Yang, A., Lee, P. & Chang, T. (2011). Does self-financing matter? Recalibrating the Rationale of NGOs Self-reliance in Search of Sustainability. *Journal of Asian Public Policy*, 1(1), 3-18.
- Yang, A., Lee, P., & Chang, T. (2011). Does self-financing matter? Recalibrating the Rationale of NGOs Self-reliance in Search of Sustainability. *Journal of Asian Public Policy*, 2(1), 3-18.
- Zhang, H. & Lei, S. L. (2012). A structural model of residents' intention to participate in ecotourism: The case of a wetland community. *Tourism Management*, 33(4), 916-925.