EFFECT OF COMMUNITY WILDLIFE CONSERVANCY AS A MEANS TO POVERTY REDUCTION WITHIN AMBOSELI ECOSYSTEM IN KAJIADO COUNTY: A CASE OF SATAO ELERAI CONSERVANCY

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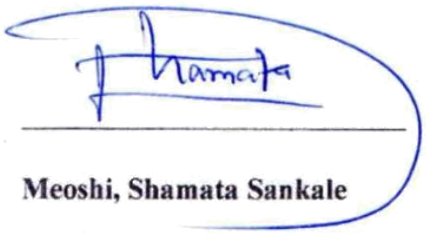
A THESIS SUBMITTED IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF THE DEGREE OF MASTER OF SCIENCE IN GOVERNANCE, PEACE AND SECURITY IN THE DEPARTMENT OF PEACE AND SECURITY STUDIES, FACULTY OF HUMAN AND SOCIAL SCIENCES OF AFRICA NAZARENE UNIVERSITY

JUNE, 2022

DECLARATIONS

I declare that this thesis is my original work and that they have not been presented in any other university for academic work.



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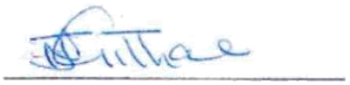

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DEDICATION

This proposal is dedicated to my wife – Beatrice Sankale and my children Charity, Gift, Fabian and Melodie.

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ABSTRACT

Community wildlife conservancies are key drivers principally designed to support a mutual benefit to animals and community and for prosperity and sustainability. However, as most currently constituted, they tend to incline towards profit making at the expense of the community around. Satao Elerai is a wildlife conservancy located within the Amboseli Ecosystem in Kajiado County. The conservancy has been in existence for 10 years however, no tangible economic benefit the communities surrounding it can attribute to its presence given the high poverty rate among community surrounding it. The study therefore, analyse the role of community wildlife conservancy in poverty reduction within Amboseli Ecosystem, Kajiado County, taking Satao Elerai Conservancy as a case. The specific objective that guided the study were: to establish the influence of employment opportunities, to determine the influence of infrastructure developed, to assess the influence of governance; and to determine the extent to which implementation of agreement framework by the community wildlife conservancy management influences poverty reduction within Amboseli Ecosystem in Kajiado County. The study was premised on membership theory of poverty and participatory theory. The target population were employees of Satao Elerai Conservancy and residents of villages adjacent to the conservancy namely Kimana and Tikondo. A descriptive research design was used for the study to clearly explain the contribution of community wildlife conservancy on poverty reduction among the surrounding communities. Simple random sampling was applied in selection of 178 respondents. Collected data was analysed using qualitative method with both descriptive (frequencies, percentages, means and standard deviations) and inferential (Pearson's correlation coefficient and multiple regression model) statistics. Study result for employment opportunities shows opportunities as hotels and restaurants staffs (Mean 4.21, Mode 4 and Std Dev. 0.701) among others; weak positive and significant correlation (r=0.299) between employment opportunities and poverty reduction; partial factor changes of employment opportunities of β=0.08 (p=0.289). Result for infrastructure development shows development/improving community roads (Mean 4.4, Mode 5 and Std Dev. 0.912) among others, insignificant weak positive correlation with poverty reduction (r=0.272), insignificance partial factor change (B=0.050); result for governance structure shows right leadership style (Mean 4.42, Mode 5 and Std Dev. 0.717) among others, weak insignificance correlation with poverty reduction (r=0.319), and insignificant partial factor change (B=0.055). result for agreement framework shows protection for both wildlife and human habitats (4.51, Mode 5 and Std Dev. 0.642) among others, positive strong and significance relationship with poverty reduction (r=0.609), significant partial effect (B=0.547). The study concludes that individually, employment opportunities, infrastructure development and governance structure does not have significance influence, while agreement framework on the other hand has. However, collectively or all variables put together, they have significance influence on poverty reduction. Thus, Community Wildlife Conservancy has significant influence on poverty reduction within Amboseli Ecosystem in Kajiado County. The research findings are significant to the academic fraternity in adding knowledge, can be used for policy development by national and county government and community around the conservancy on how community wildlife conservation can help reduce poverty.

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OPERATIONAL DEFINITION OF TERMS

Community: refers to a social unit with commonality such as norms, customs, or identity.

Community Wildlife Conservancy: refers to a piece of land that has been set aside by an individual, a group, or a community for the sake of wildlife conservation.

Employment Opportunities: refers to employment of members of the host community within the conservancy.

Governance: refers to the structure of management of the conservancy.

Infrastructure Development: refers to improving the communication, transport, education, and health infrastructure in the host community.

Indigenous Community: refers to inhabitants surrounding the Satao Elerai conservancy and are uniquely identified with the cultures and retained social, cultural, economic and political characteristics distinct from those of the dominant societies in which they live.

Implementation of Agreement structure: refers to the laid down structure of engagement between the host community and the investors in the conservancy.

Local Community: refers to a group of individuals that interact within their immediate surroundings.

Poverty Reduction: refers to process of improving the social, economic, and physicals well-being of a human being.

ACRONYMS AND ABBREVIATIONS

AET : Amboseli Ecosystem Trust

ASAL **:** Arid and Semi-Arid Land

ASOCAIMAN: Association for the Conservation of the Caimans of the Bay of Cispata

ATGRCA : Amboseli-Tsavo Group Ranches Association

ATGSA **:** Amboseli-Tsavo Game Scouts Association

AWF : Africa Wildlife Foundation

CBNRM : Community Based Natural Resource Management

CPR : Common Pool Resources

FDI **:** Foreign Direct Investment

GDP **:** Gross Domestic Product

KTB **:** Kenya Tourism Board

KWCA **:** Kenya Wildlife Conservancies Association

KWS **:** Kenya Wildlife Service

LDC **:** Least Developed Countries

MTP **:** Membership Theory of Poverty

PRA : Preparatory Rural Appraisal

SPSS : Statistical Package for Social Sciences

WBR : World Bank Report

WTTC **:** World Travel and Tourism Council

CHAPTER ONE: INTRODUCTION AND BACKGROUND INFORMATION

1.1. Introduction

Wildlife conservancy is the backbone of tourism and involve the practice of protecting wild plant and animal species and their habitat for economic benefit (King, Buzzard & Warigia, 2015). This study analysed community wildlife conservancy as a means to poverty reduction. Community wildlife conservancy was the independent variable and made up of employment opportunities created, infrastructure developed, governance and community agreement, while poverty reduction was the dependent variable. This chapter presents the background of the study, statement of the problem, purpose of the study and objectives of the study. In addition, the chapter gives justification, scope, limitation and delimitation of the study, theoretical and conceptual framework.

1.2. Background of the Study

Across the globe, tourism is among the rapidly developing industries, and in developing countries its growth is twice that of the developed nations (Richardson & McEwan, 2018). Wildlife as form of tourism provides a major source of future comparative advantage for a significant underprivileged country largely in eastern and southern Africa, Kenya included (Li et.al., 2008). In Kenya, according to an Economic Survey Report carried out in 2018, tourism sector performance indicated that tourism earnings increased by 20.3 per cent to KShs. 119.9 billion in 2017 and international visitor arrivals rose by 8.1 per cent to 1,448.8 thousand in 2017 while accommodation and food service activities sector grew by 14.7 per cent in 2017 (KNBS, 2018)

The wildlife conservation sector is increasingly concerned with the need to promote poverty alleviation efforts. In 2002, during the Seventh (7^{Th}) Conference of Parties to the Convention on Biological Diversity, members settled that come 2010 there should be a substantial decrease in biodiversity damage as a input to poverty reduction and to the advantage of all existence on Earth (Balmford et.al., 2005).The World Parks Congress In 2003 proceeded to additionally recommended that conserved areas should fully contribute to sustainable growth with no damage to individuals in their neighbourhood (Ezebilo and Mattsson, 2010). However, community conservation purposes to give inducement for the workable administration of resources within the biodiversity, by connecting conservation to addressing poverty reduction and employments assistances for the local community around it. This to some extent has been reached through wildlife associated initiatives for instance tourism and maintainable harvesting of natural resources (Mdete, 2016) for the advantage of both nature and the community.

Two of the extreme encounters facing humanity are the reduction of poverty and the protection of biological variety. Both challenges are every so often related as opposed to being seen as distinct issues. Underprivileged persons in the countryside areas of developing nations are mostly reliant on biodiversity to mitigate for their day-to-day living requirements (Roe et.al., 2013). On the other hand, their dependence and usage of biological resources is likely to result to pressure on a number of species and surroundings. As a consequence, efforts made to preserve biodiversity may sometimes aggravate poverty (McShane, 2003) or, on the contrary, leads to its improvement (Leisher et al, 2012). Where the community live in abject poverty, there is a solid moral and practical necessity to address conservation and livelihood objectives in parallel. This

incentive has driven a pattern shift in conservation to extra combined tactics and a great number of experts today embrace the idea that landscape and ecosystem methods give a convenient direction in integrating the frequently incompatible objectives of biodiversity management and poverty mitigation (Sunderland, 2011).

Community wildlife conservancies developed from the appreciation that stringently conserved areas frequently inadequately appreciate welfares of inhabitant communities (Kiss, 2004), as such dipping the conservancies preparedness would support in embracing conservation regulations. In some localities, stringent conservation without the inclusion of the community has led to serious aggression between local communities and conservation authorities (Robbins *et al*., 2009). The necessity to involve societies in protection has been encouraged by the consciousness of the biodiversity resources which are subject to, as well as reliance to processes and strategies that perform at both at national and universal scale according to Ancrenaz et al (2007). Subsequently, a method that can bring together the biodiversity requirements of preservation and economic growth has been proposed as an important instrument majorly in emerging countries.

Success of tourism squarely lies on conservation of wildlife. Wildlife conservancy, as per Kenya Wildlife Conservancy Association (KWCA), is a chuck of land set aside for wildlife conservation by communities, individual landowners, corporate or group of owners (King et al, 2015). Primary conservancy is the protection of indigenous plant and animal species as well as their habitat for economic benefit. There are three types of conservancies namely community conservancy, group conservancy and private conservancy. Community wildlife conservancy has been viewed as the key drive to

socio-economic development and a recipe for poverty reduction among the pastoralist communities surrounding national wildlife parks (Kariuki and Kimaren, 2018).

Community conservancy is commonly practiced in developing nations and majorly among the poor people such as the Maasai and Samburu of Kenya, the Inga of Colombia, and the Twa people of DRC and Tanzania. In addition, it offers best avenues for the poor to increase their share in tourism through 'pro-poor tourism' strategies via creation of opportunities and incentives for private sector participation to aid in poverty reduction. For an area to be considered a conservancy, groups have to define their membership and boundaries, create a committee for governing purposes, advance a profit-sharing plan and approve a permissible constitution and in return, manage and protect game. However, many rural communities in Africa have not benefited from community wildlife conservancies such as the Maasai and Samburu communities in Kenya. Majority of communities are marked by their inaccessibility, an increase in unemployment and poverty, minimal education level and competencies as well as high reliance on natural resources for existence (Ellis et.al., 2004).

At the global realm, tourism is a large economic driver through job creation. According to the Foreign Direct Investment (FDI) Report 2018, the impact of tourism at the global economy is estimated at 10.4% of the worldwide GDP and 313 million careers translating to 9.9% of the entire employment in 2017 (WTTC, 2018). For regions across the world without potential for agriculture and industry development, tourism is the preferred principle source of investment, since it signifies over half of the direct investment in developing countries. As per the first all-inclusive report on worldwide tourism figures and tendencies of the new era, the fast rising growing area for global tourism is Middle

East. Specifically, the region's tourism advents in the 2019 rose double the universal average (+8%). Progress in Asia and the Pacific decelerated but still presented above-average progress with international entrances up 5%. Europe's development was also slower than in preceding years (+4%) remains on the lead in terms of global arrivals numbers, welcoming 743 million worldwide tourists in 2019 (51% of the global market). The Americas (+2%) exhibited a mixed representation as many island destinations in the Caribbean consolidated their gains after the 2017 hurricanes while entrances fell in South America owing partly to continuing social and political chaos. Inadequate statistics available for Africa (+4%) points to continuous strong outcomes in North Africa (+9%) whereas arrivals in Sub-Saharan Africa grew slower in 2019 (+1.5%) (WTO, 2021).

Regionally, tourism is rising quickest in developing nations of Africa. As stated by Agrawal and Redford (2006), tourism is amongst the top five foremost export sectors in two thirds of the world's 49 least advanced nations particularly Uganda, Tanzania, Nepal, Cambodia and the Maldives - accounted for over a half of total Least Developed Country (LDC) tourism receipts. Wildlife tourism encompasses a substantial portion of the nature tourism trade nevertheless the study could not in a position to find any evaluations of its real share. The wildlife business has been fundamental to the growth of tourism in southern and eastern Africa and a key element of the tourism sector in nations like Nepal and Costa Rica. Wildlife tourism is projected to be an upcoming foundation of competitive gain for poor nations especially in southern and eastern Africa (WTO, 2021).

Tourism is the third principal financial sector after tea and agriculture currently in Kenya. It is a source of foreign exchange, revenue as well as employment. Kenya Tourism Board (KTB) Tourism performance report of FY 2017/2018 indicates that the total tourism

arrivals rose by 6.8% to highest 1,488,370 tourists likened to 1,393,568 in 2016/17. Tourism income recorded a 9.9% growth at Kshs 117.6 billion up from KShs 107 billion documented in 2016/17. This growth in tourism can be attributed to growth of wildlife conservancies in the country (KTB, 2018). Currently in the Wildlife Act of 2013, conservancies are an accepted way of using land. This makes them a striking land use choice for groups and land proprietors as they give incentives better-quality rights and access to land and resource (KWS, 2016).

Kenya rich and plenty wildlife resource are fairly spread across the country with skewed concentration extending from the Indian Ocean to afforested environments, massive savannah forests, mountain peaks, and to the lowermost of the Great Rift Valley. The nation has 411 PAs, spanning over 12% of its terrestrial part and 1% of maritime coverage area (UNEP-WCMC, 2019). According to Kenya Wildlife Service (KWS) there are 23 national parks, 28 national reserves, 4 marine national parks, 5 marine national reserves and 4 national sanctuaries (KWS, 2016). Samburu National Reserve and Mukogodo Forestry Reserves are amongst the highest wildlife tourist attractions in Africa. By introducing societies at the hub of wildlife preservation and considering preservation motivations, conservancies in Kenya are safeguarding livings though retrogressing wildlife drop, leading to the protecting Kenya's iconic wildlife for posterity. Kenya conservancy currently cover over 6.36 million hectares - approximately 11% of Kenya's land mass with 160 conservancies in 28 Counties. In addition, 110 conservancies are entirely functioning, 42 are coming up presently whereas 8 more projected according to Kenya Wildlife Conservancy Association (KWCA, 2016). The KWCA further provides that 76 of registered conservancies are on communal land, 26 are group

conservancies fashioned from combining adjoining private lands and 58 are on individual private landholdings. Conservancies play a critical part in communities' socio-economic growth thus resulting to reduction in poverty (KWCA, 2016).

In Kenya, wildlife conservancy employ more than 2900 game rangers mostly from the local communities to monitor and patrol conservancies where 39% are trained by Kenya Wildlife Service. In addition, more than 700,000 local community families obtain direct benefits from conservancies through provision of shops outside the conservancies to sell their wares as well as improvement of infrastructure around the community areas. Conservancies are important tourist destinations as they are home to 142 campsites and eco lodges with over 2,400 beds. All these generates income and empowerment to the communities living around the conservancies **(**KTB, 2018). In the Amboseli National Park, for instance, 15 conservancies guard more than 450,000 acres of a key habitation for the famous Serengeti-Mara wildebeest movement. This saw the lion numbers increasing twofold in the last decade and 3,000 families receive over $4 million every year from tourism. Contrary to this is the high level of poverty experienced among the communities living around these conservancies (Benavides, 2004).

Conservancies generate a substantial advantage by safeguarding natural resource use rights for property-owners and communities around the conservancy. While proprietorship and organisation models differ across the continent, conservancies continuously tie back to a sustainable land and wildlife administration practice. Aland lease program established by African Wildlife Foundation (AWF) to make community conservancies neighbouring the Amboseli National Park in Kenya to safeguard a significant wildlife connection and has allowed the community to participate in health

dispensaries, schools and microfinance businesses that meaningfully raises the resilience of communities from whom the land is rented (Riamit, 2019).

1.3. Statement of the Problem

It is argued that wildlife conservancy are intended to contribute to poverty alleviation through direct employment of locals as game rangers and other support staffs, hosting of tourism lodges, and promoting local entrepreneurship through craftsmanship and other ornamental trading (KWCA, 2018). On the contrary however, this great stride towards poverty reduction is yet to be realised within communities surrounding Satao Elerai conservancy, where poverty level is still high. Several studies have been done across the globe on roles, effect and impact of community wildlife conservancies and mixed results have been reported on its contribution to poverty reduction. Proponents have reported from successful wildlife conservancies to have benefited the communities through preservation of inheritance resources form a portion of the tourist remittance (Coria & Calfucura, 2012; Mbaiwa, 2017); provision of tourism related enterprises and products (Meguro & Inoue, 2011) and infrastructural accessibility within the community (Ondicho, 2018). While on the other hand critics scholars have reported eco-tourism among indigenous communities to promote unequal socio-economic relations leading to planetary and uneven revenue for poorer memberships of the host community (Barasa, 2010). The Amboseli Ecotourism Trust generates significant income through international tourism, but statistics indicated the indigenous communities receive the smallest quantity of assistances from this growth procedure (Stanonik, 2005; Ondicho, 2018). In addition, distancing local lands to generate wildlife conservancies, exemption of property-owners from using critical natural resources in the parks and human-wildlife

conflicts away from conservancies are some of the contributing factors to the side-lining of poverty-stricken rural communities. From this, a link between the community wildlife conservancies and poverty management can be forged, especially among the communities surround by conservancies. within Amboseli, has not been clear and empirically established. This study therefore, investigated the role of community wildlife conservancies as a means of poverty reduction at Satao Elerai Wildlife Conservancy.

1.4. Purpose of the Study

The purpose of this study was to examine community wildlife conservancy as a means to poverty reduction within Amboseli Ecosystem in Kajiado County.

1.5. Objectives of the Study

The study was guided by the specific objectives:

i. To assess the extent to which employment opportunities created by community conservancies contribute to poverty reduction within Amboseli Ecosystem in Kajiado County,

ii. To establish the extent to which infrastructure developed by community conservancies help in poverty reduction within Amboseli Ecosystem in Kajiado County.

iii. To establish the extent to which governance of community wildlife conservancies influence poverty reduction within Amboseli Ecosystem in Kajiado County.

iv. To determine the extent to which implementation of agreement frameworks by the conservancy's management influence poverty reduction within Amboseli Ecosystem in Kajiado County

1.6. Research Questions

The study attempted to answer the following research questions:

i. What influence do employment opportunities created by community wildlife conservancy has on poverty reduction within Amboseli Ecosystem in Kajiado County?

ii. What influence does infrastructure developed by community wildlife conservancy have on poverty reduction within Amboseli Ecosystem in Kajiado County?

iii. How does governance of community wildlife conservancy influences poverty reduction within Amboseli Ecosystem in Kajiado County?

iv. To what extent does implementation of agreement framework by the community wildlife conservancy management influences poverty reduction within Amboseli Ecosystem in Kajiado County?

1.7. Study Hypothesis

According to Toledo et al. (2011), a research hypothesis is a precise, clear, and testable scheme or predictive statement about the likely consequence of a scientific research study. Accordingly, research hypothesis is deduced on a particular attribute of a population under study, and defines supposed differences or associations amongst clusters on a specific variable. The study tested the following research hypothesis:

H_0: Community Wildlife Conservancy has no significant influence on poverty reduction within Amboseli Ecosystem in Kajiado County.

H_1: Community Wildlife Conservancy has significant influence on poverty reduction within Amboseli Ecosystem in Kajiado County.

1.8. Significance of the Study

According to Maillard (2013), significance of the study is the range of the participation made by the study to expand understanding, to change an idea or to encourage a new hypothesis in a field of research. This study would be of significance in advancing the concept of community wildlife conservancy. This study is significant in establishing how community conservancy can be harnessed to reduce poverty in Amboseli ecosystem. The findings could be of importance because the study finding and conclusion would assist management/trustees or board of directors of community conservancy in decision making regarding economic empowerment and poverty reduction among their members. Study findings could also be of importance to policy makers in designing regulations and policies that would encourage mutual beneficial to community prosperity and wildlife and its habitat protection. Last but not least, study finding and conclusions would be significance to academic fraternity in furtherance of scholarly development in the relevant field. Specifically, the study will contribute to existing literature body and suggest recommendations for further research areas.

1.9. Scope of the Study

The scope of the study clearly defines the extent of content that will be covered by means of the research to arrive to more rational suppositions and give decisive and acceptable responses to the research (Marshall & Rossman, 1995). The scope was grounded in analysis of community wildlife conservancy as a means to poverty reduction. The study was carried out in Satao Elerai Conservancy found within Amboseli Ecosystem in

Kajiado County. It was guided by four variables or objective themes namely employment, infrastructural development, governance and implementation of agreement framework. Data was obtained from conservancy management (trustees/board of management) Kimana/Tikondo community, and conservancy employees. The study covered a period of one and a half year from April 2020 to June 2021.

1.10. Delimitations of the Study

According to Theofanidis and Fountouki (2018), delimitations are options done by the researcher which should be revealed. They describe the limitations that the researcher has put in place for the study. The study focus is community wildlife conservancy as a means to poverty reduction. Four variables namely employment opportunities, infrastructural development, Governance and agreement framework were assessed. Study area was Satao Elerai conservancy within Amboseli Ecosystem, Kajiado County, Kenya. Respondents were drawn from the communities surrounding the conservancy, local employees and the board of management/trustees of the conservancy.

1.11. Limitations of the Study

Limitation**s** are stimulus that the researcher cannot control, that is inadequacies, circumstances or effects that cannot be controlled by the researcher that place limitations on research methodology and conclusions (Theofanidis and Fountouki (2018)). The study encountered a minor limitation relating to language barrier during data collection. However, the limitation was overcome through use of research assistants who translated and interpreted the questionnaires to illiterate respondents and assisted the elderly in filling in the questionnaire.

1.12. Assumptions of the Study

Assumptions are statements recognised as factual or as a minimum reasonable by the researcher. Assumptions include things that are to some extent out of your control, but if they vanish your study would become inappropriate (Marshall and Rossman, 1995). The study assumed that interviewees are well-informed on the role played by the conservation groups towards poverty reduction within Amboseli ecosystem, and the conservancy have framework plan on how to reduce poverty within its ecosystem. The study also assumes that the conservancies have had a contribution towards poverty in the host communities.

1.13. Theoretical Framework

Theoretical framework, according to Abend (2013) and Richard (2013), is a structure that backs a theory and presents and defines the theory that describes why the research problem under study happens. Thus, the study was founded on the membership theory of poverty and the collective action theory. Membership Theory of Poverty (MTP) proposed by Durlauf (2002) which hold the idea that person's socioeconomic projections are influenced by the groups and surrounding to which an individual is committed over the his/her life duration. As alluded by Durlauf (2002) the part played by a group connection in shaping socio-financial results should not be undervalued. The theory provides for two types of groups: endogenous for example inhabited localities, schools and firms and exogenous that including culture and sex.

The idea of the membership theory of poverty is basically founded on the belief that a person's socioeconomic result varies depending on the configuration of the numerous groupings of which he/she is affiliated over time. This kind of associations could in principle be well-defined beside numerous extents that include inhabited neighbourhoods,

ethnicity, institutions of learning and workrooms. It does also apply fundamental effects on person's results by way of a diversity of reasons which comprise of peer group effects, role model effects, social learning and social complementarities.

The peer group effect is viewed as the options a number of affiliates of a group have on the predisposition of others in get into the similar options. The typical examples are youth crimes - a plea of involvement in a lawbreaking as justified by one's friends. On the other hand, the role model effects happen a group inspiration the favourites of youthful associates (Durlauf, Bowles & Hoff, 2006).

Social learning, just as similar to role model, is the options result affiliated to experiences a group have based on choice of choice-experience by others on the data related to choices and consequences influence. For instance, if a community dominantly comprises of economically failed grown-ups with university schooling can affect how high school students assess the goodies of college. Lastly is the ssocial complementarities which is an impression of selections of some affiliates of a group makes the choices on behalf of others irrespective of whether the choices are absolutely interrelated or not (Durlauf, 2002).

It's worth noting influential collective inspirations significantly causally affect thesocio economic achievement or disappointment of members by the evolution of the associations and the groups themselves. If a specific associate of an indigenous group which agonises from social control, additionally is raised in a poor neighborhood or community where the role models and peer groups influence in contradiction of economic gains, and in addition placed in sequence of disadvantaged schools and employment or odd jobs certainly this categorisation explains for why that kind of an

individual is in poverty by the membership theory of poverty, the writer refers to a perception on poverty where these group effects play a key part in comprehending the reasons why a person is poor for the better part of his/her life (Durlauf, 2002). The major weakness of the MTP is assuming that an individual's socio-economic status is determined by the group affiliation, it shifts the importance in a causal explanation of poverty from persons individualities as an explanation of heterogeneousness in behaviour to associations and group influences which strain individual outcomes.

The Theory of Collective Action has grown and became popular since the time first publication of 'The Logic of Collective Action' book by Olson in 1965. The theory explains the group or an individual's deficiency in capacity to resolve a 'collective' action challenge within the community exhibited by a coherent, self-interested individual who exploits temporary gain while the society exploits community welfare (Ostrom, 2003). As a result, the theory posits a cconflict of interest be exhibited amongst the community's objective function and that of a person.

Stupendous literature of the application of collective action theory existed and concentrated on punishment and social sanctioning or exclusion in encouraging collaboration amongst resource users. For instance, Agrawal and Redford (2006) underscores the differences between a self-organised community and an outwardly compulsory collective action on law implementation and sanctioning. The study reported communities gain when organisations are dominated by the locals, as opposed to a situation when directions and procedures are manipulated by the state. A good example for instance is the Amboseli Community wildlife management that is predominately dependant on state powers to monitor and impose instructions and guidelines.

Similarly to collective action, the significant concept of participatory development and good governance were advanced by (Bedelian, 2014)**.** Pparticipatory development is method through which shareholders are able to influence, apportion control condition over growth initiatives, thus contribute to vital decisions on issues and resources paramount to community livelihoods. The objective is involving local communities in development and conservation while simultaneously promoting self-dependent and sustainable growth. Since its advent in the 1970s, the pparticipatory development has been widely acknowledged as a vital element of the Participatory Rural Appraisal (PRA) approaches.

For a significant period, local communities have been side-lined when as far as the administration and use of treasured natural resources in their areas of control wildlife included. This has been made deliberate by insensitive policies which disregarded their wishes and thus exacerbating conservational crime such as poaching, hostility to park management or wildlife by the locals. To resolve this, participatory development is vital, in addition to adopting people-centred approaches that spurs small scale growth in areas that permit the underprivileged to be knowledgeable contributors in development. This study was thus anchored on the theory of poverty, collective action and participatory development.

1.14. Conceptual Framework

A conceptual framework provides the researcher's fusion of literature on how to explain a phenomenon. It is the researcher's understanding of the connections that exist among the variables under study, hence aiding in identification of the variable required in the

research study. McGaghie et al. (2008) indicates the role of a conceptual framework as ground breaking stage for presentation of the research question on the problem statement.

The study, therefore, has established a conceptual framework founded on the analysis of literature using both independent and dependent variables as shown in Figure 1-1. The governance issues on management of conservancy towards contribution to the community are the independent variable and dependent variable is the community poverty reduction. According to World Bank Report (2005), there are various factors that cause poverty in Africa; among them are poor donor policies, poor infrastructure, wars and conflicts, poor governance, lack of capacity to influence social processes and corruption. The World Bank report used the sustainable livelihoods approach to evaluate the part played by community wildlife conservancy in deprived peoples' livelihoods. This will assist in explaining how income properties, for instance wildlife, are affected by strategies, organizations and procedures, and can be used in underprivileged peoples' livelihood approaches to bring the anticipated results.

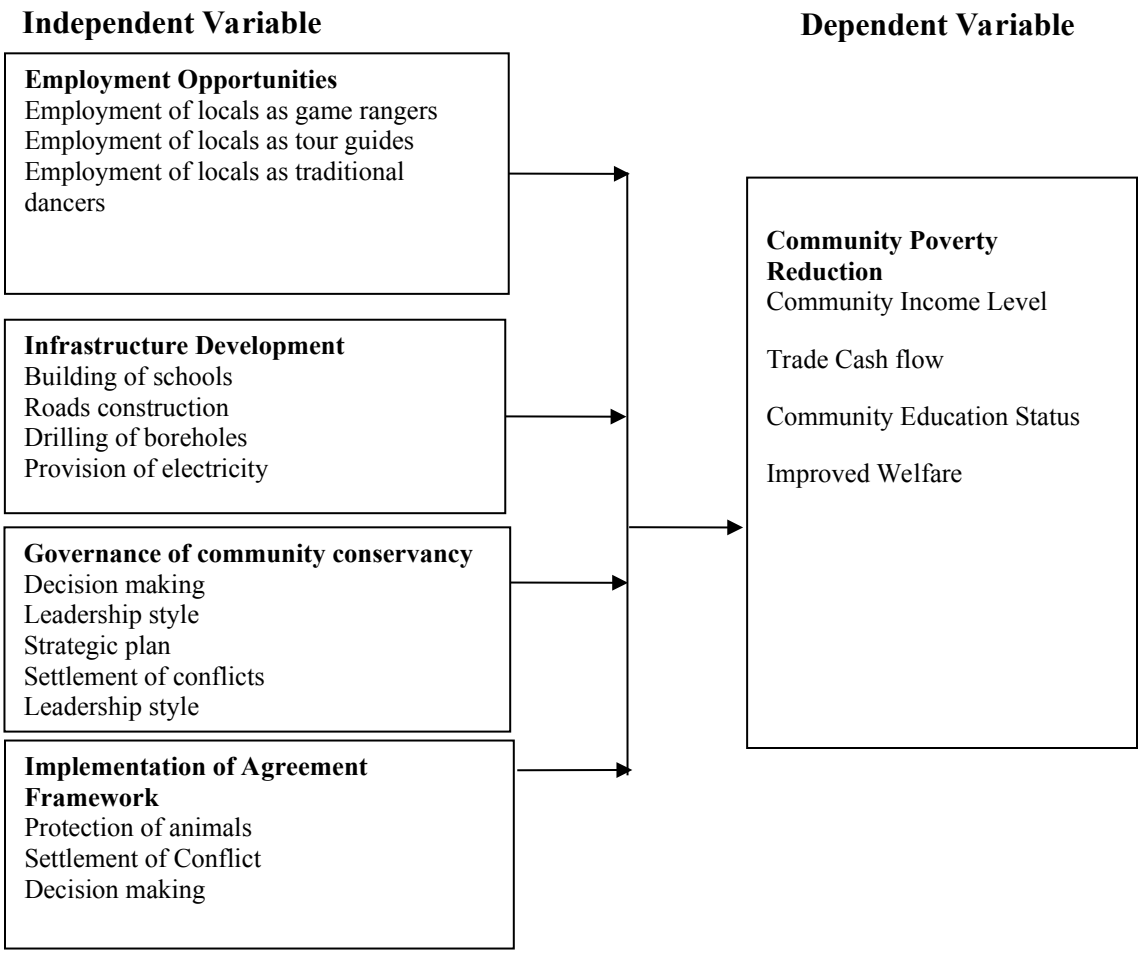

Figure 1-1: Conceptual Framework

Source: Researcher (2022).

CHAPTER TWO: LITERATURE REVIEW

2.1. Introduction

This chapter reviews literature from an empirical perspective. The purpose of literature review is to appraise the prevailing data to identify what has been done and puzzles in the research area so as to determine the research gap. The review will be directed by the research objectives, summary of review of literature and the research gap.

2.2. Poverty Reduction

To define poverty, economists have usually referred to the least requirements desired to gratify an individual's daily requirements. Everybody under the minimum necessities would find him or herself below the 'poverty line'. This line is relative, with everyday necessities achieving different worth in different parts of the world. Different countries have diverse poverty lines, with wealthier countries having considerable higher poverty lines compared to poor countries. This is simply because it costs extra to supply basic requirements in the wealthier countries and to some extent because expectations change (Ravallion, 1998). The World Bank considers poverty as hunger and absence of housing. Poverty considered as being sick and unable to see a medic. Poverty can as well be lack of access to education and inability to read and write. Poverty is lack of employment, is uncertainty for the future and living a day at a time. Poverty is losing a kid to ailment resulting from dirty water. Poverty is hopelessness, lack of representation and liberty (World Bank, 2001).

In its most general sense, poverty is the absence of basic requirements. Food, housing, medical care and security are commonly considered as essential according to the shared values of human dignity. However, what is a requirement to an individual must not

necessarily be a necessity to another. Desires may be relative to what is conceivable and are founded on social meaning and knowledge (Mwangi, 2007). According to Ashley (2016) the main cause of poverty is inequality. Basically, the meaning of poverty in other words, is relative deprivation. A social (comparative) meaning of poverty permits community flexibility in tackling persistent local fears while unbiased definitions permit tracking growth and likening one area to the other.

Though poverty is frequently assessed and viewed in complete terms i.e., people leaving on less than $2 per day, justifications of poverty are multidimensional. The three dimensions of poverty according to the WTO (2001) are deficiency of properties, hopelessness and defenselessness. Poverty can also be assumed to be a condition of insufficiency or inadequate living prospects. In relation to the communities conservancies, the relationship between poverty and biodiversity preservation is explained by Roe *et al.* (2013).

The call to encourage poverty reduction efforts have gradually informed conservation theme in many sectors and scientific discussion and presentations. In the 7th Conference of Parties to the Convention on biological diversity held in 2002, members commit to attain an important decrease in the present degree of biodiversity damage as an involvement to poverty reduction (Clark, Bolt & Campbell, 2008). In addition, consensus to protect endangered areas and animals was arrived at The World Parks Congress In 2003 (Baillie, Craig & Stuart, 2004).

It should be noted that the community conservation purposes to offer an inducement for efficient management and sustainable of biodiversity resources, realigning their objective with poverty mitigation within the local inhabitants is significant. The implication of the

theory, therefore, provided a model for integrating wildlife-linked initiatives that support society and nature to poverty reduction within the study area.

2.3. Community Wildlife Conservancies

The community wildlife conservancies are viewed as influential extension of partnership agreements system. They are commonly constructed on land next to the already established government-dominated parks. They predominate regions or areas which have experience or are subject to human-wildlife threats, where communities were motivated to contribute in tourism activities, or where government-controlled parks are incapable to address the pressures between requirements for conservation and profits for local community (Bandyopadhyay *et al*. 2009).

Barrow and Murphree (2001) defined a community wildlife conservancy is a well-preserved land or area coverage that adopts the conservation philosophy. The conservancy in practice is complex and multifaceted dependent on diverse legal framework and regulatory systems for its operation and management.

In Africa initial conservancies were informed by the concepts of wildlife ranching and denationalization of wild games on private land, a practice that emerged in the late 1960s and 1970s in South Africa, Namibia and Zimbabwe. In the late 1980s the concept of Community Based Natural Resource Management programs (CBNRM) were introduced in those areas. In Kenya, conservancy at inception covers establishments for the governance and management including the geographic areas set aside for wildlife on communal or private land **(**Hulme & Infield, 2001).

The Kenya's Wildlife Act 2016 permits that community conservancies can be established an individual or community. In addition, the conservation and management are required

to be decentralised where possible with proprietors and administrators, with public involvement and full participation (Government of Kenya 2013). the three clusters of conservancies in Kenya are provided by the Kenya Wildlife Act 2016 based on ownership as the private conservancies, group conservancies and community conservancies (KWCA 2016).

In the past three decades Kenya has witness sporadic growth and outstanding progress in the number and categories of conservancies employing a range of conservation policies, namely ecotourism, law enforcement, water management and species protection. According to KWCA More than160 conservancies have been registered and occupying more than 10% or 60,000 km of Kenya's total land area, of which 47% or 76 conservancies are located on community land (KWCA 2016). apart from expanding the national game reserves, the community conservancy have also resolve conflicts between the conservation requirement and needs welfare and community livelihoods. The policy supports and state government have streamlined management and operation of community conservancies leading to growth implementations of models that encourages participation and empowerment of shareholders including the community at large (Li *et al*., 2008).

2.3.1. Creation of Employment and Poverty Reduction

Community wildlife conservancy is one of the tourism sectors that provided both direct and indirect employment majorly to pastoralist in Arid and Semi-Arid Land. Equally, scholars have also studied tourism employment opportunities and ability to reduce poverty across the globe. To commence with, Roe et al, (2013) study evidenced that the relationships between wildlife and poverty can bring employment prospects and

substantial earning to the underprivileged persons. Specifically, there is an increased number of tangible corporations both equity and management amongst both the local communities and the private sector especially the facilities operated by safari companies. In addition, there are also a rising figure of groups that encourage consumers to interact 'community tourism' businesses directly thus raising trades and revenues at local level. From these arrangement, substantial employment is formed by way of wildlife-based tourism which includes guiding, cleaning, cooking, self-employment, etc as a result of related trading opportunities (KWCA, 2016).

In a similar study to ascertain communal income for poor communities from tourism was conducted by Songorwa, Buhrs and Hughey (2000) in Namibia. Finding revealed that wildlife community conservancy has brought about 547 permanent and 3,250 casual works to the local communities. In addition, women traders from the community around the conservancies retailed $85,000 worth of jewellery in the year 2011 and the conservancies make over $1 million annually from tourism, livestock and jewellery. The study concluded that community wildlife conservancies significantly contribute to poverty reduction with most prevalence being income from fee and lease.

A study was conducted by Kiriinya (2011) and analysed factors influencing community conservation of forest in upper Imenti forest. The study clearly reported Kenya's damage of woodland cover and the related biodiversity has caused adverse conservational deterioration, the result being noticeable reduction of tourism as a result of destruction of wildlife habitation. This has equally threatened food production, thus contributing to countryside poverty throughout these earlier resources endowed lands. He recommends practice of community wildlife conservancy as a means to remedy the situation.

Lekalkuli (2011) additionally conducted a research on aspects contributing the mushrooming of wildlife conservancies which concluded socio and economic factors and climate changes to have greatly contributed to the coming up of these wildlife conservancies as informed by the semi aridity of the region with brief rain interludes. Famines bring about the movement of wildlife to other regions looking for pasture and water leading to an escalation in conflict with human as a result of the race for the limited pasture and water.

2.3.2. Infrastructure Development and Poverty Reduction

Infrastructures are the pillar of development and ecotourism is not in exempt. A study done by Glew, Hudson and Osborne (2010) showed that community conservancies strive very well in areas with good infrastructure which support trade, especially hospitality and service industry. Accordingly, among the infrastructure needed to support community wildlife conservancy, according to Stephen (2010), are good road network, telecommunication, healthcare, among other social-welfare services. In return, the community requires the same in addition to education sponsorship, culture support and environmental maintenance.

Kangwana and Berger (2015) study recorded that, in Tanzania's Tarangire National Park, community ecotourism fund supported infrastructural development to a tune of $16,520 in constructing school buildings and equipment from 2000-2014. As a result, the study cross tabulation analysis reported a significance decrease in poaching rates and a rise in reporting of presence of poachers and poaching activities by the locals to the park rangers. Alternative proceeds distribution initiative observed at the Ruvuma Elephant Project which absorb game scouts for protection from the local populace to work together

with the government rangers and given performance-based payments. The Scheme also teaches communities and recommends approaches to minimise human-elephant conflicts which includes the use of chilli fence to prevent elephants as well as making a cash crop. Residents also report poachers and any poaching activities which led to a serious decrease in poaching (Glew et al, 2010).

In Rwanda, Kiss (2004) analysed the community conservancy contribution to infrastructure development in gorillas (Gorilla Berengei) conservancies. The study reported that in 2013, $294 million of ecotourism fund was spent which 15% was devoted to infrastructure development in the community. The study finding further illustrated that fund support for conservation infrastructure development significantly reduces poaching rates by 67%. In comparison, Benavides (2004) study in reported that enforced legislation that prevented people from any access to, or use of, habitats used by gorillas was the most significance method of conserving their population however, this would effectively work in collaboration of local communities with the conservation initiative.

In Kenya, a study was done by Osano et al. (2013) on the Northern Rangelands Trusts, which encompasses 29 conservancy nodes, occupying more than 30 000 km2 (NRT 2016), the findings indicated that the amount of money used to lease land was not adequate to offer the families with a decent livelihood, however the conservancies sponsored some of the children of the employees to school and even helped in the construction and stocking of dispensaries in the host community.

2.3.3. Governance and Poverty Reduction

Governance defines management approach to stewardship in resource utilization. Proper governance structure is a key resource to management competence in delivering conservancy mandates. According to USAID (2010), governance process matters as much as the product in that it's not just about conserving wildlife or generating employment, but also encouraging all-encompassing decision making from all stakeholders. Wildlife conservancies must cultivate good governance in order to effectively achieve its objectives. A study by Wells et al (2012) reported on activeness of the local's ability to hold community-based conservancies accountable through their representatives. The study reported that 78% of community-based conservancies have advocated for representatives in conservancy management board.

Brockington and Adams (2008) affirmed that good corporate governance should create compensation fund for communities' sacrifice in land use and protection of games. Any cash the conservancies raise is equally distributed amongst members. Several conservancies make use of these funds to pay herders whose livestock are killed by wild animals, to fund schooling for the members and to begin additional ventures as farming crops. In most conservancies, about 60% of gross income is directed to development activities like improving access to water or channelling to road infrastructure.

A study done by Glew, Hudson & Osborne (2010) disclosed that community conservancies have better output if it has the right objective oriented management governance structure. The study further revealed that with good governance in the

conservancies where community members are incorporated in the decision making, there is an improved flow of income to the local community.

During the 2007-2009 droughts, Glew, Hudson & Osborne (2010) found that a number of individuals amongst the conservancy families were not compelled to get rid of their cattle at extremely low amounts as give low pasture in-stores to for cattle feeding. Thus facilitated fast re-bounce from the famine in mitigation the effect of climate changes. A study by Aburuki (2011) on examination of issues causing environmental deprivation in Tigania North Division alluded that bordering areas with both wildlife and cattle roams, are recipe for creation of conservancies to assistance wildlife - human conflict and creates employment and other opportunities to the local communities.

A study by Baskin (2009) analysed the influence of governance in hostility amongst local herders and large predators due to the ravage they pose to their cattle. The study reported that without good governance, community wildlife conservancies face a number of challenges including retaliatory killing of wild game. The author advocated for conservation initiatives to encourage the coexistence of human and predators through giving compensation when and if an animal is killed and at the market cost of the concerned animal. In addition, the study recommended for an alternate but comparable arrangement to offer an insurance plan where community members or proprietors settle insurance package for membership compensate following damages.

Manyara and Jones (2007) posit that the benefits of conservancies in Kenya is that the local community can actively participate in the administration and including decision on sharing proceeds at the same time protecting the naturals resources for posterity. Profit

sharing is an essential part of the conservancy approach which is ensured by the Kenya Wildlife Act. Landowners, the communities, NGOs and investors are considered as shareholders and other conservancy stakeholders.

2.3.4. Community Agreement Framework and Poverty Reduction

Community based wildlife conservancies are arrangement between *safaris* or tour investors and communities defined by agreement contract which spells out the terms and conditions for each party. This agreement framework spells out, according to Gibson (2016), revenue-sharing initiatives, human-carnivore coexistence, infrastructure and social amenities support to the community. In return, the commitment to preserve wildlife habitat and conserve the ecosystem are realised. A study by Gichohi (2003) reported that community-conservancy agreement enhances the locals feeling that the existence of wild game is a plus to their life. Since ecotourism and big game hunting businesses are exceedingly lucrative, one technique of attaining mutual understanding is to authorization of portion or fraction of proceeds to the local communities as an enticement to preserve them.

Norton-Griffiths (2015) study on the implementation of community conservancy contract agreement revealed that proceeds sharing can improve wildlife numbers. In a study conducted in Kenya between 1987-2014, the study findings indicated that 19-65% of wildlife population vanished in a geographical location where most of the proceeds from ecotourism was maintained by the tourism trade, where profits were shared, and no wildlife was lost. Wildlife grew by 12% where exclusive owners of land had all the proceeds since they are motivated to preserve wildlife. Groom and Harris (2008) study revenue-sharing as a component of agreement terms between community and the

conservancy which showed that sharing revenue with community significantly promote good coexistence between human and wildlife thus promoting the rise of wildlife population. This is evidenced by the strong correlation of 0.89 between revenue-sharing wildlife population and thus wildlife is unlikely to be killed by the residents.

Ulloa and Sierra (2002) did a study on community protection of carnivorous among the ASOCAIMAN in Columbia. The findings revealed that community engagement through agreement contract not to kill or harm wild game for commercial sale has significantly led to rise in population of American crocodiles. Martin (2011) analysed the use of legislation to contract agreement between community and conservancies in promoting tourism in South Africa. The study was delimited to analysis of methods to protect rhinos by way of implementation of stringent protection laws. Findings revealed that enforcement agreement has significantly failed as demonstrated in persistent and rising occurrences of poaching.

Similarly, Emslie (2013) has shown that massive million used yearly to conserve the rhino from poaching threat and its unlawful horn market. The study report lack for value of money and low engagement of community conservancies supporting rhino population controlled. The study concluded that wildlife conservation of rhinos' population would be greatly attained by leaving protection-orientated regulation and embracing a firmly controlled community-based conservancy agreement framework.

2.4. Summary of Literature Review

This chapter reviews works from both theoretical and empirical. The reviewed theories are participatory theory, social learning theory and liberal democratic theory. Participation theory encourages people participation in decision-making to inspire

partners to embrace matters of shared concerns. Social learning theory is founded on the concept that communities together can form a learning structure that can withstand ambiguity and uncertainty. Liberal democratic theory is based on the principles of civilized society to inspire nationals' to willingly get involved in democratic procedures to further public good.

Empirical review of literature was guided by objective themes. For employment opportunity theme: community wildlife conservancy is one of the tourism sectors that provided both direct and indirect employment majorly to pastoralist in arid and semi-arid areas. The relationship between Wildlife and poverty can give substantial revenue and employment prospects to underprivileged persons and thus community wildlife conservancies significantly contribute to poverty reduction with most prevalence contributes being income from fee and lease. For infrastructure objective: community conservancy grasslands thrive well in areas with good infrastructure which support trade especially hospitality and service industry. For governance: proper governance structure is a key resource to management competence in delivering conservancy mandates, governance process and encouraging inclusive decision making from all stakeholders. Finally, for agreement framework theme: revenue-sharing initiatives, human-carnivore coexistence, infrastructure and social amenities support to the community are major terms of conservancy agreements.

2.5. Research Gap

The literature review clearly points that community wildlife conservancy is a strive towards securing the nation's natural heritage thus establishing the foundation of the tourism industry which is among the primary foreign exchange earner and the main

supporter to nation's GDP. Scholars appear to be in agreement regarding community conservancy – ecotourism – to address dependence on activities that exploit natural resources, reduces the danger related to climatic changes and market-dependent sources of income, but this was linked to poverty reduction (Roe et al, 2013; Songorwa et al, 2000; Lekalkuli, 2011). Accordingly, scholars are also in agreement that job creation, infrastructure development for tourism (lodges, airports, parks buildings and roads) and that most service and hospitality sectors within conservancies are owned by foreigners (Spenceley, 2016; Mbaiwa, 2017; Manyara and Jones, 2007). However, majority of these studies have been done from promotion of tourism and not from community benefits standpoint. This creates a conceptual gap that the study will address by analysis how the conservancy contributes to employment, infrastructural development, governance and implementation of agreement framework in relation to addressing community poverty reduction.

CHAPTER THREE: RESEARCH METHODOLOGY

3.1. Introduction

This chapter lay down the measures/methods and tools adopted throughout the research in a quest to get solutions to the research questions. The chapter covered the research design, research site, target population, determination of study sample, data collection measures, data processing and analysis and finally legal and ethical consideration.

3.2. Research Design

Research design is a blueprint that gives direction to researchers on how to gather, examine and interpret observations. According to Degu and Yigzaw (2006), research design is a logical model that leads the investigator in the numerous phases of the research. The study adopted a descriptive design. Descriptive studies are conducted to check for relationships or associations that exist between things around the world or relationships between things in the world around, that is, determines and reports the way things are when information is gathered to describe individuals, organizations, settings or phenomena (Mugenda & Mugenda, 2013). The researcher finds the design appropriate as it will enable the study to explain provide a vivid descriptive picture of the contribution of community wildlife conservancy towards poverty reduction in Amboseli ecosystem, Kenya.

3.3. Research Site

Research site is the geographical position of the study area. According to Creswell and Creswell (2017), research site the physical or geographical location where the case or target population occupies. The study was done in Satao Elerai, a community group conservancy occupying an expanse approximately 11,000 acres. The conservancy is divided into three distinct but complementary regions where settlements and cattle keeping occupied 4,000 acre while wildlife conservation and crop farming taking 4,555 and 2,000 acres respectively. Its population stands at 1258 members. The Conservancy came into being in 2005 with Satao Elerai Camp an eco-tourism establishment jointly owned by the local community and a foreign entrepreneur. The conservancy is situated within the Amboseli ecology forming a constituent part of the Kilimanjaro-Tsavo landscape. UNESCO has considered this zone as an environment that balances the welfares of the Maasai community and their livestock with that of the Wildlife through co-existence.

Cattle and Crop farming as well as activities related ecotourism are the major sources of revenue and livelihoods in the area. The conservancy is geographically located on the windy side of Mt Kilimanjaro which gets reasonable to little quantities of rain. The region infrequently suffers intermittent and recurring droughts, periodic floods and other effects of climate change. The Satao Elerai countryside is mainly covered with scattered Savannah scrubland and open grassland. The Acacia tortilis, Acacia meliphera and Acacia xanthofolea are the dominant species of trees in the area. It is from the Acacia xanthofolea (yellow fever acacia) that the conservancy derived its name Elerai from the Maasai dialect. The conservancy occupies an area where the African Wildlife Foundation

(AWF) consider it as a critical wildlife corridor named Kitenden Corridor where various Wildlife species particularly elephants use as a migration path between Amboseli, Chyulu, Kilimanjaro forests and Tsavo National Parks.

3.4. Target Population

The target population is the gathering or the persons to whom the survey concerns. It is those gatherings or persons who are in a situation to reply the questions and to whom the outcomes of the survey relate (Kitchenham & Pfleeger, 2002). The target populace for the study comprised of Kimana/Tikondo group ranch community, Satao Elerai limited (the conservancy management and Satao Elerai local employees. The data obtained from Satao Elerai conservancy indicates 1328 as total population distributed as presented in Table 3-I.

Table 3.1: Target Population

Category	Population
Satao Elerai Limited Management	12
Employees	58
Community (Group ranch - Kimana/Tikondo)	1258
Total	0

Source: HRM Satao Elerai (2020) and Oloitokitok Sub- County Headquarters (2020)

3.5. Determination of Study Sample

3.5.1. Sampling Procedure

Sampling refers to the selection of a subset of a group to act as a representative of the whole. Sampling is more desirable where the area of study is extensive and the researcher cannot cover all the target population and conduct a thoughtful assessment (Mugenda and Mugenda, 2003). Since the target group is heterogeneous, the study embraced a stratified random sampling technique. Stratified sampling ensures proper representation of different categories of the target population into the respondent's sample size as urgued by Creswell and Creswell (2017). From each different stratum, the study employed simple random sampling to select the final respondents from each category proportionately as weighted on the category population as shown in Table 3-2.

3.5.2. Study Sample Size

The study sample size is a proportion of the target population cautiously chosen to signify the entire population. The study adopted Taro Yamane sample size formula (Yamane, 1967) to get the sample size.

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

Where: n = Sample size

N = Population size

e = Sampling error

Creswell and Creswell (2017) argued that Yamane sample size formula is ideal for determing observation units where there is definite target population just like in the study case. Thus, from total target population of 1328 and a sampling error of 0.075 (95% level

of confidence), the computed sample size is 177.7777 approximately 178 respondents arrived at as follows:

$$n=\frac{1328}{1+1328(0.075)^2}=177.777 \cong 178$$

Sampled respondent from each stratum or category was computed based on proportionate weight using the flowing formula:

$$w=\frac{x}{N}$$

Where: w = the category/stratum weight

n = category/stratum population

N = Target population

Representatives for each population category/stratum will be arrived at as a product of category weight and sample size (that is, w*n) as presented in Table 3-2.

Table 3.2: Sampling Frame

Category	**Category Population**	**Weight** $\left(w=\frac{x}{N}\right)$	**Category Representatives** (w*n)
Satao Elerai Limited Management	12	0.009036	2
Employees	58	0.043675	8

Community members elders and leaders (Group ranch - Kimana/Tikondo;)	1258	0.947289	168
Total	0	0.00	0

Source: Researcher (2020)

3.6. Data Collection Measures

3.6.1. Development of Instruments

The study gathered from primary sources both quantitative and qualitative data. The instrument for primary data collection was semi-structured questionnaire and Interview guide. Questionnaires helped simplify and quantify people's behaviour, characteristics or other factors about which the research is inquiring (Creswell & Creswell, 2017) and interview guide enabled in-depth analysis of the research issues at hand from management point of view. Key informant interviews using interview guides was carried out to management of the Satao Elerai Wildlife Conservancy so as to obtain in-depth information to corroborate the responses from the community members as gathered from semi-structured questionnaires. A research assistant was hired, trained and assisted in data collection.

3.6.2. Pilot Testing of Research Instruments

As noted by Bordens and Abbott (2002), the pilot study is a smaller scale form of the study aimed at finding procedures, resources and limits for use in the complete study. The pilot study was conducted to determined faults, restrictions or other weaknesses in research instruments and adjusted prior to actual data collection. The study was done at

Kitirua Conservancy on sample size of 15 respondents to determine the reliability and validity of research instruments. The pilot exercise was carried two weeks to actual data collection.

3.6.3 Instrument Reliability

Reliability, as observed by Mugenda and Mugenda (2003) is the extent to which a research instrument produces finding that are constant every time it is administered to similar subjects. The measurement of reliability offers consistency in the measurement variables (Creswell, 2017). The study employed Cronbach alpha to get the reliability based on internal consistency (Mugenda & Mugenda, 2003). The normal minimum value adopted for item loadings was alpha 0.7 as suggested by Gupta (2008). Result of reliability is presented Table 3.3.

Table 3.3: Cronbach Reliability Result

Questions	Reliability Alpha (α) value	Verdict
Employment opportunities by community conservancies.	0.7345	Accepted
Infrastructure developed by community conservancies.	0.897	Accepted

Governance of community wildlife conservancies.	0.7021	Accepted
Implementation of agreement frameworks.	0.869	Accepted
Overall reliability	** Expression is faulty **	**Reliable**

Source: Researcher (2020)

From Table 3.3, the alpha value for employment opportunities questions was α=0.7345, and infrastructure developed by community conservancies questions was α=0.897. In addition, governance of community wildlife conservancies question and implementation of agreement frameworks questions gave alpha values of α=0.7021 and α=0.869 respectively. The overall reliability of the instrument was α=0.80, above recommended threshold of 0.7, implying the research questionnaire was reliable.

3.6.4 Instrument Validity

Validity is the extent to which the sample of the test element signify the content that is intended to be measured, that is, the tool measures the features or attributes that is intended to measure (Mugenda & Mugenda, 2003). Data need to be dependable, factual and precise and if a measurement is valid, it will as well be consistent (Creswell & Creswell, 2017). This study adopted Content Validity (CV) which refers to the degree to which a measuring tool satisfactorily covers the subject under study. The content cogency was verified through exposing the data collection instruments to an assessment group of

specialists who gave observations and significance of each item of the instruments and show if it is appropriate or not.

3.7. Data Processing and Analysis

Collected data was analysed by use of quantitative methods with the support of (SPSS) version 22 and excel. Before analysis, collected data was processed through editing, coding and classification and descriptive and inferential statistics were adopted. The descriptive statistics was used to summarize the data using frequencies and percentages. Conversely, inferential statistics was used to analyse the association between the independent and the dependent variables. Specifically, Pearson's correlation will identify nature and strength of correlation within independent and dependent variable. Multiple regression analysis at 95% level of confidence was performed to evaluate the contribution factors of independent variable unit change on the dependent variable. The Multiple Regression model was as shown below:

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

Where: β_0 = Constant (coefficient of intercept)

X_1 = Employment opportunity

X_2 = Infrastructure development

X_3 = Governance

X_4 = Agreement framework implementation

β_1, β_2, β_3 and β_4 = regression coefficient for variables.

ε = error

Qualitative data collected from the KII was coded into groups relating to the objectives them thematically analysed, after which the output was combined with the quantitative output from the semi-structured questionnaires.

3.8. Legal and Ethical Consideration

Ethics in research calls for individual honesty from the researcher. Blumberg *et.al*. (2014) provides the objectives of integrities in research as to make sure that none is damaged or suffer serious consequences from the conduct of the research. The respondents were adults above 18 years and were not required to disclose their identity anywhere in the research instrument, to maintain their anonymity. Respondents were not in any way coerced and those who undertook the study did so with full consent. The researcher also adhered to respondent's freedom to exit from the study at will. The study also sought for clearance from National commission for Science Technology and Innovation (NACOSTI) which is a legal requirement to conduct research in Kenya.

CHAPTER FOUR: DATA COLLECTION, ANALYSIS AND RESULTS

4.1. Introduction

This chapter is about data;analysis and results. The study collected information using both structured questionnaire and interview schedule. Analysis was done based on qualitative method in which both descriptive and inferential statistics were used. The chapter therefore, commences with response rate result followed by results on demographic information of respondents there after results of objective questions.

4.2. Response Rate

The study sample size was 178 respondents comprising of management (2) and employees (8) of the conservancy and community members (168). The management and staffs were interviewed and community members were issued with questionnaires during data collection. Out of 178 sample size, those who responded were two managers, eight employees and 150 community members giving a total response of 160. This equally corresponded to 89.88% reply rate as presented in table 4.1.

Table 4.4: Response Rate

Category	Sampled	Responded	Response Rate
Management	**2**	**2**	**89.88%**
Employees	**8**	**8**	
Community members	**168**	**150**	
Total	0	0	

Source: Researcher (2022)

All the interview scheduled for management and staffs were successfully conducted and of the 168 questionnaires given to the community respondents, only 150 were brought forth dully filled. This signified a total reply rate of 89.88% and above the threshold rate 60% according to Bryman (2007) and Best and Khan (2006). Therefore, the response was considered adequate, and the study proceed with data analysis.

4.3. Demographic Results

The study considered it necessary to find out the demographic data of respondents. The characteristic assessed were sex, age and academic level. Results are presented and discussed below.

4.3.1. Gender Response

Results of respondents' distribution by genders is presented in Table 4.2

Table 4.5: Response Rate

Category	Frequency	Percent
Female	86	53.75
Male	74	46.25
Total	0	100.00

Source: Researcher (2021)

Result from Table 4.2 shows there were 53.75% (N=86) female gender and 46.25% (N=74) male gender. This result indicates that majority of respondents werefemale and thus could imply that women are the major beneficiaries of the conservancy. Similarly,

this was also supported by employee's distribution of the conservancy in which there were more women in relation to male gender.

4.3.2. Age Distribution Result

Results of respondents distribution by age is presented in Table 4.3.

Table 4.6: Response Age Distribution Result

Category	Frequency	Percent
Between 18 - 20 years	59	39.3
Between 21 - 29 years	51	34.0
Between 30 - 49 years	14	9.3
Above 50 years	26	17.3
Total	150	100.0

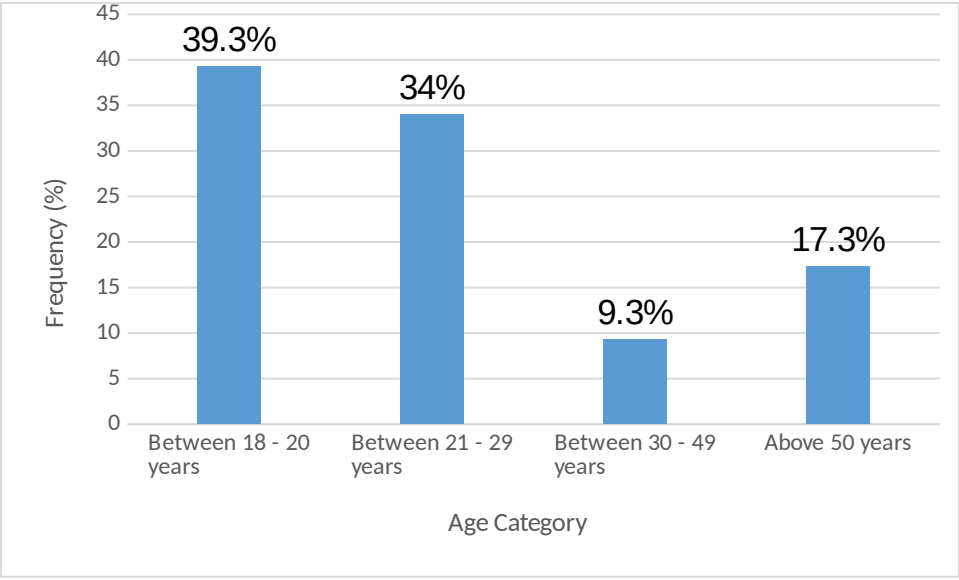

Figure 4.2: Respondents Age Distribution

Source: Researcher (2021)

Result from Table 4.2 and Figure 4.1 present respondent age distribution and result shows that 39.3% (59) were aged between 18 - 20 years; 34% (N=51) were aged between 21-29 years; 9.3% (N=14) were aged between 30-49 years and 17.3% (N=26) were aged above 50 years. This result showed majority of respondents were aged age between 19-29 years. This indicated that respondents were mature youth and thus were able to express reliable opinions or experiences regarding the research questions.

4.3.3. Highest Education Level

Results of respondents' distribution by level of education is shown in Figure 4.2

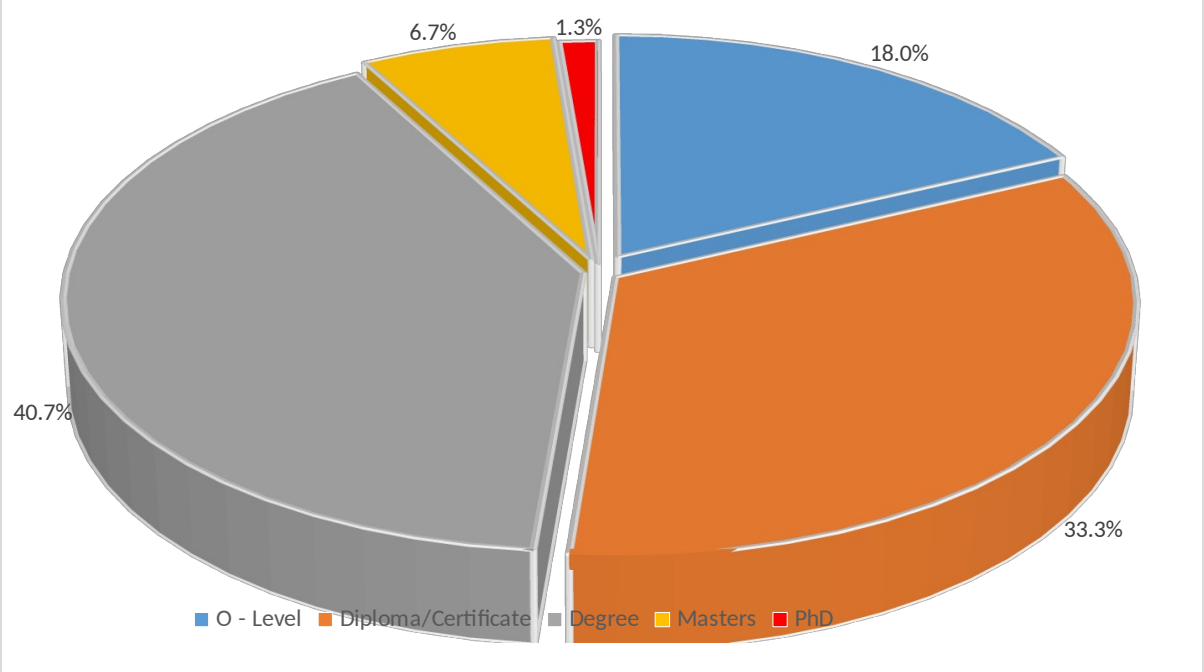

Figure 4.3: Respondents Highest Education Distribution

Source: Researcher (2021)

From figure 4.2 result shows a big number of respondents at 41% (N=61) had attained certificate or diploma as uppermost level of schooling, followed by degree qualification at 33% (N=50), O/A level qualification at 18% (N=27), Masters at 7% (N=10) and PhD qualification at 1% (N=2). These results indicate majority of respondents had acquired post-secondary education and thus were knowledgeable enough to intemperate research questions, thus provide reliable answers.

4.4. Descriptive Results

4.4.1. How the Conservancy have benefited the Community

The study sought to determine the benefits that conservancy have contributed. Five benefits were identified for analysis namely employment opportunities, healthcare support, trade opportunities, education support and culture preservation. Respondents were asked to select all the benefits applicable and result if summarized in Figure 4.3.

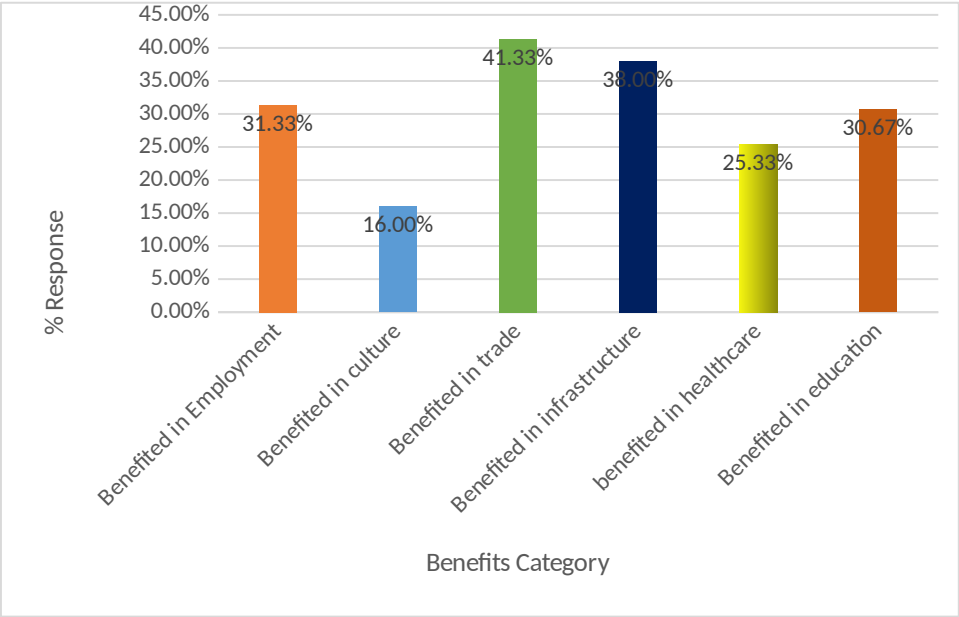

Figure 4.4: Community Benefited from the Conservancy

Source: Researcher (2021)

Result shown in Figure 4.3 indicates that majority 41.33% (N=of respondents have benefited from the trade opportunities (N=62), followed by infrastructure at 38% (N=57), employment opportunities at 31.33% (N=47), education support at 30.67% (N=46), Healthcare 25.33% (N=38) and culture preservation 16.00% (N=24). These findings implied that community wildlife conservancies have promoted trade opportunities and enhancement of infrastructure. In addition, they have fairly contributed to employment and education support and healthcare provision to community members. However, they have least assisted in the preservation of cultural heritages among the communities surrounding them. Addition observation from interviewees showed community members were prohibited from conservancy resources as observed by an interviewee " Intra alias… *hatuwezi kata miti kutoa dawa, hata kuua samba tuwe wanaume*…" meaning "we cannot harvest tree for medicinal use nor kill lions for manhood passage". These were viewed as contributing to low cultural support to the community.

4.4.2. Extent to which Employment Opportunities Contribute to Poverty Reduction

The study assessed how the wildlife conservancy have created employment opportunities for local communities surrounding them. Respondents were asked to rate the extent to which they agree or disagrees with the research question items founded on a five-point Likert scale with 5 signifying 'Strongly Agree', 4 signifying 'Agree', 3 signifying 'Indifferent', 2 signifying 'Disagree' and 1 signifying 'Strongly Disagree'. The descriptive result was analysed based on measures of central tendency and the result is showed on Table 4.4.

Table 4.7: Response to extent to employment opportunities

Code	Category	Min	Max	Mean	Median	Mode	Std Dev.
EO1	Community wildlife conservancy has employed locals as guard scouts	1	5	4.59	5	5	0.753
EO2	Community wildlife conservancy has employed locals in the hotels and restaurants.	1	5	4.21	4	4	0.701
EO3	Community wildlife conservancy has employed locals as tour guides	1	5	4.44	5	5	0.755
EO4	Community wildlife conservancy has employed locals as traditional dancer	1	5	4.27	4	5	0.739

Source: Researcher (2021)

Result from table 4.4, respondents response to question assessing how the communality wildlife conservancy has created employment opportunities to locals reveals: opportunity as guard scouts revealed a mean 4.59, Mode 5 and Std Dev. 0.753 suggesting strong agreement; opportunity in hotels and restaurants revealed Mean 4.21, Mode 4 and Std Dev. 0.701 suggesting agreement; opportunity as tour guides revealed a mean 4.44, Mode 5 and Std Dev. 0.755 suggesting strong agreement; and opportunity as traditional dancers revealed a mean 4.27, Mode 4 and Std Dev. 0.753 suggesting agreement. This finding implied the community wildlife conservancy have offered employment to community as scout guards, in hotel and restaurants, as tour guides and traditional dancers to entertain tourists. This finding was supported by management who emphasised that most of their staffs are local and, as a way to give back to the community, local are given priority in employment, except where there is no local capacity or where candidates are sourced from across the nation or global like managing director and senior managers.

4.4.3. Extent to which Infrastructure Development Contribute to Poverty Reduction

The second objective assessed if community wildlife conservancy has supported development of infrastructures and how this leads to poverty reduction for the surrounding local communities. Similarly, research participants were asked to rate their agreement or disagreement with the research question items based on a five point Likert scale (5 signifying 'Strongly Agree', 4 signifying 'Agree', 3 signifying 'Indifferent', 2 signifying 'Disagree' and 1 signifying 'Strongly Disagree'). The descriptive result is showed on Table 4.5.

Table 4.8: Response to extent to infrastructure development

Code	Category	Min	Max	Mean	Median	Mode	Std Dev.
ID1	Community wildlife conservancy supports the development of community roads.	1	5	4.4	5	5	0.912
ID2	Community wildlife conservancy supports the construction of dams and bore hole within the community	1	5	4.27	4	4	0.741
ID3	Community wildlife conservancy supports power and electricity accessibility within the community	1	5	4.1	4	5	0.975
ID4	Community wildlife conservancy supports the accessibility of telecommunication within the community	1	5	4.17	4	5	0.979

Source: Researcher (2021)

Table 4.5 shows respondents response to question assessing how the community wildlife conservancy has enhance infrastructure development within the community surrounding them. Supportingthe development of community roads revealed a mean 4.4, Mode 5 and Std Dev. 0.912 suggesting strong agreement; supports the construction of dams and bore hole within the community revealed a mean 4.27, Mode 4 and Std Dev. 0.741 suggesting agreement; and supports the accessibility of telecommunication within the community revealed a mean 4.17, Mode 4 and Std Dev. 0.979 suggesting agreement too. This finding implied the community members are in strong agreement that wildlife conservancy have supported improvement of local roads. In addition, they agree that the conservancy have supported construction of dams and boreholes, electricity connectivity and telecommunication too. The management personnel who were interviewed stressed the same. Management emphasised that they allocate annual budget for road maintenance and liaises with relevant authority for maintenance of electricity including those serving the general community.

4.4.4. Extent to which Governance Structure Contribute to Poverty Reduction

The third objective assessed how the governance structure of community wildlife conservancy has supported decisions towards poverty reduction in the surrounding local communities. The participants were asked to rate their opinion or experience with research question items based on a five-point Likert scale (5 signifying ‘Strongly Agree’, 4 signifying ‘Agree’, 3 signifying ‘Indifferent’, 2 signifying ‘Disagree’ and 1 signifying ‘Strongly Disagree’). The descriptive result is presented on Table 4.6.

Table 4.9: Response to governance structure

Code	Category	Min	Max	Mean	Median	Mode	Std Dev.
GS1	leadership style in promotes poverty reduction among the community members	1	5	4.42	5	5	0.717
GS2	Management possesses the right competencies to address poverty reduction within the community.	1	5	4.3	4	5	0.73
GS3	The conservancy strategic objectives are clearly directed towards addressing poverty reduction within the community.	1	5	4.02	4	4	0.908
GS4	The conservancy board of governance incorporate local representatives who champions for community interest.	1	5	4.4	5	5	0.811

Source: Researcher (2021)

From Table 4.6, the result of agreement on how the wildlife conservancy governance structure support the community reveals that: the leadership style had a mean 4.42, Mode 5 and Std Dev. 0.717 suggesting strong agreement; the management competencies in addressing poverty reduction revealed Mean 4.3, Mode 4 and Std Dev. 0.730 suggesting agreement; and the conservancy strategic objectives towards poverty reduction revealed a mean of 4.02, Mode 4 and Std Dev. 0.908 suggesting agreement; and incorporating locals in board of governance to champions for community interest revealed a mean 4.4, Mode 5 and Std Dev. 0.811 suggesting strong agreement. These results suggest that community members are in strong agreement that wildlife conservancy has right management leadership style and encourages participation of locals in board of management. Similarly, respondents agreed with

the management competencies in addressing poverty reduction and the conservancy has clear strategic objective towards the same. Result from interview also affirmed the same.

4.4.5. Extent to which Agreement Framework between the Conservancy and Local Communities Contribute to Poverty Reduction

The fourth objective assessed the agreement structure between the conservancy and local community in address poverty reduction. Equally, participants were asked to rate their perceptions on formulated question items using a five point Likert scale (5 signifying 'Strongly Agree', 4 signifying 'Agree', 3 signifying 'Indifferent', 2 signifying 'Disagree' and 1 signifying 'Strongly Disagree'). The descriptive result is displayed on Table 4.7.

Table 4.10: Response to agreement framework

Code	Category	Min	Max	Mean	Median	Mode	Std Dev.
AF1	The agreement provides for protection for both wildlife and human habitats	1	5	4.51	5	5	0.642
AF2	The agreement provides mechanisms for the resolution of animals-human conflicts.	1	5	4.31	4	5	0.725
AF3	The agreement provides for adequate conservancy fee payable to community members.	1	5	2.86	3	2	0.831
AF4	The agreement provides for community participation in decision making on economic wellbeing.	1	5	3.41	4	3	0.836

Source: Researcher (2021)

From Table 4.7, the responses from respondents to questions assessing agreement framework shows: that agreement provides for protection for both wildlife and human

habitats revealed a mean 4.51, Mode 5 and Std Dev. 0.642 suggesting strong agreement; the agreement provides mechanisms for the resolution of animals-human conflicts revealed Mean 4.31, Mode 4 and Std Dev. 0.726 suggesting agreement; the agreement provides for adequate conservancy fee payable to community members revealed a mean 2.86, Mode 4 and Std Dev. 0.813 suggesting disagreement; and the agreement provides for community participation in decision making on economic wellbeing revealed a mean 3.41, Mode 3 and Std Dev. 0.836 suggesting disagreement or indifference.

These results suggest that community members are in strong agreement that the agreement framework between the wildlife conservancy and communities protects both wildlife and human habitats. In addition, respondents were in agreement that the agreement framework provides for mechanisms for animals-human conflicts resolutions, indifferent with allowance of community to participate on economic wellbeing; and disagreed with the adequacy to fees payable to community members. In contrast to management responses to interview result, management observed that the agreement framework protects the community members and that is address any conflict that may arise between the community and the conservancy amicably.

4.4.6. Poverty Reduction within Communities Surrounding Wildlife Conservancies

The dependent variable of the study was about poverty reduction among communities surrounding the wildlife conservancies. The study identified and assessed four element of community poverty indicators. Participants were asked to rate their agreement or disagreement on research question items using a five-point Likert scale (5 signifying ‘Strongly Agree’, 4 signifying ‘Agree’, 3 signifying ‘Indifferent’, 2 signifying

'Disagree' and 1 signifying 'Strongly Disagree'). The descriptive result is displayed on Table 4.8.

Table 4.11: Response to poverty reduction

Code	Category	Min	Max	Mean	Median	Mode	Std Dev.
PR1	The community income level has increased in the past five years.	1	5	4.49	5	5	0.849
PR2	The community trading activities have increased in the past five years	1	5	4.2	4	4	0.751
PR3	The community education sponsorship has increased in the past five years	1	5	4.34	5	5	0.758
PR4	The community healthcare and living standard has increased in the past five years	1	5	4.45	5	5	0.756

Source: Researcher (2021)

From Table 4.7, respondents response to community income level has increased in the past five years.revealed a mean 4.49, Mode 5 and Std Dev. 0.849 suggesting strong agreement; the community trading activities have increased in the past five years revealed Mean 4.2, Mode 4 and Std Dev. 0.751 denoting agreement; the community education sponsorship has increased in the past five years revealed a mean 4.34, Mode 5 and Std Dev. 0.752 suggesting agreement; and the community healthcare and living standard has increased in the past five years revealed a mean 3.45, Mode 3 and Std Dev. 0.756 suggesting agreement. These results suggest that participants were in strongly agreement that community income have increased due to conservancy created importunities; agreement that trading activities, education, and healthcare and living standards have all increased in the past five years. This finding implied community

wildlife conservancies have improved community members income, trading activities, education sponsorship and healthcare. These finding are in tandem with finding on members of community that do access those opportunities and is also supported by management interview which highlighted that the conservancy have constructed hospitals and clinics in every village; hotels and restaurants have lead to growth of trading centres and they do run education program through the conservancy foundation.

4.5. Correlation Analysis Result

The study conducted Pearson correlation analysis to find out the nature and strength of relationship between the community wildlife conservancy roles and poverty reduction. The result is presented on table 4.9.

Table 4.12: Result of correlation between wildlife conservancy role and poverty reduction

Variable/Construct	Correlation with poverty reduction	
Employment opportunities	Pearson Correlation	.299**
	Sig. (2-tailed)	.000
	N	150
Infrastructure development	Pearson Correlation	.272**
	Sig. (2-tailed)	.001
	N	150
Governance structure	Pearson Correlation	.319**
	Sig. (2-tailed)	.000
	N	150
Agreement framework	Pearson Correlation	.609**
	Sig. (2-tailed)	.000
	N	150

Source: Researcher (2021)

The result from Table 4.9 shows that there exist a weak positive and significant correlation of 0.299 between employment opportunities and poverty reduction; a weak positive and significant correlation of 0.272 amongst infrastructure development and poverty reduction; a moderate positive and significant correlation of 0.319 between governance structure and poverty reduction; and finally, a strong positive and significant correlation of 0.609 amongst agreement framework and poverty reduction. All correlations are significant at 95% significance level. This result indicates that agreement framework has the highest relationship with community poverty reduction followed by governance structure, employment opportunities and infrastructure development.

4.6. Regression Analysis Result

The study did a multiple regression to assess the interdependency amongst the independent variable constructs and the dependent variable. The result of model summary is presented on Table 4.10.

Table 4.13: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.623a	.388	.371	.466	2.039

a. Predictors: (Constant), Agreement framework, Infrastructure development, Employment opportunities, Governance structure

b. Dependent Variable: Poverty eradication

Source: Researcher (2021)

Model summary on Table 4.10 shows a summary statistic of R = 0.623, R-square of 0.300 and adjusted R-square of 0.371. The value of coefficient of determination (R^2)

signifies that variation of dependent variable described by the independent variable construct. The resultant R^2=0.388 value implied that approximately 38.8% of variation in dependent variable can be ascribed to independent variable. Therefore, community wildlife conservancies could account for 38.8% variation in poverty reduction within communities surrounding the conservancies.

The Analysis of variance (ANOVA) to test for the suitability of model for the study result is shown on table 4.11.

Table 4.14: ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	19.996	4	4.999	23.012	.000b
	Residual	31.498	145	.217		
	Total	51.493	149			

a. Dependent Variable: Poverty eradication

b. Predictors: (Constant), Agreement framework, Infrastructure development, Employment opportunities, Governance structure

Source: Researcher (2021)

Analysis of variance result shows the mean square of regression is 4.999 and residual is 0.217. The value of F-statistic is 33.012 with p<0.005. Since the F calculated value (F=23.012) is greater than F-critical at degree of freedom 4,145) 4.324; and the P-value is less than critical value of 0.05, the model was considered fit for the study and one or all of the construct(s) can be used to explain dependent variable.

The result of coefficient values, which explains the partial change attributed by variables is shown on Table 4.12.

Table 4.15: Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	1.113	.411		2.708	.008
	Employment opportunities	.085	.080	.080	1.065	.289
	Infrastructure development	.039	.061	.050	.636	.526
	Governance structure	.057	.082	.055	.703	.483
	Agreement framework	.564	.075	.547	7.518	.000

a. Dependent Variable: Poverty eradication

Source: Researcher (2021)

From Table 4.12, the constant value is 1.113, statistics of standardised coefficient of employment opportunities β=0.08, t=1.065 and p=0.289 which denoted that unit

change in employment opportunities would cause a factor change of 0.08 on poverty reduction; infrastructure development β=0.050, t=0.636 and p=0.526 implying a unit change in infrastructure development would results to 0.050 change in poverty reduction. For governance structure β=0.055, t=0.703 and p=0.483 representing a unit change in governance structure would result to 0.055 factor change on poverty reduction; and finally agreement framework β=0.547, t=7.518 and p<0.0005 signifying a unit factor change would cause 0.547 partial change on poverty reduction.

Only agreement framework change is significance at 95% significance level. These finding hence suggests that agreement framework between the conservancy and local community has significance effect on poverty reduction. In addition, employment opportunities, infrastructure development and governance structure do have insignificance contribution to poverty reduction. The study proposed the below model for assessing influence of community wildlife conservancy on poverty reduction:

$$Y = 1.113 + 0.08X_1 + 0.05X_2 + 0.055X_3 + 0.547X_4$$

Where: β_0 = Constant (coefficient of intercept)

X_1 = Employment opportunity

X_2 = Infrastructure development

X_3 = Governance

X_4 = Agreement framework implementation

4.7. Test of Hypothesis

The study developed both null and alternative hypothesis. The null hypothesis was "Community Wildlife Conservancy has no significant influence on poverty reduction within Amboseli Ecosystem in Kajiado County" while the alternative is "Community

Wildlife Conservancy has significant influence on poverty reduction within Amboseli Ecosystem in Kajiado County". The result of coefficient, t-statistics and significance output from the test analysis are shown on table 4.12.

Table 4.16: Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	1.569	.419		3.744	.000
	Community Wildlife Conservancy	.658	.093	.501	7.047	.000

a. Dependent Variable: Poverty reduction

Source: Researcher (2021)

The standardised beta coefficient of community wildlife conservancy is $\beta=0.501$ ($p<0.0005$). This result reveals that a unit variation in conservancy operation (employment opportunities, infrastructure development, governance structure and agreement framework) would cause a positive and significance factor change of 0.501

on poverty reduction. The t-statistic value t=7.047 is greater than critical t-stats value at 95% level of significance t=1.645. the study therefore failed to accept the null hypothesis as Community Wildlife Conservancy has significant influence on poverty reduction within Amboseli Ecosystem in Kajiado County.

CHAPTER FIVE: DISCUSSION, SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1. Introduction

This chapter offers discussion of the major findings, conclusions made, appropriate commendations and recommendations for further study.

5.2. Discussion of Finding

The purpose of the study was to analyse community wildlife conservancy as a means to poverty reduction within Amboseli Ecosystem in Kajiado County. Four specific objective namely "to assess the extent to which employment opportunities created by community conservancies contribute to poverty reduction, to establish the extent to which infrastructure developed by community conservancies help in poverty reduction, to establish the extent to which governance of community wildlife conservancies influence poverty reduction and to determine the extent to which implementation of agreement frameworks by the conservancies management influence poverty reduction". The study adopted mixed research approach comprising both qualitative and quantitative analysis. The data was captured through both structured questionnaire and interview schedules. Both descriptive and inferential analysis were conducted, and result are discussed as follows.

5.2.1. Influence Employment Opportunities on Poverty Reduction

The first objective assessed the extent to which community wildlife conservancy employment opportunities influence poverty reduction. The descriptive analysis result revealed community wildlife conservancy has created employment opportunities to locals (mean

4.59, Mode 5 and Std Dev. 0.753). These opportunities are in hotels and restaurants staffs (Mean 4.21, Mode 4 and Std Dev. 0.701), tourguides (Mean 4.44, Mode 5 and Std Dev. 0.755) and traditional dancers (Mean 4.27, Mode 4 and Std Dev. 0.753). The correlation analysis reveals a frail positive and significant correlation of 0.299 amongst employment opportunities and poverty reduction suggesting that there is a weak association between employment opportunities and poverty reduction. Partial factors change of employment opportunities is β=0.08 (p=0.289), which imply a unit employment opportunity would cause a positive and insignificance factor change of 0.08 on poverty reduction.

This finding implies that employment opportunities created by community wildlife conservancies contributes to poverty reduction, however the contribution is insignificance. The finding is in agreement with Roe and Elliott (2004) study which reported wildlife-poverty relationships have the capability to bring substantial earning and employment prospects to the underprivileged persons; Songorwa et al, (2000) who found that community wildlife conservancies significantly contribute to poverty reduction with most prevalence being income from fee and lease. In the contrary, the finding was inconsistent with Kiriinya (2011) analysis of factors influencing community conservation of forest that reported community wildlife conservancy had a significant damage of woodland cover and related biodiversity causing grave environmental decline and threatened the production of food.

5.2.2. Influence of Infrastructure Development on Poverty Reduction

The second objective assessed if community wildlife conservancy has supported development of infrastructures and how this leads to poverty reduction for the surrounding local communities. The descriptive results show conservancy have enhance infrastructure development within the community surrounding them by development/improving

community roads (Mean 4.4, Mode 5 and Std Dev. 0.912) supports the construction of dams and bore hole within the community (4.27, Mode 4 and Std Dev. 0.741), supports the accessibility of telecommunication within the community (Mean 4.17, Mode 4 and Std Dev. 0.979). There is a weak positive and insignificant correlation of 0.272 amongst infrastructure development and poverty reduction and a unit change in infrastructure development would results to positive and insignificant 0.050 change in poverty reduction.

These results and finding suggests that infrastructure development have insignificantly contributed to poverty reduction among communities surrounding wildlife conservancy. The finding is corroborated by Glew et al, (2010) result that community conservancy promotes good infrastructure that support trade, hospitality and service industry; Stephen (2010), who reported significant correlation between good road network, telecommunication, healthcare and social-welfare services with the presence of community wildlife conservancies. The study finding also collaborated with Kangwana and Berger (2015) study of Tanzania's Tarangire National Park, which reported that community ecotourism fund supported infrastructural developments in areas with wildlife conservancies; Roe (2015) study that reported community conservancy significantly contributed to infrastructure development in gorillas (Gorilla Berengei) conservancies.

The study finding contribution to infrastructure however was in contrary to Osano et al. (2013) study, which reported the Northern Rangelands Trusts compensation for leased land was not sufficient to provide the households with a decent living, and inadequately supported the local infrastructure.

5.2.3. Influence of Governance Structure Contribute on Poverty Reduction

The third objective assessed the extent to which governance structure of community wildlife conservancy supported decisions addressing poverty reduction within the local communities. Findings revealed that community wildlife conservancy governance structure has right leadership style (Mean 4.42, Mode 5 and Std Dev. 0.717), with right competencies in addressing poverty reduction (Mean 4.3, Mode 4 and Std Dev. 0.730), and right strategic objectives towards poverty reduction (Mean 4.02, Mode 4 and Std Dev. 0.908). Further results show local communities are incorporated in board of governance to champions for community interest (Mean 4.4, Mode 5 and Std Dev. 0.811). the relation between governance structure and poverty reduction is moderate but insignificance (r=0.319) and a unit variation in governance structure would lead to 0.055 factor change on poverty reduction. This finding also suggests that governance structure insignificantly contributes to poverty reduction among communities cohabiting wildlife conservancies.

Although wildlife conservancies must cultivate good governance in order to effectively achieve its objectives, the finding that governance structure insignificantly contributes to poverty reduction is clear evidence of low representation of the indigenous community in the administration of the wildlife conservancies observed by Wells et al (2012) at 78%. In addition, the result supported Brockington and Adams (2008) who affirmed that most wildlife conservancies lack good corporate governance to champion for adequate compensation fund for communities' sacrifice in land use and protection of games. Similarly, the finding is in agreement with Glew *et al.* (2010)

study which emphasised that communal conservancy savannahs had higher output if they embrace the right objective-oriented management governance structure.

The finding is also in agreement with Baskin (2009) study that reported without good governance, community wildlife conservancies face a number of challenges including retaliatory killing of wild game. In the contrary however, the finding contradicted with Manyara and Jones (2007) who reported significance contribution of the native inhabitant in making decisions and operations of conservancies leading to equitable sharing of benefits and sustainability of the conservancies as guaranteed by the Kenya Wildlife Act.

5.2.4. Influence of Agreement Framework on Poverty Reduction

The fourth objective assessed the agreement structure between the conservancy and local community in address poverty reduction. Finding shows that agreement framework provides for protection for both wildlife and human habitats (4.51, Mode 5 and Std Dev. 0.642) and mechanisms for the resolution of animals-human conflicts (Mean 4.31, Mode 4 and Std Dev. 0.726). However, on the contrary, the agreement framework does not provide for adequate conservancy fee payable to community members (Mean 2.86, Mode 4 and Std Dev. 0.813) but weak community participation in decision making on economic wellbeing (Mean 3.41, Mode 3 and Std Dev. 0.836). There exist a positive strong and significance association amongst agreement framework and poverty reduction ($r=0.609$) and a unit change would cause 0.547 partial effect change on poverty reduction.

These finding suggest that agreement framework between the local communities and the wildlife conservancy has significance effect thus contributes to poverty reduction and corroborate with Gibson (2016) who reported agreement framework significantly

influenced revenue-sharing initiatives, human-carnivore coexistence, infrastructure and social amenities support to the community; and Gichohi (2003) who reported community-conservancy agreement enhances indigenous communities feeling that the existence of wild game is of advantage to their livelihood to some extent.

The finding is also supported by Norton-Griffiths (2015) study that revealed revenue-sharing contracts significantly increases wildlife conservancy and game populations in Malawi. Similarly Groom and Harris (2008) supported our finding when they reported revenue-sharing as a component of agreement terms between community and the conservancy significantly promoted human-wildlife cohabitation and occasioned growth of wildlife inhabitants as evidenced by the strong correlation of 0.89; Ulloa and Sierra (2002) study which revealed that community engagement through agreement contract not to kill or harm wild game for commercial sale has significantly led to rise in population of American crocodiles. The finding was in consistent with Martin (2011) who reported that enforcement agreement was significantly unsuccessful as proved by the continual and growing occurrences of poaching.

5.3. Summary of Finding

The study key findings are summarized by specific objective.

5.3.1. Influence of Employment Opportunities on Poverty Reduction

Summary of finding for first objective which pursued to assess the range to which community wildlife conservancy employment prospects influence poverty reduction revealed the community wildlife conservancies have greatly promoted trade activities and enhanced infrastructure development, fairly contributed to employment, education support and healthcare provision to community members, and lowly assisted in the

preservation of cultural heritages among the communities surrounding. Specific employment opportunities are in scout guards, hotel and restaurants, tour guides and traditional dancers to entertain tourists.

5.3.2. Influence of Infrastructure Development on Poverty Reduction

The summary findings of objective two, which assessed the influence of infrastructure development on poverty reduction, are community wildlife conservancy has supported development of infrastructures that support poverty reduction for the surrounding local communities. Specific infrastructural are improvement of local roads, construction of dams and boreholes, electricity connectivity and telecommunication.

5.3.3. Influence of Governance Structure Contribute on Poverty Reduction

Summary of third objective which examined the extent to which governance structure supported decisions which address poverty reduction for the surrounding local communities are that wildlife conservancy has right management leadership style and encourages participation of locals in board of management in addition to clear strategic objective towards community empowerment.

5.3.4. Influence of Agreement Framework on Poverty Reduction

Summary of finding for objective four are: the agreement framework between the wildlife conservancy and communities protects both wildlife and human habitats. The agreement also provides for mechanisms for animals-human conflicts resolutions. In the contrary, the agreement inadequately supports economic wellbeing of community as it allocated low allocation of conservancy proceed to communities.

5.4. Conclusions

The general conclusion is drawn from the finding on hypothesis test. Since the study rejected the null hypothesis, it is concluded that Community Wildlife Conservancy has significant influence on poverty reduction within Amboseli Ecosystem in Kajiado County. Specific objective conclusion is made below.

5.4.1. Conclusion on Influence of Employment Opportunities on Poverty Reduction

The study concludes, from the findings of objective one, that community wildlife conservancy employment opportunities influence poverty reduction. This is achieved through promotion of trade activities and enhancement of infrastructure development to a great extent; and local employment opportunities, education support and healthcare provision to a fair extent. The study also concludes that conservancies have not protected and preserved the cultural heritages among the communities surrounding them. In overall, employment opportunity created by the community wildlife conservancies has insignificant effect on poverty reduction.

5.4.2. Conclusion on Influence of Infrastructure Development on Poverty Reduction

From findings of objective two, the study concludes that community wildlife conservancy has supported development of infrastructures that support poverty reduction in the local communities. Specifically, the conservancies have enhanced improvement of local roads, construction of dams and boreholes, electricity connectivity and telecommunication. In overall, infrastructure development by the community wildlife conservancies has insignificant effect on poverty reduction.

5.4.3. Conclusion on Influence of Governance Structure on Poverty Reduction

From the finding of the third objective, it is concluded that the conservancy governance structure has supported decisions that addresses poverty reduction in the local communities. These decisions are having a right management leadership style and encouraged participation of locals in board of management and having clear strategic objective towards community empowerment. In overall, governance structure of the community wildlife conservancies has insignificant effect on poverty reduction.

5.4.4. Conclusion on Influence of Agreement Framework on Poverty Reduction

From the finding of objective four, the study concludes that agreement framework has provided for mechanisms for animals-human conflicts resolutions. It's also concluded that the agreement framework had not adequately supported economic wellbeing of the community by allocating low conservancy proceed to communities. In overall, agreement framework between the community wildlife conservancies and the locals has significant effect on poverty reduction.

5.5. Recommendations

Based on the hypothesis finding, the study recommends that community wildlife conservancies should be encouraged as a mechanism to poverty reduction. Specific objective recommendation is provided below:

5.5.1. Recommendation on Influence of Employment Opportunities on Poverty Reduction

The study recommends that community wildlife conservancy need to review their employment policy in preference of locals so as to create more opportunities and address poverty. Similarly, the conservancy need to undertake measure aimed at protecting and

preserving the cultural heritages of local communities. This can be integrated with cultural practices towards game protections too.

5.5.2. Recommendations on Influence of Infrastructure Development on Poverty Reduction

Although the conservancies have enhanced infrastructure development, the low extent of agreement with construction of dams and boreholes and electricity and telecommunication connectivity and support to schools and hospitals points that the insignificant influence on poverty reduction. Therefore, the study recommends that conservancy management should enhance their allocation and support towards infrastructure development within the local communities.

5.5.3. Recommendation on Influence of Governance Structure on Poverty Reduction

The study recommends that wildlife conservancies should encourage active participation of the local communities' leaders in their governance structure.

5.5.4. Recommendation on Influence of Agreement Framework on Poverty Reduction

The study recommends that the agreement framework should provide for more allocation of conservancy funds to local communities and active participation of the communities on matters affecting their need particularly those addressing poverty reductions.

5.6. Suggestions for Further Studies

The study achieved its purpose and objective in explaining the influence of wildlife conservancy on poverty reduction among communities surrounding the conservancies.

The study only looked at one conservancy - Satao Elerai in Amboseli National Park. The study suggests similar study to be conducted in other conservancies, especially national parks. Second, the study only assessed four variables namely employment opportunities, infrastructure development, governance structure and agreement framework which accounts for only 38.8% of poverty reduction. The other factors that define 61.2% of community wildlife operations influence on poverty reduction were not addressed. The study therefore recommends further analysis on these other factors.

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APPENDICES

Appendix I: Letter of Introduction / AUTHORITY TO COLLECT DATA

AFRICA NAZARENE
UNIVERSITY

16th October, 2020

RE: TO WHOM IT MAY CONCERN

Meoshi Shamata Sankale (**15J03DMGP019**) is a bonafide student at Africa Nazarene University. He has finished his course work and has defended his thesis proposal entitled: - ***"Community Wildlife Conservancy as a Means to Poverty Reduction Within Amboseli Ecosystem in Kajiado County: A Case of Satao Elerai Conservancy ".***

Any assistance accorded to him to facilitate data collection and finish his thesis is highly welcomed.

Rodney 2. Reed

Prof. Rodney Reed.
DVC, Academic & Student Affairs

Appendix II : Research Questionnaire

RESEARCH QUESTIONNAIRE

Introduction

This research instrument seeks to solicit data/information on community wildlife conservancy as a means to poverty reduction within Amboseli ecosystem. kindly provide as honest response/replies to the posed enquiries. The answers you offer will be stringently confidential, and no person(s) or his/her contribution will be referred in the statement of the study. In addition, your contribution is voluntary, and you are at liberty to willingly leave the exercise. Thank you for your cooperation.

Meoshi, Shamata Sankale (ADM No. 15J03DMGP019)

SECTION A: Demographic information

For each of the following questions, please tick OR fill as appropriate

1. What is your Age bracket?

   Between 18-20 years ☐
   Between 21- 29 years ☐
   Between 30- 49 years ☐
   Above 50 years. ☐

2. Are you male or female?

   Male ☐
   Female ☐

3. What is your highest academic level?

   PhD ☐
   Masters ☐
   Degree ☐
   Diploma/Certificate ☐
   O-Level ☐

Others (Specify) …….

5. How have you benefited from Satao Elerai Wildlife Conservancy?

Employment	☐
Trade	☐
Infrastructure	☐
Healthcare	☐
Education/sponsorships	☐
Cultural support	☐

Other(specify)……

SECTION B: Employment Opportunity (EO)

This section contains questions relating to influence of community wildlife conservancy creation of employment opportunity on poverty reduction. Kindly use the provided scale of 1-5 (5-Strongly agree, 4-Agree, 3-Indifference, 2-Diasagree and 1-Strongly disagree). You are required rate your opinion by selecting the most appropriate option.

Code	Statements	Rating				
		SA (5)	A (4)	I (3)	D (2)	SD (1)
EO 1	Community wildlife conservancy has employed locals as guard scouts.					
EO 2	Community wildlife conservancy has employed locals in the hotels and restaurants.					
EO 3	Community wildlife conservancy has employed locals as tour guides.					
EO4	Community wildlife conservancy has employed locals as traditional dancer.					

SECTION C: Infrastructure Development (ID)

This section contains questions relating to influence of community wildlife conservancy development of infrastructure on poverty reduction. Kindly use the provided scale of 1-5 (5-Strongly agree, 4-Agree, 3-Indifference, 2-Diasagree and 1-Strongly disagree). You are required rate your opinion by selecting the most appropriate option.

Code	Statements	Rating				
		SA (5)	A (4)	I (3)	D (2)	SD (1)
ID1	Community wildlife conservancy supports the development of community roads.					
ID 2	Community wildlife conservancy supports the construction of dams and bore hole within the community.					
ID 3	Community wildlife conservancy supports power and electricity accessibility within the community.					
ID 4	Community wildlife conservancy supports the accessibility of telecommunication within the community.					

SECTION D: Governance Structure (GS)

This section contains questions relating to influence of community wildlife conservancy management governance structure on poverty reduction. Kindly use the provided scale of 1-5 (5-Strongly agree, 4-Agree, 3-Indifference, 2-Diasagree and 1-Strongly disagree). You are required rate your opinion by selecting the most appropriate option.

Code	Statements	Rating				
		SA (5)	A (4)	I (3)	D (2)	SD (1)
GS1	Community wildlife conservancy leadership style promotes poverty reduction among the community members					
GS 2	Management of community wildlife conservancy possess the right competencies to address poverty reduction within the community.					
GS 3	Community wildlife conservancy strategic objectives are clearly directed towards addressing poverty reduction within the community.					
GS 4	Community wildlife conservancy board of governance incorporate local representatives who champions for community interest.					

SECTION E: Agreement Framework (AF)

This section contains questions relating to influence of community wildlife conservancy agreement framework on poverty reduction. Kindly use the provided scale of 1-5 (5-Strongly agree, 4-Agree, 3-Indifference, 2-Diasagree and 1-Strongly disagree). You are required rate your opinion by selecting the most appropriate option.

Code	Statements	Rating				
		SA (5)	A (4)	I (3)	D (2)	SD (1)
AF1	The community-conservancy agreement provides for protection for both wildlife and human habitats.					
AF 2	The community-conservancy agreement provides mechanisms for the resolution of animals-human conflicts.					
AF 3	The community-conservancy agreement provides for adequate conservancy fee payable to community members.					
AF 4	The community-conservancy agreement provides for community participation in decision making that affects their economic wellbeing.					

SECTION F: Poverty Reduction (PR)

This section contains questions relating to community poverty reduction indicators. Kindly use the provided scale of 1-5 (5-Strongly agree, 4-Agree, 3-Indifference, 2-Diasagree and 1-Strongly disagree). You are required rate your opinion by selecting the most appropriate option.

Code	Statements	Rating				
		SA (5)	A (4)	I (3)	D (2)	SD (1)
PR1	The community income level has increased in the past five years.					
PR 2	The community trading activities have increased in the past five years.					
PR 3	The community education sponsorship has increased in the past five years.					
PR 4	The community healthcare and living standard has increased in the past five years.					

Appendix III: Interview Guide

Introduction

This research instrument seeks to solicit data/information on community wildlife conservancy as a means to poverty reduction within Amboseli ecosystem. kindly provide as honest response/replies to the posed enquiries. The answers you offer will be stringently confidential, and noperson(s) or his/her contribution will be referred in the statement of the study. In addition, your contribution is voluntary, and you are at liberty to willingly leave the exercise. Thank you for your cooperation.

Meoshi, Shamata Sankale (ADM No. 15J03DMGP019)

Interviewee Number: ……

1. How did the Satao Elerai Conservancy get started? Which people were involved in the setting up of the conservancy?

2. Were community around involved? And WHO in particular (Give category and not name)?

3. How do people (community in particular) take part in the policymaking of the conservancy?

4. How many people have been employed by the conservancy? And in what capacity? Do you consider this as an adequate in proportion to the opportunities available?

5. Do you think the conservancy has contributed or helped in infrastructure development in the community? Kindly give a few examples in which the community are the primary beneficiaries and not the conservancy alone.

6. How did the boundaries of the conservancy get formed? Do people recognize and know these boundaries?

7. Who are the partners with conservancy? Do you consider community as a major stakeholder in the management of the conservancy?

8. Does the conservancy have a benefits distribution plan? What proportion (give a percentage) of benefit do accrue to the communities? Do you consider this as adequate and fair distribution?

9. Are you a conservancy member and do you receive benefits? What are the benefits?

10. What is it like living right next to Satao Elerai Conservancy?

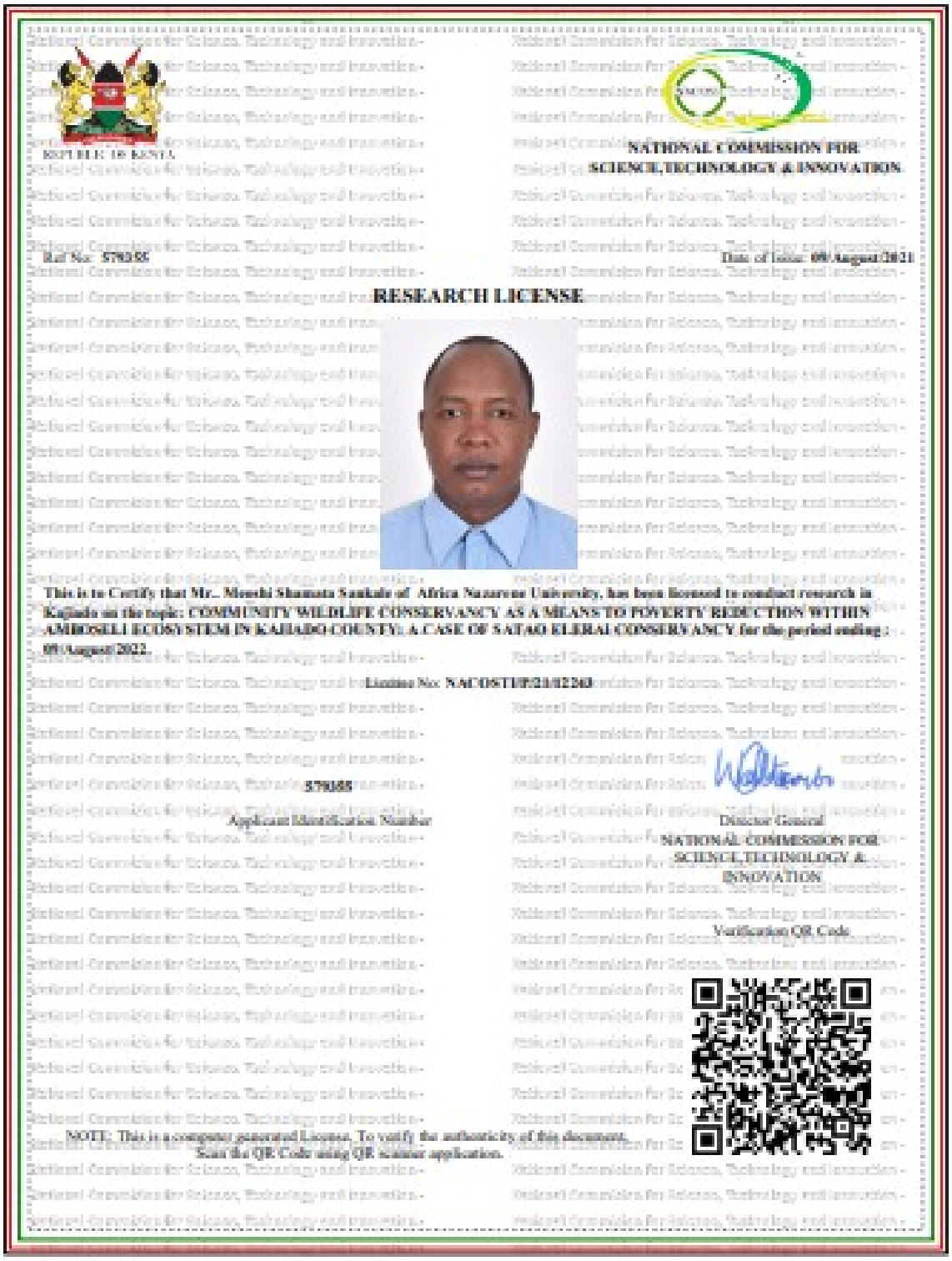
11. What do community people do in Satao Elerai Conservancy?

Appendix III: Research Budget

Item description	Unit/ unit cost	Total cost (Ksh.)
Printing services		
Proposal	40 pages@ sh. 20 (5 copies)	4,000
Questionnaire	50 pages @ sh. 10 (5 copies)	2500
Binding of proposal	70 pages @ sh. 50 (5 copies)	3500
Final project binding	@ sh. 500 (5 copies)	5000
Flash Disk	2 @ sh. 700	1,400
Internet services	Sh. 1/minute	3,200
Stationary		
Writing pads	10@ Sh. 300	3000
Pens	5 @ sh. 20	100
Pencils	3 @ sh. 30	90
Photocopying services		
Questionnaires	5 pages, 32 copies @ sh.10	1,600
SPSS data analysis	Sh. 25000	25000
Publication		20,000
Contingencies	10% of Total cost	5830
TOTAL		**74,138**

Appendix IV: Map of Satao Elerai Wildlife Conservancy

Appendix V: NACOSTI LICENCE



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