

**THE ROLE OF COMMUNITY-BASED CONSERVATION ON POVERTY
REDUCTION IN WESTGATE COMMUNITY CONSERVANCY IN SAMBURU
COUNTY**

BY

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DECLARATION

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

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DEDICATION

I dedicate this work to my family for the sacrifice they made for me to complete this project. I would like in particular to mention my wife Grace, Son Kelvin and my beautiful daughters namely Benda, Yvonne, Jedidah and Anabel. Their love, care, concern, support, encouragement and enthusiasm inspired me to complete this study.

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LIST OF ABBREVIATION AND ACRONYMS

CBNRM: Community Based Natural Resources management

CBT: Community based Tourism

DNA: Deoxyribonucleic acid

GZT: Grey's Zebra Trust

ICEP: Institut Zur Cooperation Bei Entwicklungs-Projekten

IUCN: International Union for Conservation of Nature

LWC: Lewa Wildlife Conservancy.

NGO: Non Governmental Organisation

NRT: Northern Rangelands Trust

ABSTRACT

Protected areas have always been seen as a kind of alien elements, another heritage from colonial times, mostly more beneficial to tourists from rich countries than the country's own poor population especially the people living around the parks. The problem with many of the past efforts to conserve nature has been that nature conservation has taken place without paying any attention to the interests and needs of local people. Local communities seldom had any advantages from tourism. The income primarily went to the tourism industry and to the central government. In most cases only a limited part of the revenue was reinvested in the parks and an even smaller part was allocated to development of local communities' adjacent to the protected areas. The purpose of this study was to determine the role of community-based conservation on poverty reduction in Westgate Community Conservancy in Samburu County. This study was a descriptive survey. Descriptive survey was preferred for it is used to obtain information concerning the current status of a phenomenon. The population for this study was the seven management official of the Westgate conservancy and the 987 community members living in areas surrounding Westgate conservancy. The research used a census approach to pick all the seven management staff in Westgate conservancy. As for the community living in areas immediately surrounding Westgate conservancy, the study used systematic sampling to select the manyattas and then select the head of households within the manyattas using purposeful sampling so as to come up with 10% of the target population. The researcher therefore selected 98 community members from areas surrounding Westgate conservancy. The sample size of this study was 105 respondents. A questionnaire was used to gather information from community members from areas surrounding Westgate conservancy. In addition, the study also used interview guides to collect data from the seven management officials in Westgate conservancy. Both descriptive statistics and inferential statistics were employed in the analysis. The study found that improved security influences poverty reduction at Westgate Community Conservancy in Samburu County most followed by enterprise development, institutional governance, improved range management and wildlife conservation was influencing poverty reduction least. The study recommends that the government and non-governmental organisations should focus on improving infrastructure of the area and also enhance the accessibility of financial resources to the residents for them to come up with businesses that are related to tourism for instance hotels and restaurants. This study also recommends that a lot of attention and resources be accorded to the security docket. This will ensure that tourism will thrive and with it the economy of this region.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Natural resources (forest, wildlife, water among others) are inherent and appropriate targets from which Communities can derive livelihood improvement and income generation activities that can have a positive long-term impact on poverty with a significant contribution to the millennium development goals.

Although poverty is often measured and defined in absolute terms (people falling below a specified level of income, commonly US\$2 per day), it is now widely accepted that causes of poverty are multidimensional. The World Bank (2001) refers to three dimensions of poverty: lack of assets, powerlessness and vulnerability. Thus, poverty can be thought of as a state of reduced or limited livelihood opportunities. In other words, addressing multidimensional characteristics of poverty may help achieving livelihoods security. In view of the complimentary characteristics of poverty and livelihoods, the terms are used interchangeably in this article. Conservation in this context is used in its broadest sense, including management of natural resources sustainably as well as their protection and restoration, rather than in a narrow sense of maintaining an original state or preservation. The links between poverty and biodiversity conservation is interpreted by scholars and practitioners in many different ways. For example, Roe and Elliott (2004) state that dependence of rural poor on forest resources is a significant underlying threat to conservation; Adams et al. (2004) view poverty reduction and biodiversity conservation as simultaneous developmental goals.

Agrawal and Redford (2006) on the other hand term this link as ‘complex’, mainly because of the inherent dilemma in designing programs that may beset the achievement of twin objectives.

Global biodiversity is undergoing rapid and substantial loss, with species and habitats in decline at an estimated 0.5% to 1% per year (Balmford & Cowling, 2006). In an attempt to curtail this loss, the international community spends an estimated \$6-10 billion per year on the maintenance of biological resources (James et al., 2001), the majority is used to maintain

a global protected area network. Despite some localized successes, it is clear that the threats to biodiversity remain largely undiminished (Kiss, 2004). In the search for a solution, the international community has sought a 'silver-bullet' which could simultaneously alleviate human poverty and curb biodiversity loss, based on an assumed relationship between the two issues.

The need to promote poverty alleviation efforts has become an increasingly common theme in the conservation sector. At the 7th Conference of Parties to the Convention on Biological Diversity held in 2002, participants agreed 'to achieve by 2010 a significant reduction in the current rate of biodiversity loss as a contribution to poverty alleviation and to the benefit of all life on Earth' (Convention on Biological Diversity, 2002). In 2003, the World Parks Congress went further, recommending that protected areas should 'make a full contribution to sustainable development' (IUCN, 2004) and 'at least no harm' to people in their vicinity (IUCN, 2004). However, community conservation aims to provide an incentive for the sustainable management of biodiversity resources, by linking their maintenance with poverty alleviation or livelihoods benefits for the people living in their vicinity. This has typically been achieved through wildlife-linked enterprises, such as tourism or sustainable harvesting of natural resources (Hughes & Flintan, 2001) to benefit people and nature. While it has formed a component of protected area outreach in some cases, community conservation is more commonly associated with land outside of the formal protected area network (Wells et al., 1992).

Community conservation emerged from the recognition that strictly protected areas often failed to consider the interests of local communities, reducing their willingness to support or abide by conservation regulations (Kiss, 2004). Indeed, in some areas, strict protection and lack of community involvement resulted in active hostility between conservation authorities and local communities (Robbins et al., 2006). The need to engage communities in conservation was heightened by the realisation that biodiversity resources are both subject to, and depend upon processes and policies, which act at national and global scale (Ancrenaz et al., 2007). Consequently, an approach which can reconcile the needs of biodiversity conservation and economic development was seen a vital tool particularly in developing nations.

In the 1980s, community-based conservation, integrated conservation and development along with community-based natural resource management, rose to prominence as tools through

which win-win outcomes for conservation and development were thought to be achievable (Hughes & Flintan, 2001). Across sub-Saharan Africa, these strategies with their emphasis on participation and empowerment supplemented traditional 'fines-and-fences' conservation in the areas outside of the formal protected area network. However, the anticipated win-win outcome proved elusive. In practice, results tended to be ambiguous, complex and locally-specific, even in the flagship 'CAMPFIRE' and 'ADMADE' programmes in southern Africa which were specifically designed to generate community benefit (Songorwa et al., 2000).

Reporting on an integrated conservation and development project in Cameroon, Abbot et al, (2001) concluded that the inclusion of rural development initiatives promoting alternative livelihoods can improve the sustainability of conservation in an area by altering community attitudes and behaviours.

However, even this relationship was not straightforward. While community participation in the livelihoods programme created a 'pre-disposition' among community members towards biodiversity conservation, it did not predict an individual's attitude or behaviour in relation to the conservation project (Abbot et al., 2001).

Elsewhere, Franks (2008) examined the socioeconomic complexities of conservation outcomes in developing nations. While the protected areas analysed had both costs and benefits, these accrue to different stakeholders and operate at different spatial scales (Franks, 2008). Benefits were typically found to occur at a global scale, through the provision of ecosystem services while costs to the global community were limited (Franks, 2008). At the local scale, direct financial benefit was relatively small and opportunity costs resulting from livelihoods restrictions higher (Franks, 2008). Within the local community at Bwindi Impenetrable National Park, Uganda, these costs were borne largely by the poorest in society and exceeded US\$200 per household per year (Franks, 2008). The impact on wealthy community members was less negative, with costs less than US\$150 per household per year. In parallel, the latter experienced greater benefit than their poorer community members (Franks, 2008). Similarly, Upton et al. (2008) reported an analysis of protected area network size and spatial configuration, which found conservation-poverty linkages to be 'dynamic and locally specific'. The authors concluded that while a win-win solution to biodiversity loss and poverty may be possible, it is likely to be rarer than situations where a trade-off between these goals is required (Upton et al., 2008). These findings were echoed in a global review by Coad et al. (2008) which highlighted the inequity in the spatial and demographic distribution

of the costs and benefits of conservation. Consequently, it would appear that the relationship between poverty and conservation varies not only from place to place but person to person.

On a broader scale, the poverty-conservation linkage has been conceptualised as a relationship between the number, size and location of protected areas and the incidence of poverty, typically at the national and global scale. In an analysis covering 119 countries, de Sherbinin (2008) found little evidence for a relationship either positive or negative between poverty and protected areas. In Thailand and Costa Rica, communities living close to protected areas are poorer than most in their respective nations but the impact of the protected areas in both countries was to alleviate poverty (Adam et al., 2004).

1.1.1 Westgate Community Conservancy

West Gate Community Conservancy borders Samburu National Reserve to its south, Kalama Community Wildlife Conservancy to its east, Namunyak Wildlife Conservation Trust to the north, and Meibae Community Conservancy to the northwest. Its southern and western boundary is the Ewaso Ngiro River. The conservancy was initiated by the owners of Ngutuk Ongiron Group Ranch in 2004 and is managed by a group of representatives elected among its registered members at its Annual General Meetings.

The goal of West Gate Community Conservancy is to “ improve the livelihoods of its residents by providing a platform for sustainable protection and utilization of resources within NOGR for income generation through natural resource related enterprises that shall address health, water, education, livestock, and infrastructure and wealth creation for present and future generations.” As the development arm of the Ngutuk Ongiron Group Ranch, the conservancy also ensures the equitable distribution of benefits. The conservancy also acts as an entry point through which other programmes are extended to community members by government agencies, NGOs and Private sector. The conservancy aims at diversifying income generation and improved range management as a means of reducing poverty levels.

West Gate Community Conservancy is home to Giraffe, elephant, Gerenuk, Lion, Grant’s gazelle, Somali Ostrich, impala, and other wildlife. More significantly, it is one of the most important habitats for the endangered Grevy’s Zebra. Herds of up to 400 Grevy’s zebra can be seen on the Naibelibeli plains while the population moves between the community conservancies in the north and the Samburu and Buffalo Springs National Reserves to the south. The conservancy has made the conservation of this species one of their top priorities

and closely monitors the species as well as their habitat to ensure that the conservancy retains its ecological importance for this species. West Gate community scouts provide critical support to the conservation of Grevy's zebra and elephants through anti-poaching and wildlife monitoring activities within and surrounding the conservation area. They also assist with community awareness, as well as assisting wildlife in emergencies.

The Grevy's Zebra Trust (GZT) was established to conserve Grevy's zebra in collaboration with local communities. It recognises and supports the critical role played by pastoral people whose livelihoods are inextricably linked to the same fragile ecosystem. The Grevy's zebra has undergone a catastrophic decline in the past 30 years and now only occurs in northern Kenya and southern Ethiopia. The Ethiopian population is less than 100 and still declining, whereas in Kenya the population is believed to be 2,500 and stable, largely as a result of the establishment of the NRT community conservancies and grass roots awareness campaigns. GZT works closely with NRT and the community conservancies in collaborative conservations efforts, including Grevy's zebra research and monitoring, habitat restoration, improving resource access, disease mitigation, and awareness creation. Management actions that are taken to help Grevy's zebra also help other endangered, threatened and migratory species including African elephants, African wild dogs and cheetahs.

The conservancy currently houses a very successful luxury tented camp - Sasaab - on the banks of the Ewaso Nyiro River. The 18-bed camp opened in 2006 and is managed by the external operator Tamimi Company Limited. Opened in 2006, Sasaab has been a vitally important part of West Gate's conservation and community development efforts. The tourism operation provides many employment opportunities for members of the local community and the conservancy receives income from the operation through conservation and bed night fees charged to guests. From this revenue, 60 percent goes towards funding community development projects of choice (such as school bursaries or water projects) while 40 percent goes towards financing annual operating costs of the conservancy. Sasaab supports local women's groups through purchasing crafts for sale in their gift shop and also provides income to local communities by taking guests on cultural manyatta visits.

Women's groups in West Gate are working to produce unique crafts and gift items for guests staying at Sasaab and for sale in regional and international markets facilitated through NRT Trading. Women have gained access to formal and informal training sessions on business and quality product development, accounting skills, understanding markets and loan repayment

schedules. Through the support of ICEP to NRT Trading, a micro-credit programme gave women access to micro-loans to support business development, product diversification and purchasing raw materials.

1.2 Statement of the problem

The most viable approach in the conservation of nature is to involve the local people. The problem with many of the past efforts to conserve nature has been that nature conservation has taken place without paying any attention to the interests and needs of local people. The communities living around the parks were ignored by the authorities and with regard to conservation approaches this picture has not changed drastically since independence, especially when it comes to access, ownership and a controlled utilization of the national natural resources inside protected areas. Parks have always been seen as a kind of alien elements, another heritage from colonial times, mostly more beneficial to tourists from rich countries than the country's own poor population especially the people living around the parks. Local communities seldom had any advantages from safari hunting and safari tourism. The income primarily went to the tourism industry and to the central park authorities of the country. In most cases only a limited part of the revenue was reinvested in the park and an even smaller part was allocated to development of local communities.

There seem to be a growing recognition that it is necessary to involve the people in the management of the natural resources including national parks and other protected areas. The local people should however not only be involved but should also to a far higher level than previously benefit from the protected areas and the revenue generated by the associated enterprises.

Several research studies have been conducted in Kenya in relation to conservancies. Stephen (2010) conducted a study on the influence of sources and composition of finance on successful implementation of community development projects. The study found out that sources of finance have an influence on successful project implementation. Kiriinya (2011) conducted a study on factors influencing community conservation of forest: The case of upper Imenti forest-Imenti North District. His study revealed that Kenya's loss of forest cover and associated biodiversity has led to serious environmental deterioration, the consequence of which is the marked decrease in food production and rural poverty found across these previously rich and abundant lands. Further, Lekalkuli (2011) did a study on factors influencing the emergence of Community Wildlife Conservancies. His study found that

socio-economic factors influence the emergence of community wildlife conservancies. Further, the study revealed that climate change influence the emergence of community wildlife conservancies as the area is mostly dry with short rain intervals. Droughts lead to migration of wildlife to other areas in search of food and water which have led to rise in conflict with human being due to competition for the scarce resources like food and water. While other authors indicate that conservancies have got a positive effect on poverty alleviation, Kiriinya (2011) conservancies found that they have got a negative effect on poverty alleviation.

This research study was motivated to determine the role of community-based conservation on poverty reduction by focusing on Westgate Community Conservancy in Samburu County.

1.3 Purpose of the Study

The purpose of this study will be to determine the role of community-based conservation on poverty reduction in Westgate Community Conservancy in Samburu County

1.4 Objectives of the Study

The objectives of this study were;

- i. To determine how wildlife conservation contribute to poverty reduction in Westgate Community Conservancy in Samburu County
- ii. To assess how improved range management can help in poverty reduction in Westgate Community Conservancy in Samburu County
- iii. To establish how enterprise development can contribute to poverty reduction in Westgate Community Conservancy in Samburu County
- iv. To find out how improved security contribute to poverty reduction in Westgate Community Conservancy in Samburu County
- v. To ascertain how institutional governance can contribute to poverty reduction in Westgate Community Conservancy in Samburu County

1.5 Research Questions

This research study sought to answer the following questions;

- i. How does wildlife conservation contribute to poverty reduction in Westgate Community Conservancy in Samburu County?

- ii. To what extent does improved range management help in poverty reduction in Westgate Community Conservancy in Samburu County?
- iii. What is the role of enterprise development on poverty reduction in Westgate Community Conservancy in Samburu County?
- iv. How does improved security contribute to poverty reduction in Westgate Community Conservancy in Samburu County?
- v. What is the contribution of institutional governance to poverty reduction in Westgate Community Conservancy in Samburu County?

1.6 Significance of the Study

This research study would be of great importance to the Samburu community living in Westgate conservancy and donors as it would outline the role of community-based conservation on poverty. The study would also provide information on how wildlife conservation, improved range management, enterprise development, improved security, and institutional governance can lead to poverty reduction.

To the government of Kenya and policymakers, the study would provide information that can be used to formulate policies on community-based conservancies in Kenya.

To researchers and academicians the study would provide a base upon which secondary material on the role of community conservancies on poverty reduction would be drawn. The study would also provide good literature on community-based conservancies. This study would also set a base upon which more studies on role of community-based conservancies can be done.

1.7 Assumptions of the Study

The researcher makes the assumption that the respondents who include Samburu community living in Westgate conservancy and management officials (Conservancy Manager, Holistic Management Officer, chief security officer, Conservancy Accountant, Board Secretary, community development officer, Board Chairman) would be cooperative enough to give the required information of the study. This was despite the fact that most of them usually have tight schedules that leaves no time for the respondents to get time to answer to the research instruments. But with better arrangements and a timely preparation would make this assumption possible.

The researcher also assumed that external factors like strikes would not arise as this would affect the process of data collection and hence the completion of the project. The researcher assumed that the cited respondents are conversant with the role of community-based conservation on poverty reduction.

It was assumed that the respondents would answer the questions honestly and would not view this study as if they are being investigated. It is also assumed that resources allocated for this study in terms of money and time would be adequate.

1.8 Delimitations of the study

This research study focused on the role of community-based conservation on poverty reduction. The study was limited to five factors; wildlife conservation, improved range management, enterprise development, improved security, and institutional governance. The study was also limited to Westgate Community Conservancy in Samburu County.

1.9 Limitations

There are expected challenges during data collection where some target respondents may fail to give the required information. The researcher however worked at winning the confidence of those involved in this research by giving them the reasons for the research and assuring them of confidentiality.

1.10 Definition of terms

Community Conservancy: An autonomous institution that represents a constituent community over a defined geographic area for the purposes of wildlife conservation, range management and natural resource based business development. The community conservancy aims to initiate enterprise development, improve security and institutional governance.

Wildlife conservation: Regulation of wild animals and plants in such a way as to provide for their continuance.

Community: a social group of any size whose members reside in a specific locality, share government, and often have a common cultural and historical heritage.

Politics: The art or science of government or governing, especially the governing of a political entity, such as a nation, and the administration and control of its internal and external affairs.

Climate change: Any change in global temperatures and precipitation over time due to natural variability or to human

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

Wildlife conservation is the preservation, protection, or restoration of wildlife and their environment, especially in relation to endangered and vulnerable species. All living non-domesticated animals, even if bred, hatched or born in captivity, are considered wild animals. Wildlife represents all the non-cultivated and non-domesticated animals living in their natural habitats. Our world has many unique and rare animals, birds and reptiles (King and Brian, 2007). However the pressure of growing population in different parts of the world has led to the increasing need of using land for human habitations and agriculture. This has led to the reduced habitat of many wild animals.

2.2 Wildlife conservancies

A study of cattle ranching vs. “wildlife ranching” in Zimbabwe found that wildlife ranching was more profitable, but depended on diverse populations and large land areas. Wildlife ranching is the promotion of wild populations that offer some economic value. The conservancies in Namibia allow the local people significant discretion in how they allocate the land to cattle ranching, farming, or protecting wildlife with a view toward economic and environmental sustainability. Because there is growing interest in biodiversity and ecotourism, the conservancies often encourage wildlife ranching or similar activities. Instead of largely unsustainable and economically tenuous agricultural activities, the conservancies harvest income for the local population from the tourists and trophy hunters (Haule, Johnsen and Maganga, 2002).

The same study found that low capital investment needs compared to cattle ranching introduced significantly less risk to the conservancies. In addition to lower start-up and maintenance costs, the profitability per unit of biomass was also higher, especially on larger land areas where resident herds of wild animals remained for long periods of time. This profitability came from the improved value of meat but most significantly from the interest that tourism and hunting have in wildlife.

A study done in neighboring South Africa found that younger community members thought most highly of their conservancies, primarily because of the increase in employment opportunities and the improved economic situation of the communities. Others, particularly cattle ranchers, viewed the conservancies with dissatisfaction as they tended to reduce range grazing opportunities in favor of reserved or in some cases restored land for wildlife. King (2007) also found that the economic expectations of the particular conservancy were not met. However, King (2007) interpreted this as a result of unrealistic expectations and a concern for international ideals that did not consider the community out of which the conservancy was formed.

The value of communal wildlife conservancies toward biodiversity maintenance cannot be ignored. Wildlife conservancies promote biodiversity in numerous ways. By protecting the primary animals of economic value, the animals and plants that support or depend on the primary animals are also protected, and the majority of the land remains in a natural state. A 2002 paper found that a game reserve in Tanzania (in a comparable situation to the conservancies in Namibia) was unsustainable for several reasons. The central government of Tanzania has set aside a large portion of land for the conservation and controlled hunting of game in the Kilombero river valley. The findings in the paper indicate that in areas of the reserve that were patrolled by national wildlife agents, game was relatively plentiful. However, the majority of the reserve was poorly patrolled, leaving game animals over-harvested and significantly stressed by poaching and agricultural activity. Poaching mostly occurred to supply meat to supplement local people's diets, but a significant number of rhinoceros and elephant were taken by trophy hunters. The problem is compounded if the rules were enforced since that would prevent the local's access to quality protein from their hunting activities. Because the patrol of large areas by government wildlife agents is not possible due mostly to monetary issues, the poaching continues and the population of wildlife declines (Bandyopadhyay et al., 2004).

The CAMPFIRE program or Communal Areas Management Program for Indigenous Resources in Zimbabwe is an example of a successful transfer of power from the well-intentioned, but poorly effective and overly standardized national government to the local people. CAMPFIRE allowed the establishment of community control over game and land resources, and also the collection and retention of fees for wildlife hunting and sightseeing. The funds collected stay primarily in the community and are used for local development

projects, including schools, clinics and rural infrastructure. This improvement in quality of life has made wildlife protection more valuable as a resource to the communities. There is significant evidence that the rate of poaching has decreased so much that hunting quotas could be, and have been increased thereby increasing local revenue. The local communities manage the wildlife and wild land of their conservancies as resources that, if sustained, have the potential to provide continuous sources of both meat and income (Ashley and Caroline, 2000).

A study found that CAMPFIRE was successful in its primary aims, notably rural development and sustainable wildlife management. To illustrate this success, it was noted that many locals viewed the benefits of the CAMPFIRE conservancy so highly that they would tolerate some level of crop destruction by wildlife, rather than kill a valuable resource. The CAMPFIRE program and the study findings should apply well to Namibia and its communal conservancies as they are almost the same in both idea and implementation. However, due to recent political events in Zimbabwe, the continued success of CAMPFIRE within Zimbabwe may be questionable (Ibid)

The importance of some measure of control over their lives and surroundings to individuals and communities is readily apparent. The control given to the community members of the conservancies was found to motivate them to administer and sustain the land area more effectively than the national government had been able to. A study done to understand the lack of success in several other types of wildlife and habitat sustainability programs, showed that the two biggest failings were: a poor or generic understanding of the affected communities, and a lack of community involvement within each specific program (Connel, 2004). Trophy hunters and eco tourists can go elsewhere, but the local population is usually not able to move. Not understanding the need to include the local stakeholders and their access to benefits or concern over burdens prompted the locals to largely ignore various aspects of previous sustainability plans. Many of these failings can be attributed to pressure from foreign governments and nongovernmental organizations whose primary interests may have generally ignored local populations.

In addition to a better understanding of the stakeholders' needs, the decrease in cost of some GIS software and other easy-to-use systems of information organization dramatically increased the effectiveness of community control of conservancies. Both national and provincial governments can obtain a relatively affordable amount of equipment and trained

staff to construct databases with information collected from the locals and from other sources. They can then combine this information into readably usable maps for locals to use in their administration of each conservancy (Latham and Niesenbaum, 2001). Maps produced by this method highlight information of local concern and allow leaders to build consensus and to resolve community resource use issues, as well as giving everyone involved a "big-picture" view of their conservancy. Bringing even modest amounts of technology to underdeveloped portions of the country allowed significant progress toward the management and sustainability of communities and their resources.

2.3 Theoretical review

2.3.1 Participatory theory

Participation theory promotes citizens' involvement in decision-making as a means of encouraging community members to consider issues of common interest. There are many potential benefits. Foremost these include the ability to build local skills, interests and capacities that are on-going. Others include the ability to improve outcomes by extending the range of values and inputs into the decision-making process, and, the increased probability of acceptance and successful implementation when decisions are seen by those involved as responsible and appropriate. Involvement, it is argued, enhances co-operation, as co-operation is strongly influenced by the possibility of individuals having to deal with each other repeatedly. In addition, identification with a group, association, or cause, elevates common interests, even if individuals' motives for membership are self-serving.

Participation encourages communities or groups to work together to achieve goals that are broader than those that can be achieved by individuals. Where citizens are jointly involved with elected representatives and managers this necessitates agreements for sharing responsibility and decision-making authority. Increasingly the concept of partnership is promoted, where organizations, agencies and citizens work together as equals (despite differences in power and resources) to achieve agreed objectives.

2.3.2 Social learning theory

Recently considerable emphasis has been placed in the more communicative and strategic aspects of Social learning Theory is based on the idea that people, collectively, are capable of forming a learning system that can cope with uncertainty and challenges. Making use of

stakeholders different knowledge, interests and experiences, it has been applied through a vast array of participatory methods, with the intention of fostering collective sustainable change (Muro and Jeffery 2008). This orientation makes it particularly relevant in natural resource management, as it addresses complex social processes such as the role of participation in its governance process. As explained by Muro and Jeffery (2009), “social Learning is understood as a process of communication and collective learning potentially establishing and changing relationships thus contributing to transforming existing structures of governance”.

Social learning is relevant as major challenges of participation community based management relates to power inequalities. Social learning actively seeks heterogeneity in participation and its design needs to be aware of power dynamics of in group learning. Such learning is aided by the role of the facilitator as a “process expert” rather than by the formal process of disseminating knowledge which typically relies on a much more hierarchical role of those that “know” and those that do not.

The most important goals of social learning are about learning from and with each other, promoting the diversity of in group learning, creating trust and social cohesion and building in participants a sense of ownership over learning processes and results.

Social learning can be described in several ways, covering spontaneous if not inevitable social phenomenon between interacting people to a strategic tool in assisting processes of transformation. The concept of social learning in relation to natural resource management is gaining more popularity amongst theory and action research. This orientation make social learning particularly relevant as it addresses complex social processes such as the role of participation in the governance process. The different modes of social learning lay across a wide spectrum allowing also be translated into different modes of learning that a given collective is prepared to acknowledge and implement in the pursuit of change.

2.3.3 Liberal Democratic theory

Community-based conservation originates from Jeffersonian ideals of civil society to encourage citizens’ voluntarily participation in democratic processes to advance the public good (Lurie and Hibbard, 2008). The major motivation for a bottom-up community-based conservation approach is local sustainable development. Local communities are closer to the

environmental problems and the connections to the solutions; thus, it is appropriate for residents to play important roles in local environmental conservation. Community residents and key stakeholders can be more responsive to local environmental preferences and have more motivation to ensure local environmental quality. Local communities generally have strong commitment to their own places, and the commitment provides bottom-up motivation and necessary local knowledge to effectively manage the environment. Recent research has highlighted the critical linkage between environmental planning and sustainable development in the local context. Since the 1990s, local jurisdictions have been aware of sustainability and some local governments have been motivated to work towards sustainable development. For example, many local governments in California have started to strategically incorporate critical environmental elements as a part of local sustainable initiatives into their local long-term comprehensive land use plans. The motivation and movement towards sustainability provides a great opportunity to integrate environmental conservation as a part of local jurisdictions' sustainable development campaigns. Taking action in environmental conservation at the local jurisdictional level can result in a sustainable development outcome.

2.4 Wildlife conservation

Community based Tourism (CBT) though facing many challenges has an enormous potential of bringing economic growth to the local people and make the tourism sector more sustainable courtesy the donor community that has continued to offer grants through the government and through local and international NGOs. Community Based Tourism has been promoted since the 1970s as a way of raising living standards for the rural poor. Environmentalists view it as an important strategy for enhancing biodiversity conservation as it advocates responsible tourism and generates income for the local poor and marginalized who though living in close proximity with wildlife receive the blunt of wildlife. CBT is a product of the Community Based Natural Resources management (CBNRM), a system that attempts at allocating all or a proportion of ownership, rights and control over natural resources to a section or group of local communities. It is therefore aimed at enhancing the livelihoods of poor people in remote and marginal areas, through empowerment, improved governance, and increased income impacts through tourism and natural resource management initiatives.

Tourism remains the primary source of revenue for community conservancies under NRT. The existing tourism enterprises serve to stimulate a range of other emerging enterprise

activities in the region, creating and sustaining incentives for support by local people to conservancies and wildlife conservation activities. At the start of the project 6 conservancies were engaged in tourism – Il Ngwesi, Lekurruki, Kalama, West Gate, Namunyak and Melako. In 2007 and 2008 these produced approximately 185,000 and 172,000 dollars, respectively, in net revenue for these conservancies and a further 135,000 dollars each year in waged income through employment. Despite the global recession, 2009 has produced a very significant increase (approx. 20-30%) in revenues over 2008 (final figures are still being collected and will be reported in the Year 3 Final Report). Tourism is now established in additional locations in Namunyak and in Sera Conservancy with significant efforts being made to expand tourism operations across NRT. In the year 2011 revenues for the conservancies under NRT including Westgate were as follows; Tourism Revenues Kshs. 35M (\$400,000), Bead Craft sales Kshs. 7m (\$80,000) and Livestock revenues Kshs 35m (\$400,000).

Mwaluganje Elephant Sanctuary is a community-based initiative that was launched to reduce the increasing human elephant conflicts in the area and provide protection for the now endangered elephant. More than 200 families have voluntarily contributed land to the reserve, agreeing not to farm this important elephant habitat. Today they live nearby and manage the sanctuary, earning more from tourism than from farming. Valuable revenue from ecotourism and gate entrance fees has also enabled the community to build school classrooms and enjoy a steady water supply and better roads. One of the major activities occurring within the sanctuary is the production of elephant dung paper that is sold to visitors. Proceeds from the sale of the paper are either distributed to the community as dividends in return for leasing their land, or go towards the improvement and maintenance of the Sanctuary.

There is a newly developed economy in the community conservancies and availability of prime wildlife habitat. In order to fast track wildlife numbers and to restore species that historically occurred in these areas, NRT is slowly reintroducing species such as giraffes and impala with plans at an advanced stage to reintroduce black rhinos.

Kiriinya (2011) conducted a study on factors influencing community conservation of forest: The case of upper Imenti forest-Imenti North District. His study revealed that Kenya's loss of forest cover and associated biodiversity has led to serious environmental deterioration, the consequence of which is the marked decrease in food production and rural poverty found across these previously rich and abundant lands. He also revealed that natural Resource

Management is increasingly the subject of social and political power struggles between groups claiming an interest in specific objectives.

Further, Lekakuli (2011) did a study on factors influencing the emergence of Community Wildlife Conservancies. His study found that socio-economic factors influence the emergence of community wildlife conservancies. Further, the study revealed that climate change influence the emergence of community wildlife conservancies as the area is mostly dry with short rain intervals. Droughts lead to migration of wildlife to other areas in search of food and water which have led to rise in conflict with human being due to competition for the scarce resources like food and water.

2.5 Improved range management

Northern Kenya boasts some of the most striking landscapes and critical wildlife habitats in East Africa. It is also home to a number of pastoralist communities who are dependent on a livestock-based livelihood system. Poverty rates in the region are among the highest in the world around 40 percent in a year with adequate rainfall, and more than double that during extended droughts. That's why healthy grasslands are crucial for both northern Kenya's people and its spectacular wildlife.

The 2007-2009 droughts killed 60-70 percent of the livestock in the region and drove food prices up 130 percent, spurring migration of various ethnic groups looking for access to grazing lands and leading to increased poaching of wildlife and conflicts over limited natural resources such as water and forage. Increasingly, northern Kenya faces the effects of climate change, which threatens to deepen the region's vulnerability to poverty by reducing the productivity of these essential grasslands. Rainfall in East Africa has already declined by 15 percent since the 1980s, and climate change is expected to bring less predictable rains and more frequent droughts to the region.

Faced with these threats, local communities and other stakeholders involved in biodiversity conservation began organizing community-based conservancies in 1995, and in 2004 six conservancies joined together to form the Northern Rangeland Trust (NRT). Today, NRT has grown to 19 conservancies encompassing 1.2 million hectares (more than 3 million acres) of grasslands. Conservancies integrate livestock management with Wildlife conservation with a view of benefiting from both. Conservancy's does land use planning with wildlife, livestock and people needs in mind, buffer zone functions as a "community grass bank". When drought

hits, the community opens up their buffer zones so livestock can graze grass that the community “banked” when rains were favorable. NRT helps conservancies manage community grasslands and optimize their value for both wildlife and domestic stock in good times and bad times. This helps in building community resilience.

A study conducted by Glew, Hudson & Osborne (2010) revealed that community conservancy grasslands had greater productivity and more moisture in the soil compared to similar grasslands not under conservancy management. Vegetation cover in the community conservancies increased significantly in both dry and rainy seasons in 2000 and 2007. There were grassland benefits not only within the wildlife zones, but also in the buffer and grazing zones where grass growth increased because of better management. The study also found that people who were part of the conservancies had increased access to a variety of resources compared with those outside the conservancies. For instance, compared to control sites, conservancy residents had an average of 15 percent more young people attending secondary school because of scholarships provided by the conservancies, 40 percent better access to affordable transportation because of conservancy vehicles giving rides to villagers, and 35 percent better access to timber resources because of education efforts to protect large trees.

Glew, Hudson & Osborne (2010) also found that during the 2007-2009 droughts, some people in the conservancy communities were not forced to sell their livestock at very low prices because there was still grass in the grass banks to feed their animals. The grass reserves helped these communities to recover faster from the drought and gave them greater resilience against climate change impacts.

Aburuki (2011) did a study on investigation of factors contributing to environmental degradation in Tigania North Division. The study found that in the marginal lands where herding and wildlife roams the government should encourage group ranches to help minimize the demise of wildlife and above all create employment for the locals.

2.6 Enterprise development

Conservancies can help communities to improve their social, economic and environmental conditions by benefiting from the natural resources in their area. Often people have only experienced the damage caused by wildlife animals who come on to their land, but through conservancies and giving people the rights over the natural resource on their land they can start benefit from them (Cash et al. 2006)

If people can benefit directly from the natural resources in their region they are more likely to manage them more carefully because they have a stake in them. The government has also realized that jobs can be created out of wildlife in the rural areas and this can help towards the development and towards the economy of these areas. Conservancies decide how to spend income from wildlife and tourism. They can pay dividends to individual households or use income for community development projects. Conservancies give communities new economic opportunities which can help them in times of drought. All conservancy members have equitable shares and the benefits provide incentives for people to manage the wildlife for the future. Conservancies can help lead to improved numbers and variety of wildlife through certain species being reintroduced into areas where they had previously dwindled or been eliminated. They can also help to protect habitats for the local species and conserve biodiversity.

Northern Kenya is characterized by low rainfall, communal systems and hosts pastoralist communities whose main source of livelihood is livestock. Despite the inherent viability of livestock keeping, there are growing challenges requiring mechanisms to cope with changes to enable sustainable livelihoods (Karwitha et al., 2009). Erratic weather patterns, livestock multi-functionality and constraints to marketing such as insecurity, lack of bargaining power and poor infrastructure, all suggest that livestock sales are motivated by factors other than price and should be noted when designing marketing programs. The market chain inefficiencies hold pastoralist to ransom, forcing them to dispose livestock at less than optimum prices in local markets through brokers. Government has intervened occasionally in destocking programs to reduce losses during drought. Considering pastoralists are in imperfect markets, investment in collective action and networking could bring higher returns, compared to individual transactions.

In their study Karwitha et al., (2009) indicate NRT's Livestock Programme is developing the integrated management of livestock and wildlife, with a focus on best practices to manage the range. Through the program, conservancy members have successfully been linked to the Ol Pejeta Conservancy, and major player in the Kenya beef industry. The tripartite partnership is fuelled by trust attributed to working with institutions with a common interest and goal. The approach adds value to livestock by taking the market closer to communities thus reducing the inefficiencies and uncertainties experienced in the marketing process.

NRT was established in 2004 as an initiative to improve the livelihood of the conservancy communities through wildlife conservation and natural resource based enterprise. Communities have traditional skills that allow them to develop jewellery, household items and clothing, however, most of these goods are produced for individual use and very few of these products are sold through markets, either locally or internationally. Communities in these areas lack the knowledge on how to market products, are hindered by long distances to market outlets and an over-supply of traditional tourist items.

NRT trading engages Conservancies such as Westgate with primarily women's groups to promote enterprise development through facilitating business-training sessions, access to microcredit loans, technical assistance in product development, and access to local and international markets. The goal is to provide women's groups with the opportunity to gain a competitive edge in the craft market and offer sustainable income-generating activities to communities in NRT conservancies (NRT, 2007).

The objectives on NRT trading is to enhance traditional skills through training in new methods and techniques, to identify and use raw materials that have the least environmental impact, combining them with traditional skills to produce a range of innovative gift items. NRT trading also aims at creating successful product marketing and packaging in line with contemporary market needs; diversify the range of products made by the communities and increase market access and branding of NRT trading products. NRT trading also provides an alternative and sustainable source of income for communities in line with NRTs mission to promote conservation and community development (NRT, 2007).

Stephen (2010) conducted a study on the influence of sources and composition of finance on successful implementation of community development projects. The study found out that sources of finance have an influence on successful project implementation. This is mainly because different donors continue to monitor or appoint lead organizations that have the expertise and experience to implement the development projects. Participation by the communities is critical in achieving project success. Further, the study revealed that development projects have created dependency syndrome on the communities.

2.7 Improved security

Conservancies have diverse departments, among them is the security that plays a great role to ensure that illegal activities are done away with, such includes: Poaching, road banditry,

cattle rustling and attack on tourists. . The team of scouts is headed by the Conservancy Warden who delegates the duties to the Corporals and sergeants who provide leadership to a well trained team of Community scouts.

In a historically volatile region where ethnic conflict was a regular occurrence, the establishment of the conservancies has resulted in an improved security for both people and wildlife. A radio-network linking NRTs community conservancies, government law enforcement agencies, and other private conservancies has improved communication enabling community security scouts to effectively respond to incidents such as theft of livestock and wildlife poaching. This improved security has created a more enabling environment for tourism, conservation and business development.

Since the Conservancy was started the insecurity incidences such as poaching, cattle rustling, highway banditry and attack on tourists has greatly reduced due to the efforts of the Conservancy scouts and the VHF radio network that improved communication.

Gamba (2011) conducted a study on factors influencing Conflict resolution among Aridlands pastoralists of Kenya. His study found that the frequency of the conflicts witnessed is dictated by season's and happenings in the surroundings as well as well on how the dynamics keep on changing with several factors playing a central role in conflicts. The study also found that the endemic poverty and low levels of education in the border areas are major conflict drivers. Further, the study revealed that natural resources affect conflict resolution in Isiolo County. Major natural resources that are conflict triggers include water for livestock, pasture and grazing land, climate change and land ownership due to the land tenure system.

2.8 Institutional governance

The Northern Rangelands Trust (NRT) is a community-based conservation initiative in the arid and semiarid rangelands of northern Kenya which aims to '...To develop resilient community conservancies that transform lives, secure peace and conserve natural resources' (NRT Strategic plan 2012-2016). Established in 2004, it has facilitated the formation of community-led institutions which link rangeland management and conservation of large mammal species with poverty alleviation for their constituent communities. Since 2004, the network of conservancies assisted by NRT has expanded rapidly and by 2009 had brought more than 8,300 km² of land outside of Kenya's formal protected area system under conservation management.

NRT has its origins in a partnership between local communities and Lewa Wildlife Conservancy (LWC). Initially an outreach programme from LWC which helped neighbouring communities establish Il Ng'wesi and Namunyak Wildlife Conservation Trust, the conservancies were developed as tool to mitigate human-wildlife conflict and enhance landscape-scale conservation in the region. With the rapid expansion of the conservancy network, it became apparent that an independent organisation was required to provide effective technical assistance and oversight to the increasing number of participating communities.

While individual conservancies differ, the NRT model operates on the basis of a strong Conservancy management structure which helps to provide a good entry point for the Government, NGO's and Private sector to engage with the local community.

Westgate Conservancy is managed by an elected board on a three year rotation. The board is elected by the community during annual general meeting. The board meet quarterly to look into Conservancy and community plans. There are also various sub committees such as Finance Committee, Tourism Committee and Grazing management Committee which perform various tasks.

Westgate Board provides the general direction and vision. The finance committee provides financial management assisted by the Conservancy Accountant ensuring that donor funds and community income is properly accounted for and audited. Tourism Committee ensures that the partnership with private sector operators is sustained through joint planning. The grazing management committee oversee planned grazing and improved range management.

In Westgate all the above committees meet quarterly to discuss and share work plans closely supported by the Conservancy staff all hired by the Board. Westgate planning involves development of 5 year strategic plan from where they extract their annual, quarterly and monthly work plans with reviews at intervals. All plans and reports are presented to the community annually and bi-annually.

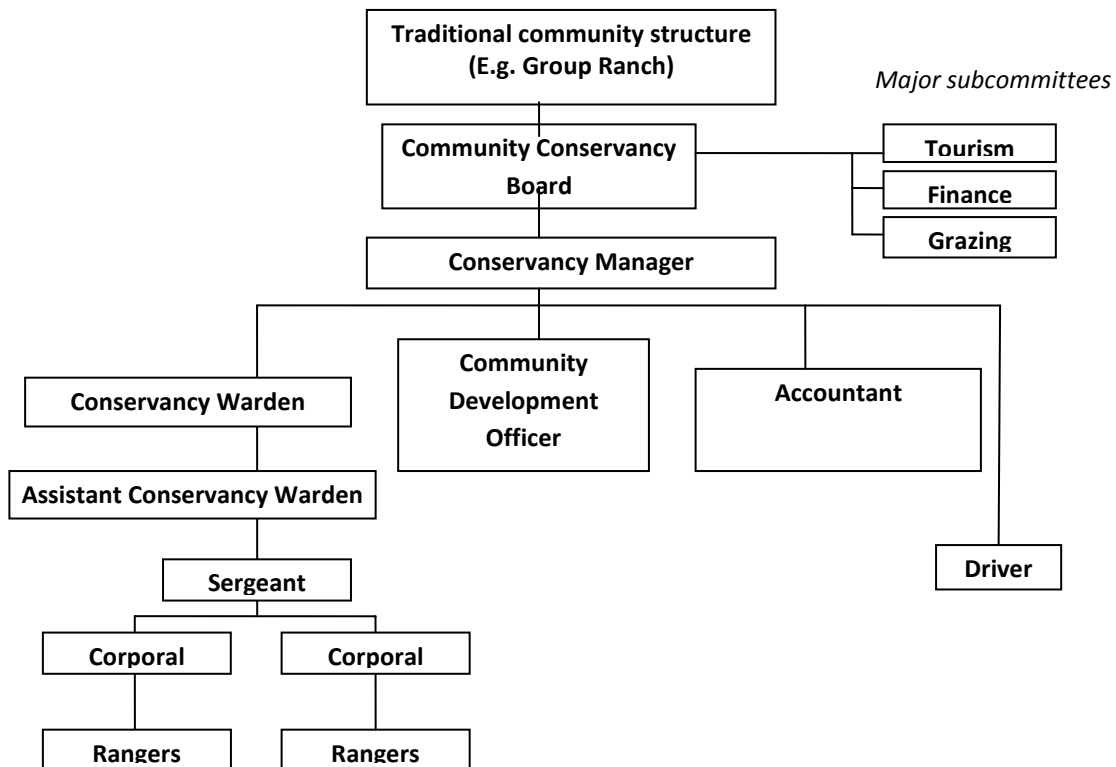


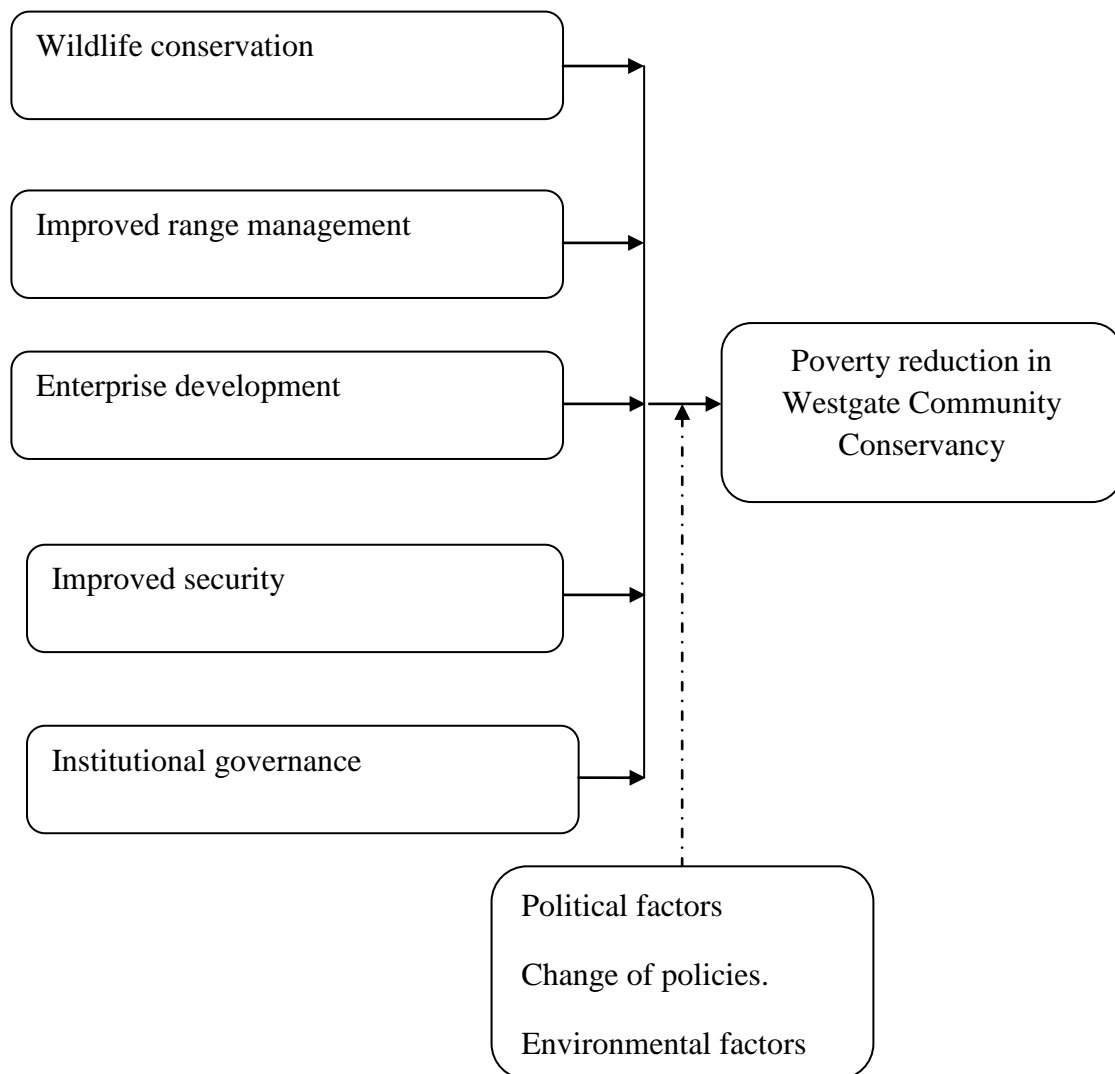
Figure 1: Westgate Management structure

Westgate Conservancy covers 35,000ha of community land. Through the Conservancy initiative the community was able to undertake Land Use planning for the entire group ranch. The community has set aside dry season grazing areas, wet season grazing areas, core areas to serve as wildlife refuge areas, buffer areas where holistic management is being undertaken, tourism designated areas and settlement areas where schools and health facilities are developed. Each of the zones is being managed by the community through grazing management committee. Community by-laws are in place for each of the zones to help enforce compliance.

Westgate's good institutional governance help in ensuring equitable distribution of benefits to all members, strengthen community planning aspects, ensures a coordinated approach throughout the group ranch, and helps build community resilience, help in identifying and prioritizing community needs and helps in creating wealth for its members.

2.9 Conceptual Framework

This research study sought to determine the role of community-based conservation on poverty. The independent variables in this study will be wildlife conservation, improved range management, enterprise development, improved security, and institutional governance can lead to poverty reduction. The study will therefore seek to determine the relationship between the independent variables and the dependent variable which will be poverty reduction in Westgate Community Conservancy.



Independent variables

Intervening variables

Dependent variables

Figure 2: Conceptual framework

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter sets out various stages and phases that were followed in completing the study. It involves a blueprint for the collection, measurement and analysis of data. Specifically the following subsections were included; research design, target population, description of research instruments, sampling design, data collection instruments, data collection procedures and finally data analysis.

3.2 Research Design

Research design refers to the way the study is designed, that is, the method used to carry out a research. It is important to highlight the two main methods when investigating and collecting quantitative and qualitative data. A quantitative approach is strongly linked to deductive testing of theories through hypotheses, while a qualitative approach to research generally is concerned with inductive testing. The main focus of this study was quantitative. However some qualitative approaches were used in order to gain a better understanding and possibly enable a better and more insightful interpretation of the results from the quantitative study.

This study was a descriptive survey. Descriptive survey was preferred for it is used to obtain information concerning the current status of a phenomena and purposes of these methods is to describe “what exists” with respect to situational variables i.e. it looks at relationship between and among variables (Mugenda and Mugenda 2003).

3.3 Target Population

Mugenda and Mugenda (2003) describe population as, the entire group of individuals or items under consideration in any field of inquiry and have a common attribute. The population for this study was the management of the Westgate conservancy and the community living in areas surrounding Westgate conservancy. The conservancy has seven management officials (Conservancy Manager, Holistic Management Officer, chief security officer, Conservancy Accountant, Board Secretary, community development officer, Board Chairman). There were 987 people living in areas immediately surrounding Westgate conservancy.

3.4 Sample size

A sample size is a set of entities drawn from a population with the aim of estimating characteristics of the population (Cramer and Howitt, 2004). The research used a census approach to pick all the seven management staff in Westgate conservancy. As for the community living in areas immediately surrounding Westgate conservancy, the study used systematic sampling to select the manyattas and then select the head of households within the manyattas using purposeful sampling so as to come up with 10% of the target population. The researcher therefore selected 98 community members from areas surrounding Westgate conservancy. The sample size of this study was therefore 105 respondents.

3.5 Research Instruments

A largely pre-coded quantitative questionnaire was used to gather information from community members from areas surrounding Westgate conservancy. Mugenda and Mugenda (2003) observed that, the pre-requisite to questionnaire design is definition of the problem and the specific study objectives. The study used both closed ended or open ended questions. As regards to the former, the questions only allow specific types of responses (such as Yes or No) while with respect to the open ended type, the respondents may state responses as they wish. The study also used ordinal scale to measure the extent of respondents' agreement. The researcher observed that questionnaires are very economical in terms of time, energy and finances. Similarly, it yields, quantitative data which is easy to collect and analyze. The questionnaires method was preferred as it is very economical in terms of time and cost as compared to other methods.

In addition, the study also used interview guides to collect data from the seven management officials in Westgate conservancy. The interview guides had open-ended questions. The use of an open-interview strategy enabled better exposure of the interviewees' personal perspectives, their deeper thoughts, emotions and ambitions (Paton, 1990). This less structured approach allowed the interviews to be much more like conversations than formal events with predetermined response categories, permitting the respondents' views to unfold, rather than the predisposition of the researcher (Marshall and Rossman, 1997). The interview guides were administered on a face to face basis.

Table 3. 1: Operational definition of variables

Objectives	Independent Variables	Indicator	Measurement scale	Data Analysis
To determine how wildlife conservation contribute to poverty reduction in Westgate Community Conservancy in Samburu County	Wildlife conservation	a) Donor funding b) Tourism c) Access to financial resources d) Improved infrastructure	Nominal/ interval	Descriptive Means Percentages Regression
To assess how improved range management can help in poverty reduction in Westgate Community Conservancy in Samburu County	Range management	a) Grazing management/Planned grazing b) Range land rehabilitation/reseeding of degraded areas c) planting grass to help reduce drought impact d) Holistic management	Ordinal/ interval	Descriptive Means Percentages Regression
To establish how enterprise development can contribute to poverty reduction in Westgate Community Conservancy in Samburu County	Enterprise development	a) Employment b) Social capital/ Social relations c) Lodge/Women enterprises/Livestock marketing	Ordinal/interval	Descriptive Means Percentages Regression

To find out how improved security contribute to poverty reduction in Westgate Community Conservancy in Samburu County	Improved security	<ul style="list-style-type: none"> a) Conflict resolution b) Reducing cattle rustling/loss of life c) Reduced Wildlife Security/Cattle rustling/Highway banditry 	Ordinal/ Nominal	<ul style="list-style-type: none"> Descriptive Means Percentages Regression
To ascertain how institutional governance can contribute to poverty reduction in Westgate Community Conservancy in Samburu County	Institutional governance	<ul style="list-style-type: none"> a) Committees such as Board/Finance Committee/Grazing Committee/Tourism Committee/Managers/Staff b) Audits c) benefit sharing d) Reputable Community led Institution/community development e) Training/capacity building f) access to markets g) development of innovative gift items/ Traditional crafts 	Ordinal/ Nominal	<ul style="list-style-type: none"> Descriptive Means Percentages Regression
Dependent variable	Poverty reduction	<ul style="list-style-type: none"> Household income Social development 	Ordinal/ Nominal	<ul style="list-style-type: none"> Descriptive Means Percentages Regression

3.6 Data Collection Procedures

Questionnaires having both open and closed questions were distributed at random. For the closed questions, the respondents had to provide 'yes' or 'no' answers whereas open ended questions, the respondents were free to express their opinion. A maximum of three days period was given to the respondents to answer the questions before collecting them.

3.7 Validity

Validity as noted by Robinson (2002) is the degree to which result obtained from the analysis of the data actually represents the phenomenon under study. Validity was ensured by having objective questions included in the questionnaire and interview guide. This was achieved by pre-testing the instrument to be used to identify and change any ambiguous, awkward, or offensive questions and technique as emphasized by Cooper and Schindler (2003). Experts were requested to comment on the representativeness and suitability of questions and give suggestions of corrections to be made to the structure of the research tools. This helped to improve the content validity of the data that was collected. Content validity was obtained by asking for the opinion of the supervisor, lecturers and other professional on whether the questionnaire was adequate.

3.8 Reliability

Reliability on the other hand refers to a measure of the degree to which research instruments yield consistent results (Mugenda & Mugenda, 2003). In this study, reliability was ensured by pre-testing the questionnaire and interview guide with a selected sample from community members living in areas surrounding Westgate conservancy. In order to test the reliability of the instruments, internal consistency techniques were applied using Cronbach's Alpha. The alpha value ranges between 0 and 1 with reliability increasing with the increase in value. Coefficient of 0.6-0.7 is a commonly accepted rule of thumb that indicates acceptable reliability and 0.8 or higher indicates good reliability. The study established that the tools were reliable as they had a Cronbach's Alpha value of above 0.7.

3.8 Data Analysis

The research was both quantitative and qualitative in nature. This implies that both descriptive statistics and content analysis were employed. Once the data was collected it was checked for completeness ready for analysis. The data from the field was first coded

according to the themes researched on the study. Analysis was done with aid of the statistical package for social sciences (SPSS) package version 17. Descriptive statistics generated such as percentages, mean scores and proportions were presented in tables and figures. Qualitative data from open questions in the interview guides was analysed using conceptual content analysis and presented in prose.

The study also used regression analysis to establish the relationship between the dependent and independent variables. The regression equation was: $Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \varepsilon$. Where; Y= poverty reduction; X₁= Wildlife conservation; X₂- Improved range management; X₃= Enterprise development; X₄= Improved security; X₅= Institutional governance and ε = Error term

CHAPTER FOUR

DATA ANALYSIS, INTERPRETATION AND PRESENTATION

4.1 Introduction

This chapter presented the study analysis of the findings and their interpretations. This study aimed at to determining the role of community-based conservation on poverty reduction in Westgate Community Conservancy in Samburu County. The study further sought to examine how wildlife conservation, improved range management, enterprise development, improved security and institutional governance contributes poverty reduction in Westgate Community Conservancy in Samburu County. The researcher made use of frequency tables, percentages, mean and standard deviation to present data.

Response rate

This research study had a sample size of 105 respondents out of which 87 responses were obtained. This represents an 82.85% response rate. According to Babbie (2002) any response of 50% and above is adequate for analysis thus 82.85% is even better.

4.1 General Information

In their general information, the respondents indicated their gender, age bracket, highest education level and the duration of time that the respondents had lived in the conservancy.

Gender of the respondents

The table above shows gender of the respondents in this study. The results are shown in table 4.1.

Table 4. 1: Gender of the respondents

	Frequency	Percent
Female	32	36.8
Male	55	63.2
Total	87	100.0

From the findings, 63.2% of the respondents reported that they were male while 36.8% reported that they were female. This clearly shows that majority of the respondents in this study were male.

Age bracket of the respondents

The researcher requested the respondents to indicate their age bracket. The results are presented in table 4.2.

Table 4. 2: Age bracket

	Frequency	Percent
20-30 years	54	62.1
31-40 years	16	18.4
41-50 years	6	6.9
51 years and above	11	12.6
Total	87	100.0

Table 4.2 above shows the age brackets of the respondents. From the results, 62.1% of the respondents indicated that they were aged between 20 and 30 years, 18.4% were aged between 31 to 40 years, 12.6% were aged 51 years and above while 6.9% were aged between 41 and 50 years. These findings clearly show that majority of the respondents were aged between 20 and 30 years.

Education level of the respondents

The study sought to determine the level of education of the respondents. The results are shown in table 4.3.

Table 4. 3: Education level

	Frequency	Percent
No formal education	18	20.7
primary level	52	59.8
secondary level	4	4.6
College	10	11.5

University	3	3.4
Total	87	100.0

The table above shows the education levels of the respondents. From the findings, 59.8% of the respondents indicated that they had primary education as their highest level of education, 20.7% had no formal education, 11.5% had college education, 4.6% had secondary education while 3.4% had university education as their highest level of education. Most of the respondents in this study had primary education as their highest level of education.

Duration in the conservancy

The researcher also requested the respondents to indicate the duration of time they had spent in the conservancy. The results are shown in table 4.4.

Table 4. 4: Duration in the conservancy

	Frequency	Percent
less than 2 years	8	9.2
2 to 4 years	18	20.7
4 to 6 years	7	8.0
above 6 years	54	62.1
Total	87	100.0

Table 4.4 shows the duration of time that the respondents had lived in the conservancy. From the findings, 62.1% of the respondents indicated that they had lived in the conservancy for above 6 years, 20.7% indicated that they had been in the conservancy for 2 to 4 years, 9.2% had lived for less than 2 years and 8% had lived for 4 to 6 years. From these findings we can deduce that majority of the respondents had lived in the conservancy for a period of above 6 years.

4.2 Wildlife Conservation

The study sought to determine how wildlife conservation contributes to poverty reduction in Westgate Community Conservancy in Samburu County.

4.2.1 Wildlife conservation contribution to poverty reduction

The researcher requested the respondents to indicate the extent to which wildlife conservation contribute to poverty reduction. The results are shown in table 4.5.

Table 4.5: Wildlife conservation and poverty reduction

	Frequency	Percent
to a very great extent	38	43.7
to a great extent	35	40.2
to a moderate extent	7	8.0
to a low extent	4	4.6
to no extent at all	3	3.4
Total	87	100.0

From the findings, 43.7% of the respondents indicated that wildlife conservation contributes to poverty reduction to a very great extent, 40.2% indicated to a great extent, 8% indicated to a moderate extent, 4.6% indicated to a low extent while 3.4 % indicated to no extent at all. From these findings we can deduce that wildlife conservation contributes to poverty reduction to a very great extent.

4.2.2 Facets of wildlife conservation and poverty reduction

The researcher requested the respondents to indicate the extent to which the stated facets of wildlife conservation contribute to poverty reduction. The results are shown in table 4.6.

Table 4.6: Facets of wildlife conservation contribution to poverty reduction

	Mean	Std. Deviation
donor funding	3.9540	.83399
Tourism	3.1839	1.37696
access to financial resources	4.0345	.81338
improved infrastructure	4.1954	.72879

From the findings, the respondents agreed with a mean of 4.1945 that improved infrastructure contribute to poverty reduction to a great extent. Further, the respondents agreed with a mean of 4.0345 that access to financial resources contributes to poverty reduction to a great extent. In addition, the respondents agreed with a mean of 3.9540 that donor funding contributes to poverty reduction to a great extent. Lastly, the respondents agreed with a mean of 3.1839 that tourism contributes to poverty reduction to a great extent.

4.3 Improved Range Management

The study sought to assess how improved range management can help in poverty reduction in Westgate Community Conservancy in Samburu County.

4.3.1 Improved range management and poverty reduction

The researcher also requested the respondents to indicate the extent to which improved range management helps in poverty reduction. The results are shown in table 4.7.

Table 4. 7: Improved range management

	Frequency	Percent
to a very great extent	38	43.7
to a great extent	24	27.6
to a moderate extent	19	21.8
to a low extent	6	6.9
Total	87	100.0

From the findings, the 43.7% of the respondents indicated that improved range management helps in poverty reduction to a very great extent, 27.6% indicated to a great extent, 21.8% indicated to a moderate extent while 6.9% indicated to a low extent. These findings clearly show that improved range management helps in poverty reduction to a very great extent.

4.3.2 Facets of improved range management

Table 4.8 shows the extent to which the facets of improved range management contribute to poverty reduction.

Table 4. 8: Facets of improved range management

	Mean	Std. Deviation
grazing management/planned grazing	3.8161	1.27159
range land rehabilitation/reseeding of degraded areas	3.6782	.97043
planting grass to help reduce drought impact	4.0230	1.23869
holistic management	3.7931	1.03585
removing of invasive plant species	3.2529	1.48025

From the results, the respondents agreed with a mean of 4.0230 that planting grass to help reduce drought impact contributes to poverty reduction to a great extent. The respondents also agreed with a mean of 3.8161 that grazing management/planned grazing contributes to poverty reduction to a great extent. In addition, the respondents agreed with a mean of 3.7931 that holistic management contributes to poverty reduction to a great extent. Further, the respondents agreed with a mean of 3.6782 that range land rehabilitation/reseeding of degraded areas contributes to poverty reduction to a great extent. Finally, the respondents agreed with a mean of 3.2529 that the removal of invasive plant species contributes to poverty reduction to a great extent.

4.4 Enterprise Development

The study also sought to establish how enterprise development can contribute to poverty reduction in Westgate Community Conservancy in Samburu County

4.4.1 Enterprise development and poverty reduction

Table 4.9 shows the extent to which enterprise development contributes to poverty reduction.

Table 4. 9: Enterprise development

	Frequency	Percent
to a very great extent	23	26.4
to a great extent	23	26.4
to a moderate extent	34	39.1
to a low extent	4	4.6
to no extent at all	3	3.4
Total	87	100.0

From the findings, 39.1% of the respondents indicated that enterprise development contributes to poverty reduction to a moderate extent, 26.4% indicated to a very great extent and to a great extent, 4.6% indicated to a low extent while 3.4% indicated to no extent at all. This shows that enterprise development contributes to poverty reduction to a moderate extent.

4.4.2 Household income

The researcher requested the respondents to indicate whether their household income had increased. The results are shown in table 4.10.

Table 4. 10: Household income

	Frequency	Percent
Yes	64	73.6
No	23	26.4
Total	87	100.0

From the findings, 73.6% of the respondents reported that their house income had increased while 26.4% reported that it had not increased. From these findings we can deduce that majority of the respondents' household income had increased.

4.4.3 Household income and enterprise development

The researcher requested the respondents to indicate the extent to which the household income increased as a result of enterprise development. The results are shown in table 4.11.

Table 4. 11: Extent of household income increase.

	Frequency	Percent
to a very great extent	26	29.9
to a great extent	20	23.0
to a moderate extent	36	41.4
to a low extent	2	2.3
to no extent at all	3	3.4
Total	87	100.0

From the findings, 41.4% of respondents reported that their household income increased as a result of enterprise development to a moderate extent, 29.9% reported to a very great extent, 23% reported to a great extent, 3.4% reported to no extent at all while 2.3% reported to a low extent. This shows that the respondents' household income increased as a result of enterprise development to a moderate extent.

4.4.4 Facets of enterprise development

The researcher requested the respondents to indicate the extent to which they agreed that the stated facets of enterprise development influence poverty reduction. The results are shown in table 4.12.

Table 4. 12: Facets of enterprise development

	Mean	Std. Deviation
employment	4.0805	1.19318
social capital/social relations	3.5632	1.07510
lodge/women enterprises/livestock marketing	3.6897	1.47309
cultural visits/traditional dance	3.5977	.94573

From the findings, the respondents agreed with a mean of 4.0805 that employment influences poverty reduction to a great extent. Further, the respondents agreed with a mean of 3.6897 that lodge/women enterprises/livestock marketing also influences poverty reduction. In addition, the respondents agreed with a mean of 3.5977 that cultural visits/traditional dance influences poverty reduction to a great extent. Lastly, the respondents agreed with a mean of 3.5632 that social capital/social relations also influence poverty reduction to a great extent.

4.5 Improved Security

The study also sought to establish how improved security contribute to poverty reduction in Westgate Community Conservancy in Samburu County

4.5.1 Improved security and poverty reduction

Table 4.13 shows the extent to which improved security contributes to poverty reduction.

Table 4. 13: Improved security

	Frequency	Percent
to a very great extent	44	50.6
to a great extent	20	23.0
to a moderate extent	10	11.5
to a low extent	7	8.0
to no extent at all	6	6.9
Total	87	100.0

According to the findings, 50.6% of the respondents indicated that improved security contributes to poverty reduction a very great extent, 23% indicated to a great extent, 11.5% indicated to a moderate extent, 8% indicated to a low extent while 6.9% indicated to no extent at all. This shows that improved security contributes to poverty reduction to a very great extent.

4.5.2 Facets of improved security

The researcher requested the respondents to indicate the extent to which the facets of improved security contribute to poverty reduction. The results are shown in table 4.14.

Table 4. 14: Facets of improved security

	Mean	Std. Deviation
conflict resolution	4.1494	1.18644
reducing cattle rustling/loss of life	3.8966	1.23923
reduced wildlife security/highway banditry/tourist attacks	4.1839	1.02898

From the findings, the respondents agreed with a mean of 4.1839 that reduced wildlife security/highway banditry/tourist attacks contribute to poverty reduction to a great extent. The respondents also agreed with a mean of 4.1494 that conflict resolution contributes to poverty reduction to a great extent. Further, the respondents agreed with a mean of 3.8966 that reducing cattle rustling/loss of life contributes to poverty reduction to a great extent.

4.6 Institutional Governance

The study also sought to ascertain how institutional governance can contribute to poverty reduction in Westgate Community Conservancy in Samburu County.

4.6.1 Institutional governance and poverty reduction

Table 4.15 shows the extent to which institutional governance contributes to poverty reduction.

Table 4. 15: Institutional governance

	Frequency	Percent
to a very great extent	18	20.7
to a great extent	43	49.4
to a moderate extent	23	26.4
to a low extent	3	3.5
Total	87	100.0

From the findings, 49.4% of the respondents indicated that institutional governance contributes to poverty reduction to a great extent, 26.4% indicated to a moderate extent, 20.7% indicated to a very great extent while 3.5% indicated to a low extent. From these

findings we can deduce institutional governance contributes to poverty reduction to a great extent.

4.6.2 Facets of institutional governance

The researcher requested the respondents to indicate the extent to which the stated facets of institutional governance contribute to poverty reduction. The results are shown in table 4.16.

Table 4. 16: Facets of institutional governance

	Mean	Std. Deviation
Communities such as Board/finance committee/tourism committee/grazing committee/managers/staff	4.0805	.97906
Audits	3.2299	1.15840
Benefit sharing	3.7356	1.15597
Reputable community led institution/community development	3.7471	1.02547
Training	3.7356	1.16599
Access to markets	3.2069	1.24954
Development of innovative gift items/traditional crafts	3.7356	1.13568

From the findings, the respondents agreed with a mean of 4.0805 that communities such as board/finance committee/tourism committee/grazing committee/managers/staff contribute to poverty reduction to a great extent. The respondents also agreed with a mean of 3.7471 reputable community led institution/community development contributes to poverty reduction. In addition, the respondents agreed with a mean of 3.7356 that benefit sharing also contributes to poverty reduction. It was also agreed with a mean of 3.7356 that development of innovative gift items/traditional crafts contributes to poverty reduction. Further, it was agreed with a mean of 3.7356 that training contributes to poverty reduction to a great extent. It was also agreed with a mean of 3.2299 that audits contribute to poverty reduction to a moderate extent. Lastly, the respondents agreed with a mean of 3.2069 that access to markets contributes to poverty reduction to a moderate extent.

4.7 Poverty Reduction

This section shows the extent to which the respondents' household income had increased over the years and the extent to which the increase in the household income could be attributed to Westgate Community Conservancy.

4.7.1 Household income

Table 4.17 shows whether the respondents' household income had been increasing over the years.

Table 4. 17: Household income

	Frequency	Percent
Yes	82	94.3
No	5	5.7
Total	87	100.0

From the results, 94.3% indicated that their household income has increased over the years while 5.7% indicated that their household income had not increased. This shows that the respondents' household income had increased over the years.

4.7.2 Household income and Westgate Community Conservancy

Table 4.18 shows extent to which the respondents attributed the increase in their household income to Westgate Community Conservancy.

Table 4. 18: Household income

	Frequency	Percent
to a very great extent	35	40.2
to a great extent	18	20.7
to a moderate extent	22	25.3
to a low extent	8	9.2
to no extent at all	4	4.6
Total	87	100.0

From the findings, 40.2% of the respondents indicated that the increase in household income could attributed to Westgate Community Conservancy to a very great extent, 25.3% indicated to a moderate extent, 20.7% indicated to a great extent, 9.2% indicated to a low extent while 4.6% indicated to no extent at all. Therefore, majority of the respondents attributed the increase in their household income to Westgate Community Conservancy to a very great extent.

4.8 Regression Analysis

The researcher conducted a multiple linear regression analysis so as to determine the relationship between poverty reduction in Westgate Community Conservancy in Samburu County and the five independent variables; wildlife conservation, improved range management, enterprise development ,improved security and institutional governance. The regression equation was ($Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4+ \beta_5X_5$) was:

Whereby Y = Poverty reduction in Westgate Community Conservancy.

X1 = wildlife conservation

X2 = improved range management

X3 = enterprise development

X4 = improved security

X5 = institutional governance

Table 4. 19: Model Summary

Model	R	R Square	Adjusted Square	R Std. Error of the Estimate
1	0.843	0. 742	0.724	0.4216

The five independent variables that were studied, explain 74.2% of poverty reduction in Westgate Community Conservancy in Samburu County as represented by the R². This therefore means that other factors not studied in this research contribute 25.8% of the poverty reduction in Westgate Community Conservancy in Samburu County.

Table 4. 20: ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2.342	3	1.235	2.362	.022
	Residual	7.982	84	2.415		
	Total	2.967	87			

The significance value is 0.022 which is less than 0.05 thus the model is statistically significance in predicting how wildlife conservation, improved range management, enterprise development, improved security and institutional governance influence poverty reduction in Westgate Community Conservancy in Samburu County. The F critical at 5% level of significance was 2.362. Since F calculated is greater than the F critical (value = 2.290), this shows that the overall model was significant.

Table 4. 21: Coefficient of determination

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.365	1.335		1.615	0.029
	Wildlife conservation	0.421	0.128	0.265	3.982	0.032
	Improved range management	0.425	0.241	0.076	3.643	0.033
	Enterprise development	0.652	0.222	0.186	3.782	0.019
	Improved security	0.762	0.134	0.199	3.472	0.013
	Institutional governance	0.543	0.217	0.167	4.726	0.021

The regression above has established that taking all factors into account (wildlife conservation, improved range management, enterprise development, improved security and institutional governance) constant at zero, poverty reduction in Westgate Community Conservancy in Samburu County will be 1.365. The findings presented also shows that taking

all other independent variables at zero, a unit increase in wildlife conservation will lead to a 0.421 increase in the scores of poverty reduction in Westgate Community Conservancy in Samburu County; a unit increase in improved range management will lead to a 0.425 increase in the scores of poverty reduction in Westgate Community Conservancy in Samburu County, a unit increase in enterprise development will lead to a 0.652 increase in the scores of poverty reduction in Westgate Community Conservancy in Samburu County, a unit increase in improved security will lead to a 0.762 increase in the scores of poverty reduction in Westgate Community Conservancy in Samburu County and a unit increase in institutional governance will lead to a 0.543 increase in the scores of poverty reduction in Westgate Community Conservancy in Samburu County. This infers that improved security influences poverty reduction at Westgate Community Conservancy in Samburu County most followed by enterprise development, institutional governance, improved range management and wildlife conservation was influencing poverty reduction least.

CHAPTER FIVE

SUMMARY OF THE FINDINGS DISCUSSION, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter presents a summary of the findings, discussion, conclusions and recommendations for practice and further research on the problem. This study aimed at to determining the role of community-based conservation on poverty reduction in Westgate Community Conservancy in Samburu County. The study further sought to examine how wildlife conservation, improved range management, enterprise development, improved security and institutional governance contribute to poverty reduction in Westgate Community Conservancy in Samburu County.

5.2 Summary of the findings

5.2.1 Wildlife Conservation

The study found that wildlife conservation contributes to poverty reduction to a very great extent (40.2%). Further, the study found that improved (M=4.1945), access to financial services (M=4.0345), donor funding (M=3.9540) and tourism affects poverty reduction to a moderate extent (3.1839).

5.2.2 Improved Range Management

The study established that improved range management helps in poverty reduction to a very great extent (43.7%). The study also found that planting grass to help reduce drought impact (M=4.0230), grazing management/planned grazing (M=3.8161), holistic management (M=3.7931), range land rehabilitation/reseeding of degraded areas (M=3.6782) and removal of invasive plant species contribute to poverty reduction to a moderate extent (M=3.2529).

5.2.3 Enterprise Development

The study also found that enterprise development contributes to poverty reduction to a moderate extent (39.1%). Further, the study established that majority of the respondents` household income had increased over the years which was attributed to enterprise development (41.4%). In addition, the study found that employment (M=4.0805), lodge/women enterprises/livestock marketing (M=3.6897), cultural visits/traditional dance

(M=3.5977), social capital/social relations (M=3.56320) contribute to poverty reduction to a great extent.

5.2.4 Improved Security

The study established that improved security contributes to poverty reduction to a very great extent (50.6%). In addition, the study found that reduced wildlife security/highway banditry/tourist attacks (M=4.1839), conflict resolution (M=4.1494), reducing cattle rustling/loss of life (M=3.8966) contributes to poverty reduction in Westgate Community Conservancy in Samburu County to a great extent.

5.2.5 Institutional Governance

The study also established that institutional governance contributes to poverty reduction to a great extent (49.4%). The study further established that communities such as board/finance committee/tourism committee/grazing committee/managers/staff (M=4.0805), reputable community led institution/community development (M=3.7471), benefit sharing (M=3.7356), access to markets, training (M=3.7356) and audits (M=3.2299) contribute to poverty reduction.

5.3 Discussion

5.3.1 Wildlife Conservation

In relation to the extent to which wildlife conservation contribute to poverty reduction, the study found that wildlife conservation contributes to poverty reduction to a very great extent. These findings correlate with Lurie and Hibbard, (2008) argument that Community based Tourism (CBT) though facing many challenges has an enormous potential of bringing economic growth to the local people and make the tourism sector more sustainable courtesy the donor community that has continued to offer grants through the government and through local and international NGOs. Further, the study found that improved infrastructure influences poverty reduction to a great extent. The study also established that access to financial services influences poverty reduction to a great extent. The study also established that donor funding influences poverty reduction to a great extent. The study also found that tourism affects poverty reduction to a moderate extent. This is in line with NRT (2012) which indicates that Tourism remains the primary source of revenue for community conservancies under NRT. The existing tourism enterprises serve to stimulate a range of other emerging enterprise activities in the region, creating and sustaining incentives for support by local people to conservancies and wildlife conservation activities.

5.3.2 Improved Range Management

In relation to the extent to which improved range management help in poverty reduction in Westgate Community Conservancy in Samburu County, the study found that improved range management helps in poverty reduction to a very great extent. According to NRT (2012) faced with these threats, local communities and other stakeholders involved in biodiversity conservation began organizing community-based conservancies in 1995, and in 2004 six conservancies joined together to form the Northern Rangeland Trust (NRT). Today, NRT has grown to 19 conservancies encompassing 1.2 million hectares (more than 3 million acres) of grasslands. Conservancies integrate livestock management with Wildlife conservation with a view of benefiting from both. The study also found that planting grass to help reduce drought impact which subsequently influences poverty reduction. The study also established that grazing management/planned grazing influences poverty reduction to a great extent. A study conducted by Glew, Hudson & Osborne (2010) revealed that community conservancy grasslands had greater productivity and more moisture in the soil compared to similar grasslands not under conservancy management. In addition the study established that holistic management influences poverty reduction to a great extent. The study further, established that range land rehabilitation/reseeding of degraded areas influence poverty reduction to a great extent. The study also revealed that removal of invasive plant species contributes to poverty reduction to a moderate extent. Glew, Hudson & Osborne (2010) also found that during the 2007-2009 droughts, some people in the conservancy communities were not forced to sell their livestock at very low prices because there was still grass in the grass banks to feed their animals. The grass reserves helped these communities to recover faster from the drought and gave them greater resilience against climate change impacts.

5.3.3 Enterprise Development

On the extent to which enterprise development contributes to poverty reduction, the study established that enterprise development contributes to poverty reduction to a moderate extent. These findings agree with Cash et al. (2006) argument that conservancies can help communities to improve their social, economic and environmental conditions by benefiting from the natural resources in their area. Often people have only experienced the damage caused by wildlife animals who come on to their land, but through conservancies and giving people the rights over the natural resource on their land they can start benefit from them. Further, the study established that majority of the respondents` household income had

increased over the years. This increase was attributed to enterprise development by a majority of the respondents. In addition, the study found that employment was contributing to poverty reduction to a great extent. In addition, the study established that lodge/women enterprises/livestock marketing influence poverty reduction to a great extent. The study also established that cultural visits/traditional dance influence poverty reduction. It was also revealed in this study that and social capital/social relations contributes to poverty reduction to a great extent. According to an NRT (2007) report, NRT trading engages Conservancies such as Westgate with primarily women's groups to promote enterprise development through facilitating business-training sessions, access to microcredit loans, technical assistance in product development, and access to local and international markets. The goal is to provide women's groups with the opportunity to gain a competitive edge in the craft market and offer sustainable income-generating activities to communities in NRT conservancies. On the other hand Stephen (2010) conducted a study on the influence of sources and composition of finance on successful implementation of community development projects. The study found out that sources of finance have an influence on successful project implementation. This is mainly because different donors continue to monitor or appoint lead organizations that have the expertise and experience to implement the development projects.

5.3.4 Improved Security

On the extent to which improved security contributes to poverty reduction, the study established that improved security contributes to poverty reduction to a very great extent. According to Gamba (2011) since the Conservancy was started the insecurity incidences such as poaching, cattle rustling, highway banditry and attack on tourists has greatly reduced due to the efforts of the Conservancy scouts and the VHF radio network that improved communication. In addition, the study found that reduced wildlife security/highway banditry/tourist attacks contributes to poverty reduction to a great extent. The study also found that conflict resolution influences poverty reduction to a moderate extent. The study also found that reducing cattle rustling/loss of life contributes to poverty reduction in Westgate Community Conservancy in Samburu County to a great extent. Gamba (2011) also found that the frequency of the conflicts witnessed is dictated by season's and happenings in the surroundings as well as well on how the dynamics keep on changing with several factors playing a central role in conflicts. The study also found that the endemic poverty and low levels of education in the border areas are major conflict drivers. Further, the study revealed

that natural resources affect conflict resolution in Isiolo County. Major natural resources that are conflict triggers include water for livestock, pasture and grazing land, climate change and land ownership due to the land tenure system.

5.3.5 Institutional Governance

With connection to the extent to which institutional governance contributes to poverty reduction, the study established that institutional governance contributes to poverty reduction to a great extent. According to NRT Strategic plan (2012-2016), the Northern Rangelands Trust (NRT) aims at developing resilient community conservancies that transform lives, secure peace and conserve natural resources. The study further established that communities such as board/finance committee/tourism committee/grazing committee/managers/staff contribute to a great extent to poverty reduction. The study also established that reputable community led institution/community development contributes to poverty reduction to a great extent. The study also established that benefit sharing contributes to poverty reduction to a great extent. In addition, the study also found that access to markets, training influences poverty reduction to a great extent. This study also established that audits contribute to poverty reduction. Westgate's good institutional governance help in ensuring equitable distribution of benefits to all members, strengthen community planning aspects, ensures a coordinated approach throughout the group ranch, and helps build community resilience, help in identifying and prioritizing community needs and helps in creating wealth for its members.

5.4 Conclusion

The study concludes that wildlife conservation influences poverty reduction positively and significantly. A unit increase in wildlife conservation will lead to a 0.421 increase in the scores of Poverty reduction. In relation to facets of wildlife conservation that contribute to poverty reduction, the study found that improved infrastructure, tourism, donor funding and access to financial resources contribute to poverty reduction to a great extent.

The study also concludes that improved range management influences poverty reduction positively. A unit increase in improved range management will lead to a 0.425 increase in the scores of Poverty reduction. The study also found that improved range management, grazing management/planned grazing range land rehabilitation/reseeding of degraded areas, removing of invasive plant species, holistic management and planting grass to help reduce drought impact contribute to poverty reduction to a great extent.

The study also concludes that enterprise development significantly influences poverty reduction. A unit increase in enterprise development will lead to a 0.625 increase in the scores of poverty reduction. In relation to the effect of enterprise development on household income the study found that majority of the respondents` household income had increased. The study also established that employment, social capital/social relations, cultural visits/traditional dance and lodge/women enterprises/livestock marketing contribute to poverty reduction to a great extent.

The study also concludes that improved security significantly influences poverty reduction. A unit increase in improved security will lead to a 0.762 increase in the scores of Poverty reduction. The study also found that conflict resolution, reducing cattle rustling/loss of life and reduced wildlife security/highway banditry/tourist attacks contribute to poverty reduction to a great extent.

Finally, the study concludes that institutional governance influences poverty reduction significantly. A unit increase in institutional governance will lead to a 0.652 increase in the scores of Poverty reduction in Westgate Community Conservancy. The study also established that communities such as Board/finance committee/tourism committee/grazing committee/managers/staff, audits, reputable community led institution/community development, training, and access to markets and development of innovative gift items/traditional crafts contribute to poverty reduction to a great extent.

5.5 Recommendations

This study has established that most of the residents of Westgate Community Conservancy agree that wildlife conservation contributes to poverty reduction. However, poor infrastructure and inaccessibility to financial resources hinder the mitigation of poverty in the area. This study therefore recommends that the government and non-governmental organisations should focus on improving infrastructure of the area and also enhance the accessibility of financial resources to the residents for them to come up with businesses that are related to tourism for instance hotels and restaurants.

The study established that improved range management can help reduce poverty in this area. This study thus recommends that the residents of Westgate Community Conservancy be given proper education on range management in terms of planting grass to help reduce

drought impact, grazing management and range land rehabilitation for poverty mitigation to be achieved.

The study established that enterprise development contributes to poverty reduction to a great extent. This study recommends that the residents of Westgate Community Conservancy be supported in their enterprises as this will increase the overall household income of the residents. The support that could be accorded to them can be in terms of loans and subsidiaries from the government on some of the capital goods.

The study also established that improved security contributes to poverty reduction in Westgate Community Conservancy in Samburu County. This study recommends that a lot of attention and resources be accorded to the security docket of this area. This will ensure that tourism will thrive and with it the economy of this region.

The study also found that institutional governance contributes to poverty reduction. The researcher established that the governance of committees such as tourism committee and finance committee contributes to poverty reduction. This study recommends that the governance of these committees to be monitored regularly by the oversight authority to ensure accountability and wise management of resources that fall under their rule.

5.6 Recommendations for Further Research

This study focused on investigating the role of community-based conservation on poverty reduction in Westgate Community Conservancy in Samburu County. The study therefore recommends further research studies in the area of challenges facing Community based Conservation in the area and what the government has done to enhance the sector.

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APPENDICES

Appendix I: Letter of Transmittal

LALAMPAA TOM JONATHAN
University of Nairobi,
Department of Extra Mural studies,
April, 2012

Dear respondent,

I am a student at the University of Nairobi, pursuing a Master of Arts Degree in Project Planning and Management. I am conducting a study that is intended at identifying the role of community-based conservation on poverty reduction in Westgate Community Conservancy in Samburu County.

Attached please find a questionnaire meant for gathering information for this study. Kindly fill the questionnaire honestly and to the best of your knowledge. All responses will be handled with absolute confidence and will be used solely for the purpose of this study.

Thank you,

Yours Faithfully,

LALAMPAA TOM JONATHAN

REG NO: L50/66250/2010

Appendix II: Questionnaire for Community Members

1. Please indicate your gender

Female []

Male []

2. Indicate your age bracket

20-30 yrs []

31-40 yrs []

41-50 yrs []

51 and above []

3. State your highest level of education

No formal education []

Primary level []

Secondary level []

College []

University []

Postgraduate []

4. For how long have you lived in the conservancy?

Less than 2 years []

2 to 4 years []

4 to 6 years []

Above 6 years []

WILDLIFE CONSERVATION

5. To what extent does wildlife conservation contribute to poverty reduction in Westgate Community Conservancy in Samburu County?

To a very great extent []

To a great extent []

To a moderate extent []

To a low extent []

To no extent at all []

6. To what extent do the following facets of wildlife conservation contribute to poverty reduction in Westgate Community Conservancy in Samburu County?

	Very great extent	Great extent	Moderate extent	Low extent	No extent at all
Donor funding					
Tourism					
Access to financial resources					
improved infrastructure					

IMPROVED RANGE MANAGEMENT

7. To what extent does improved range management help in poverty reduction in Westgate Community Conservancy in Samburu County?

- To a very great extent []
- To a great extent []
- To a moderate extent []
- To a low extent []
- To no extent at all []

7.To what extent do the following facets of improved range management contribute to poverty reduction in Westgate Community Conservancy in Samburu County?

	Very great extent	Great extent	Moderate extent	Low extent	No extent at all
Grazing management/Planned grazing					
Range land rehabilitation/reseeding of					

degraded areas					
planting grass to help reduce drought impact					
holistic management					
removing of invasive plant species					

ENTERPRISE DEVELOPMENT

8. To what extent does enterprise development contribute to poverty reduction in Westgate Community Conservancy in Samburu County?

- To a very great extent []
- To a great extent []
- To a moderate extent []
- To a low extent []
- To no extent at all []

9. Have you experienced improved household income as a result of enterprise development?

- Yes [] No []

If yes, to what extent?

- To a very great extent []
- To a great extent []
- To a moderate extent []
- To a low extent []
- To no extent at all []

10. To what extent do the stated facets of enterprise development influence poverty reduction in Westgate Community Conservancy in Samburu County?

	Very great extent	Great extent	Moderate extent	Low extent	No extent at all
employment					
social capital/ Social relations					
Lodge/Women enterprises/Livestock marketing					
Cultural visits/traditional dance					

IMPROVED SECURITY

11 To what extent does improved security contribute to poverty reduction in Westgate Community Conservancy in Samburu County?

To a very great extent []

To a great extent []

To a moderate extent []

To a low extent []

To no extent at all []

12 To what extent do the following facets of improved security contribute to poverty reduction in Westgate Community Conservancy in Samburu County?

	Very great extent	Great extent	Moderate extent	Low extent	No extent at all
conflict resolution					
Reducing cattle rustling/loss of life					

Reduced Wildlife Security/Highway banditry/tourist attacks					
--	--	--	--	--	--

INSTITUTIONAL GOVERNANCE

13 To what extent does institutional governance contribute to poverty reduction in Westgate Community Conservancy in Samburu County?

- To a very great extent []
- To a great extent []
- To a moderate extent []
- To a low extent []
- To no extent at all []

14 To what extent do the following facets of institutional governance contribute to poverty reduction in Westgate Community Conservancy in Samburu County?

	Very great extent	Great extent	Moderate extent	Low extent	No extent at all
Committees such as Board/Finance Committee/Grazing Committee/Tourism Committee/Managers/Staff					
Audits					
benefit sharing					
Reputable Community led Institution/community development					
Training					
access to markets					

development of innovative gift items/ Traditional crafts					
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POVERTY REDUCTION

15. Has your household income been increasing over the years?

Yes [] No []

16. Kindly give the trend of your household income over the last five years.

2007	2008	2009	2010	2011

17. If yes, to what extent can you attribute the increase to Westgate Community Conservancy?

To a very great extent []

To a great extent []

To a moderate extent []

To a low extent []

To no extent at all []

Appendix III: Interview Guide for Westgate Conservancy Management

1. How does wildlife conservation contribute to poverty reduction in Westgate Community Conservancy in Samburu County?
2. What is the influence of improved range management in poverty reduction among residents of Samburu County?
3. How does enterprise development contribute to poverty reduction in Westgate Community Conservancy in Samburu County?
4. Have the community around the conservancy experienced improved household income as a result of enterprise development?
5. Does improved security contribute to poverty reduction in Westgate Community Conservancy in Samburu County? In what ways?
6. How does institutional governance contribute to poverty reduction in Westgate Community Conservancy in Samburu County?
7. Has the household income of the community been increasing over the years? What proportion of this can be attributed to the Westgate Community Conservancy?