PUBLIC POLICY MARKETING PRACTICES AND PERFORMANCE OF POVERTY REDUCTION PROJECTS IN THE AGRICULTURALSECTOR IN CENTRAL KENYA

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DECLARATION

This thesis is my original work and has not been presented to any other University or institution for any award.

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DEDICATION

This work is dedicated to my late dear Father Dionisio Karenge Ng'ang'a, whose love for education set me on the path of the pursuit of knowledge. Although you went too soon and missed my graduation with only about five months, your legacy lives on. I shall be eternally grateful for ensuring that I got educated. Without your earlier effort of taking me to school, I could not have come this far. I also dedicate this work to my late dear mother, Elizabeth Thoni Wa Karenge, and to my late Cũcũ, Mwarĩ Wa Gacuuru, the two women who shaped my early life but never lived long enough to celebrate this achievement (Mũrokoma kuuraga). In a very special way, this achievement is also dedicated to my wife Waceera for her love and support that kept urging me forward and to our four lovely children Karenge, Thoni, Wanjikũ and Njoroge. The five of you had to endure a lot when I diverted my attention to this work.

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someone, especially our younger generation would feel both challenged and encouraged to follow this example and achieve even higher. This is what our Father and Guka, Dionisio Karenge Wa Ng'ang'a, always wanted. That one of his children would achieve what he missed during his youth.

DAD, THIS IS FOR YOU

ŨROKOMA KWEGA KUURAGA

THAAI THATHAIYA NGAI THAAAI

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ABBREVIATIONS AND ACRONYMS

ASDS:	Agricultural Sector Development Strategy 2010–2020
ASDSP:	Agricultural Sector Development Support Programme
AASM:	Australian Association of Social Marketing
CDSM:	Consensus Definition of Social Marketing
CPP:	Core Poverty Projects/Programmes
DOI:	Diffusion of Innovation
D&AOI:	Diffusion and Adoption of Innovation
ERS:	Economic Recovery Strategy
ESMA	European Social Marketing Association
GoK:	Government of Kenya
GDP:	Gross Domestic Product
IDS:	Institute for Development Studies
IFAD:	International Fund for Agricultural Development
IMF:	International Monetary Fund
IPAR:	Institute of Policy Analysis and Research
ISMA:	The International Social Marketing Association
KIPPRA:	Kenya Institute for Public Policy and Research Analysis
MoALF:	Ministry of Agriculture, Livestock and Fisheries
OPI	Objective Performance Index
PEOU:	Perceived Ease of Use
PF&A:	Policy Formation and Analysis
PPI:	Project Performance Index
PI:	Performance Index
PM&E:	Policy Monitoring and Evaluation
PRSP:	Poverty Reduction Strategy Paper
PR/I:	Policy Results/Implications
PU:	Perceived Usefulness
SAPs:	Structural Adjustment Programmes
SDG:	Sustainable Development Goals
SMI:	Social Marketing Institute

TAM: Technology Acceptance Model

UTAUT: Unified Theory of Acceptance and Use of Technology

UT: Utility Theory

ABSTRACT

This study aimed to determine the effect of public policy marketing practices on performance of poverty reduction projects in the agricultural sector in central Kenya. Specifically the study sought to: determine the influence of public policy marketing practices on the performance of poverty reduction projects in the agricultural sector in central Kenya; assess the influence of managerial qualities of project staffs on the relationship between public policy marketing practices and performance of poverty reduction projects; investigate the influence of demographic characteristics of project target beneficiaries on the relationship between public policy marketing practices and performance of poverty reduction projects; evaluate the joint influence of public policy marketing practices, managerial qualities of project staffs and demographic characteristics of project target beneficiaries on performance of poverty reduction projects. The study was anchored on the broad theory of social marketing. Other relevant theories included adoption and diffusion of innovations, and public policy formation and marketing. The study aligned itself with the positivist paradigm and adopted a descriptive cross-sectional research design. Four hypotheses were developed and variables measured empirically using quantitative methods while statistical software SPSS was used for the analysis. The study population comprised all the poverty reduction projects in the agricultural sector in central Kenya. The unit of analysis was the individual Project. Performance Index (PPI) and other Project performance issues, as identified by the project staffs, were used as the performance indicators. The primary data were collected from the field using a semi-structured questionnaire while secondary data were collected from project documents and other Government publications. The study concluded that the overall public policy marketing practices have a positive effect on the performance of poverty reduction projects in the agricultural sector in central Kenya. However it is important for implementers to carefully price the products and services as high prices were found to have a negative impact on performance of projects. The staffs who manage the projects were found to positively influence the performance but technical and managerial skills with sufficient experience was necessary. Participative style of management in line with the Kenya Constitution 2010 and support from policy makers was found to have positive outcomes. Youthful Male target beneficiaries between 18 and 30 years with up to primary education and earning less than 25,000 Kenya shillings per month were found to be the key drivers of poverty projects. This suggests that implementers of projects should focus on the male youth who do not go beyond primary education. This appears to contradict a common perception that poverty projects are mainly driven by rural women. Because managerial qualities of project staffs and demographic characteristics of target beneficiaries were found to jointly have a significant moderating influence on the performance of projects, it is important that implementers consider these aspects jointly rather than separately as this would improve performance of projects in the agricultural sector. The study recommends further research first to investigate the influence of public policy marketing on performance of other projects in other sectors including health, tourism and education. Research in Arid and Semi-Arid Lands may give other perspectives not captured in this study. Second, effect of public policy marketing practices carried out by Government agencies in free primary education, health care, and free laptops to primary schools presents a good opportunity to do more research. Third, the inclusion of other variables in the conceptual framework such as beneficiaries' perspective should be carried out. In addition, research on a social experiment might give an insight into marketing of policies. Fourth, although some authors proposes 8Ps (Product, Price, Place, Promotion, Publics, Partnerships, Policy Environment, and Purse Strings) of social marketing, this study found that only 3Ps (Price, Place, Promotion) appears necessary in the case of poverty reduction projects. Further work in this area may help resolve this issue.

CHAPTER ONE
INTRODUCTION

1.1 Background of the Study

The primary role of any elected Government all over the world is to look after the welfare of its citizens. In particular, citizens will elect a Government into power if they perceive such a Government will significantly improve their quality of life in general and their level of income in particular. In developing countries and particularly in Africa, the goal of poverty reduction is one of the principal reasons why Governments are elected. In fighting poverty, Governments often seek financial help from the United Nations institutions such as the World Bank, and the International Monetary Fund (IMF). Bilateral institutions such as United States Agency for International Development (USAID), the Department for International Development (DFID) of United Kingdom and Danish International Development Agency (DANIDA) among many other institutions have also extended a financial helping hand. Unfortunately, such "Aid" which comes with conditionality often leaves a country worse off than it originally began. One of the reasons for this unfortunate scenario is absence of good poverty reduction policies. Where satisfactory policies exist, the implementation of these policies is often weak resulting in poor outcomes hence poverty persists. The implementation of poverty reduction policies may be associated with Public policy marketing practices.

A public policy is a specific solution product proposed to solve identified social problems (Nancy &Kotler, 2011). Public policy marketing practices fall under the general theory of social marketing. Social marketing is defined as a process that applies marketing principles and techniques to create, communicate, and deliver value in order to influence target audience behaviour that benefit society (public health, safety, the environment, and communities), as well as the target audience(Nancy & Kotler, 2011). According to Nancy and Kotler (2011), a public policy, whether economic or fiscal, may be considered to be a specific recommendation, prescription or a course of action and therefore a solution product proposed to solve identified social problems which can be marketed using the principles of social marketing. A project is defined as a temporary endeavour undertaken so as to create a unique product or service. A Project is more likely to succeed if staffs possess managerial qualities such as strong technical, marketing and management skills and believe

in participative style of management (Thieme et al, 2003). When marketing either a commercial or a social product such as a public policy, it is better to target the often-elusive consumer category known as early beneficiaries (Gerard, 2014).Understanding managerial qualities of project staffs and demographic characteristics of target beneficiaries is important for project success.

The study was anchored on the broad theory of social marketing. The International Social Marketing Association (ISMA), European Social Marketing Association(ESMA), and the Australian Association of Social Marketing(AASM) have endorsed a Consensus Definition of Social Marketing(CDSM)(2014). According to CDSM(2014), social marketing seeks to develop and integrate marketing concepts with other approaches to influence behaviours that benefit individuals and communities for the greater social good. According to Weinreich(2010), the key elements of social marketing theory are the 8Ps namely; Product, Price, Place, Promotion, Publics, Partnerships, Policy Environment, and Purse Strings. Other relevant theories that guided the current study are the Adoption and Diffusion of Innovations theory and Public policy formulation theory. On the theory of Adoption and Diffusion of Innovations and Rogers (2003) asserts that a population of target beneficiaries may have five different segments. These are innovators, early beneficiaries, early majorities, late majorities and laggards. Each category has demographics and attitude towards a particular innovation. For most innovations especially on poverty reduction projects early beneficiaries (13.5% of the population), tend to move innovations forward. Early beneficiaries have demographic characteristics, which include finding out how a new innovation meets their demographic needs or solves a problem. They also tend to be risk-takers and sets the trend (Robinson, 2009). The theory of public policy follows the process of identification of the problem, policy formulation, analysis, implementation and finally the monitoring and evaluation of the impact (Buurma, 2001).

A Project will succeed based on benefits target beneficiaries perceive they will derived from adopting the project, ease of use, facilitating conditions, (or supporting infrastructure), and the perceived social value (Thieme et al, 2003). Participative style, bringing together policymakers, implementers, civil society, local communities and other stakeholders, is beneficial to development (Mitullah, 2005).The Kenya Constitution 2010, requires all Government programmes to have public participation.

Discussions and documentation of fighting poverty have been common in Kenya. In 1965, the Government of Kenya (GoK) came up with a policy articulated in Sessional Paper number 10, which identified poverty, disease and illiteracy as the key challenges to development. Key strategies focusing on these challenges are articulated in several public policy documents. Kenya has a well-established international reputation for preparing high quality policy documents (Ryan, 2002).Good projects and programmes have been designed to implement the poverty reduction policy but marketing of these projects has been a challenge (Gitu, 2001; Ryan, 2002). Researchers, including Kenya Institute of Public Policy Research and Analysis KIPPRA (2013) have shown that in spite of the considerable amount of resources put into fighting poverty, the problem persists. The motivation for this study was the quest by the current researcher, to understand and explain why in spite of all the effort by GoK over the past fifty years, the World Bank and other development partners, poverty persists and in some cases, appears to increase.

1.1.1 Public Policy Marketing Practices

Public policy marketing practices, according to Buurma (2001), is the sum total of planning and executing processes to cause marketing exchanges with social impact. Since a public policy is a specific solution product proposed to solve an identified social problem, it can therefore be marketed using social marketing principles (Nancy &Kotler, 2011). According to the authors, customer-oriented governments use social marketing to sell their policy products to beneficiaries. The concept of public policy marketing practices, according to the authors, allows governments to sell their policies. Thus Public Policy Marketing Practices is likely to improve implementation of policies to citizens (Kotler & Lee, 2009).

Because public policy, in most cases introduces ideas and innovations that are perceived to be new to targeted beneficiaries, diffusion of innovation (DOI) theory (Rogers, 2003) is a useful model to explain user adoption of new technologies introduced by a public policy. Rogers (2003) says that diffusion takes place at the level of social systems. It is defined as a process where an innovation is communicated through certain channels over time among the members of society. It is the way the innovation is spread. Adoption, unlike diffusion, takes place at individual level (Rogers, 2003). Adoption theory explains the way a population or target beneficiaries acquire an innovation or changes behaviour. Poverty reduction policy targets the poor. Marketers of new poverty reduction innovations

introduced by a public policy are more likely to succeed if they target early beneficiaries (Gerard, 2014).

1.1.2 Managerial Qualities of Project Staffs

Project staffs refer to project managers (or coordinators) directly involved in implementing the project. Managerial quality of project staffs refers to the ability and capacity of project staffs to use the resources available to achieve the objectives of a project on time and within the agreed cost structure. Project staffs of poverty reduction projects, which possess strong technical, marketing, and management skills are more likely to succeed in getting the projects adopted (Thieme et al, 2003).Participative style of management and support from senior policy makers increase chances of success. Availability of adequate resources to implement the project and frequency of visits by project staffs are factors that increase the probability of adoption. Exemplary organizational skills are necessary for good project staffs. They are charged with managing several tasks simultaneously, organizing and managing other workers. They maintain project budgets, develop work plans and ensure they operate within a budget constrain. They also ensure they meet milestones and deadlines, address and handle issues and setbacks, and meet client needs (Larsen, 2011). According to Larsen (2011), a competent project staff is a good communicator, a master negotiator, listens to the workers and the clients.

Effective project staffs, according to Baker (2010), command respect naturally, sets priorities and is flexible. Project priorities are set, observed, and re-evaluated frequently. Such staffs are sensitive to the needs of stakeholders and are good communicators. Larsen (2011) argues that effective project staffs take charge and can make unpopular decisions. They protect their workers whenever necessary, and focus on meeting their clients' needs. Therefore, poverty reduction projects that are run by staffs with most of the above qualities have a much higher chance of succeeding.

1.1.3 Demographic Characteristics of Target Beneficiaries

Demographic characteristics of target beneficiaries refer to the age, gender, level of education and income associated with a particular target adopter. These characteristics are important factors influencing adoption of poverty reduction policy by target beneficiaries (Adeoti, 2009).

The age of a target beneficiary is important in the success of a project. Some projects are better suited to the younger population than others are. The gender is another important factor as women are said to better implement some projects than men. According to the author, the level of education is also an important factor to consider. If a project requires a certain level of education for the beneficiaries to understand it, then it would have a lesser chance of success with beneficiaries of a lesser education level. On the other hand the level of income of target beneficiaries required by a project is also an important factor. If for example a project requires cost sharing for its services and/or products, those with lower incomes many not have the capacity to adopt the project.

Rogers (2003) posits that, beneficiaries who adopt innovations early, form 13.5 percent of the population and are well-known opinion leaders who spread new ideas to others. Project early beneficiaries tend to find out how a new idea or product can meet their demographic needs (Robinson, 2009). Adesope et al (2012) argues that these early project adopters are willing to invest money to acquire the new innovations brought by the project. If they see no immediate demographic benefit, the adoption level will be low. Hence, project staffs should focus on the early beneficiaries to maximize on the possibility of project adoption (Hamblin, 2014).

1.1.4 Performance of Poverty Reduction Projects

Performance of Poverty Reduction Projects refers to the extent to which a given project has achieved its stated objectives. A good project should have a prioritized list of objectives with well-defined benchmarks and timelines. According to Greene (1990), a public policy is a latent variable. Latent variables are intangibles that cannot be measured directly except through proxy variables. To implement the poverty reduction policy, programmes and projects are designed and implemented which then act as proxies of policy adoption and implementation. The success or failure of a given project may be measured using a performance index (PI) of its stated objectives. The PI indicates the degree of achievement of the various performance targets set by each project.

Thieme et al (2003) suggests another method of assessing performance of projects and asserts that a project will succeed or fail based on what beneficiaries perceive as the benefits derived from adopting the project, ease of use, facilitating conditions (or supporting infrastructure), and the perceived social value. Gondi (2005) says that,

programmes and projects for poverty reduction are said to have succeeded if they improve the lives of their intended beneficiaries. According to Gondi (2005), one way of measuring performance of projects is to gauge the perception of target beneficiaries on whether they consider the projects as having reduced their poverty levels, improved their incomes, levels of education, health status and food security and nutrition. Another way is to assess the perception of project staffs on what they feel the project has achieved. Pozin (2013) gives six factors for measuring performance of a project namely; first the schedule-timely completion; second the scope (or objectives) of what the project needs to achieve within the time frame; third, a budget which, is often the most important for many projects. In the end, the project should achieve its objectives strictly within the budget; fourth, staffs satisfaction is another important factor. The project management staffs should never be taken for granted; fifth customer/target beneficiaries' satisfaction. Target beneficiaries may not be sure of exactly what they want. It is the job of staffs therefore, to identify the needs. Sixth, the quality of work as the outcome of one project may affect the quality of another project. It is important therefore, to monitor and evaluate quality and adjust accordingly.

1.1.5 Agricultural Sector Projects in Kenya

Poverty reduction efforts in Kenya date back to the onset of independence in 1963. More recently, the Kenya Vision 2030, launched in 2008 after successful implementation of the Economic Recovery Strategy for Employment and Wealth Creation (ERS) 2003–07, is the country's long-term blueprint for economic, political and social development. Vision 2030 is anchored on three pillars. The first pillar of economic development, aims to attain and sustain an economic growth rate of 10% per annum until 2030. It is expected that this will generate resources to achieve the Sustainability Development Goals (SDGs). The social pillar comes second and seeks to create just, cohesive and equitable social development in a clean and secure environment. The third is the political pillar that aims to achieve an issue-based, people-centered, result-oriented and accountable democratic system.

Agriculture is one of the key sectors identified under Vision 2030 to help deliver the 10% annual economic growth rate proposed by the economic pillar. Agriculture is important to Kenya's economy. It directly contributes 24% of GDP and another 26% indirectly (GoK, 2005). The sector supports manufacturing by supplying raw materials. It generates tax revenue and foreign exchange that support the rest of the economy. Agriculture sector provides employment to over 40% of the total population and over 70% of the rural

population. Vision 2030 calls for a transformation of smallholder agriculture from subsistence to an innovative, commercially oriented, and modern sector growing at a target of 7% annually. In response to this challenge, the Ministry of Agriculture, Livestock and Fisheries (MoALF) developed the Agricultural Sector Development Strategy 2010–20(ASDS) from which Agricultural Sector Development Support Programme (ASDSP) was designed and implemented in 2013.

Based on the ASDSP (2013) and other various Government publications (Economic surveys, Welfare reports), the majority of Kenya's population lives in the rural areas (67.7%), and significantly more women (77.8%) than men are rural dwellers. The country continues to exhibit strong social differentiation, with exclusion and disadvantage reflecting stratification by class, ethnic group, gender and region. Kenya's Gini coefficient, which measures inequality of expenditure per adult equivalent, declined from 0.417 in 1997 to 0.380 in 2005/06 in rural areas. In urban areas, the coefficient rose from 0.426 in 1997 to 0.447 during the same period. ASDSP (2013) asserts that food security and adequate nutrition levels have not yet been achieved for most Kenyans. The national food poverty rate is estimated at 45.8%. There is strong regional variation in levels of food poverty and malnutrition. ASDSP, a sector-wide programme has the overall aim to support the implementation of the Agricultural Sector Development Strategy 2010–2020(ASDS).

ASDSP is one of the programmes designed to implement the poverty reduction policy. Ryan (2002) asserts that Kenya has good poverty reduction policies but implementation has been lacking. According to Ryan (2002), Kenya has a well established international reputation for preparing high quality policy documents but has also a reputation for backtracking on such policies. Many National Development Plans and strategies such as Economic Recovery Strategy (2004), and Vision 2030, emphasize the need for poverty alleviation. In spite of these well-intentioned plans, the implementation appears unsuccessful. The ASDSP has some 147 projects being implemented in all the 47 counties. This study considered 53 of these projects based in central Kenya.

1.2 Research Problem

A public policy is a latent intangible variable difficult to measure directly (Greene, 1990). According to Greene (1990), in order to measure the effect of a latent variable, such as poverty reduction policy, programmes and projects have to be designed and implemented as proxies of policy adoption and implementation. The literature on this issue, points to several factors that may influence performance of poverty reduction projects including, marketing practices, quality of staffs directly involved in managing the projects and demographic characteristics of the beneficiaries targeted by these projects. The manner in which these factors influence the performance of projects is based on the theories of social marketing, policy formation and adoption and diffusion of innovations. Whereas several suggestions exist regarding the influence of the various factors on performance of projects, there are still significant knowledge gaps and unanswered questions regarding their individual roles and interactions.

There is extensive but inconclusive debate on the status of a public policy, its implementation and whether or not it should be marketed. Nancy and Kotler (2011) argue that a public policy is an intangible social product which involves a society's welfare and should therefore be marketed using the principles of social marketing. Buurma (2001) says that since the government uses public policy to achieve its developmental goals, it should be marketed to the intended beneficiaries. The Author argues that marketing of a policy is different from that of a tangible product since the choice made by the beneficiaries will have an impact on their welfare. Smith (2000) argues that it is important to sell whether one is considering a loaf of bread or school choice initiatives. There is need therefore to add insights in this issue.

On the issue of quality of staffs, the debate ranges with Gondi (2005) asserting that competent project staffs should internalize the projects they are implementing. Theme et al (2003) on the other hand argues that competent project staffs needs to have strong technical, marketing and managerial skills. The role of beneficiaries has also attracted diverse viewpoints leaving several unanswered questions. Venkatesh et al (2008) says that gender, age, level of education and level of income are the key important factors when considering the adoption of poverty reduction projects by the target beneficiaries. Adoption is an individual process detailing the series of stages a person undergoes from first hearing

about a product to finally adopting it while diffusion is the rate of adoption within a social system (Rogers, 2003). Although a lot has been written about how a consumer adopts a tangible product or service, significant knowledge gaps remains about the thought process a target adopter goes through before deciding whether or not to adopt a proposed project/programme.

Until fairly recently (about a decade ago), the Government of Kenya (GoK) gave little or no attention to marketing of its policies. The practice was mainly confined to government sponsored workshops, seminars and the administrators' public meetings (barazas). As Ryan (2002) notes, although Kenya has good policies, marketing to the intended beneficiaries has been less than satisfactory. In recent times, however, there has been increased realization that policies and hence projects need to be marketed in order to increase their level of adoption. Marketing professionals are now increasingly consulted to design marketing strategies of public policies and projects. The Government of Kenya and development partners have invested heavily in order to meet the Sustainable Development Goals (SDG). The Vision 2030 policy blue print identified the agricultural sector as one of the key drivers of the vision. The blue print envisages a growth of at least 7% per annum in this sector but as Ryan (2002) argues, the Government of Kenya comes up with good policies which are not marketed. It was therefore important to investigate the extent to which policies are not implemented. There appears to be consensus among scholars that the main hindrance to poverty reduction in Kenya is not lack of policy formulation and analysis but policy implementation due partly to lack of marketing effort (Gitu, 2001; Kimenyi, 2002; KIPPRA, 2013). Studies by Government agencies such as KIPPRA (2013), have shown that the percentage of the poor population in Kenya rose from 46.1 percent in 2006 to 49.8 percent in 2012 and was still rising. This assertion is an observable phenomenon based on Government's secondary data. However, the underlying factors giving rise to these phenomena have not been rigorously studied. There was therefore a need to carry out an empirical study to shed more insights into this important area of marketing discipline.

A review of the extant literature revealed few studies that link Public Policy Marketing practices and performance of poverty reduction projects. The effect of managerial qualities of staffs and the demographic characteristics of target beneficiaries on the performance of projects has also not been adequately studied. Rynell (2008) in an empirical study

conducted in the United States of America found that poverty is widespread in America. However, the poor population is not homogenous and that each group has different triggers to poverty. In another study done in the same country by Thieme et al (2003) tested 20 hypotheses and found that participative style of management and support from policy makers will influence success of poverty reduction projects. However, the moderating effect of the managerial qualities of project staffs and demographic characteristics of beneficiaries were not considered in these studies hence the need for the current study. Bredgaard and Larsen (2007), in their study conducted in Australia, Holland, and Denmark to analyze the interconnections between formal policy and operational policies, interviewed key respondents in the three countries. The study concluded that quasi market models could not live up to the preconditions for a well functioning market and political expectations. The study however focused on formal policy but did not link the marketing of the policy with performance of projects meant to implement the policy. Further, the roles of project staffs and beneficiaries of such policy were not considered.

Turkyilmaz, et al (2011) in a study of 220 public service employees in Turkey found that there is a strong relationship between staffs satisfaction and loyalty. However, the study did not look at the quality of these public service staffs charged with implementing government policies thus leaving a knowledge gap which the current study sought to narrow. Linna, et al (2011) in their study of productivity in Finland's public service found that to develop public sector productivity, the issue of effectiveness in the public sector's development efforts need to be considered. The study however had significant limitations in that it did not consider the role of marketing of policies in the effectiveness of development. Further, the quality of staffs and demographics of the development recipients was not considered. Buurma (2001) in a study based in Netherlands asserts that the concept of Public Policy Marketing practices as a tool to market policies to citizens is expected to improve implementation of government policies. Managerial qualities of staffs such as strong technical, marketing, and managerial skills are important for success of projects. However the study did not consider the role of beneficiaries in the performance of projects.

Irwin (2014), in his study of associations that influence public policy in Tanzania concluded that attempts to influence policy are not good enough to practitioners. The author however did not take into account whether the government of Tanzania markets policy and whether staffs who implement policies are of right quality. Singh et al (2010) in

a study for implementation of e-governance policy interviewed 918 citizens in Ethiopia, Fiji and India. The authors concluded that e-governance is positively related to government, citizen relationship and corruption reduction. The limitation of this study is that the authors did not consider the marketing of this policy to citizens and whether the demographic characteristics of the citizens influence implementation of the policy. The aspect of the quality of staffs involved in implementing this policy was also absent.

Although it is argued that beneficiaries' participation is critical to project success, it is inconclusive on what role the target beneficiaries have on Public Policy Marketing practices (Mitullah, et al 2005). Kiriti and Tisdell (2005) in their case study of family planning policy in Nyeri, Kenya concluded that both social/cultural and economic factors are important influences on family size. The study however was uncertain on whether the family planning policy is appropriately marketed to the intended rural beneficiaries. Further the issue of the role and quality of the health workers implementing such a policy did not feature in the study. Ayiro(2010) did a cross-sectional survey study in Kenya to identify key entrepreneurial variables in social entrepreneurship contributing to enhanced impact of HIV/AIDS policy. The author found that 53 percent of variation was explained by organizational boundaries, work discretion, rewards management support and time availability. The author however did not look at the marketing of the HIV/AIDS policy, the quality of staffs involved in implementing the policy and the demographic characteristics of the target patients.

Based on the above discussion, it is clear that there has not been a rigorous study linking Public Policy Marketing practices and performance of poverty reduction projects in the Kenyan context. In particular the moderating effect of managerial qualities of project staffs and demographic characteristics of target beneficiaries has not been studied. This study therefore sought to narrow the highlighted knowledge gaps by providing an integrated approach embracing the four variables. The study was guided by the following question; what is the effect of public policy marketing practices, managerial qualities of project staffs and demographic characteristics of target beneficiaries on the performance of poverty reduction projects in the agricultural sector in central Kenya?

1.3 Research Objectives

The general objective of the study was to determine the effect of public policy marketing practices on the Performance of Poverty Reduction Projects in the agricultural sector in central Kenya. The specific objectives of the study were to:

i) Determine the influence of public policy marketing practices on the performance of poverty reduction projects in the agricultural sector in central Kenya.

ii) Assess the influence of managerial qualities of project staffs on the relationship between public policy marketing practices and performance of poverty reduction projects in the agricultural sector in central Kenya.

iii) Investigate the influence of demographic characteristics of project target beneficiaries on the relationship between public policy marketing practices and performance of poverty reduction projects in the agricultural sector in central Kenya.

iv) Evaluate the joint influence of public policy marketing practices, managerial qualities of project staffs and demographic characteristics of project target beneficiaries on performance of poverty reduction projects in the agricultural sector in central Kenya.

1.4 Value of the Study

This study contributes to the current theoretical knowledge in social marketing. Understanding how to market policy prescriptions is as important as to market a tangible product (Smith, 2000). It contributes to the understanding of marketing of a public policy and confirms the theory of marketing a policy as a social product. For example the structure of correlation coefficient between policy marketing and project performance was found to have a significant contribution to the theory of social marketing. The nature of the joint influence, of managerial qualities of project staffs and demographic characteristics of target beneficiaries was found to contribute to the theoretical knowledge. It is therefore expected that this study will assist social marketers to better understand the factors influencing marketing of policies. In addition, although, buyer behaviour in commercial products is fairly well understood, this study also contributes to better understanding of adoption and buyer behaviour in respect to social products.

The findings of this study are likely to have important implications on the design of policy prescriptions and studies in policy analysis. Several studies including, Gitu(2001), Ryan(2002) and PRSP(2004) assert that the main hindrance to poverty reduction in Kenya is non-adoption and implementation of policies. The study will, hopefully, help to explain why seemingly good policies end up not being implemented. Once it is established what triggers action on implementation of policies, then the marketing effort will be directed towards encouraging action, which will in turn result in better implementation of policies. To development agencies such as the World Bank, the IMF and bilateral partners, understanding of the factors that contribute towards adoption and implementation of policies means that the design of programmes and projects meant to implement those policies will be more focused and therefore improve the chances of success of those policies thereby increasing the impact of the programme outcomes.

In practice, the findings of this study will be useful to coordinators/managers of public projects. It is expected that the findings of this study will assist managers of public poverty reduction projects to improve their managerial qualities. New insights in managing these projects emerged and are highlighted in this study. This is likely to result in better adoption and implementation of projects by the target beneficiaries which is in turn likely to bring real poverty reduction among the poor in Kenya.

1.5 Chapter Summary

This chapter introduced the research with some background to the study. The concepts of the four variables considered in this study were presented namely; the Public Policy Marketing Practices; the Managerial Qualities of Project Staffs; the Demographic Characteristics of Target Beneficiaries; and the Performance of Poverty Reduction Projects. The issues in projects within the agricultural sector in central Kenya were also presented. Finally the research problem was articulated from which four research objectives were extracted and the anticipated value of the study given. Chapter two reviews the literature relevant to this study.

CHAPTER TWO
LITERATURE REVIEW

2.1 Introduction

This chapter reviews theoretical and empirical literature on Public Policy Marketing practices, Managerial qualities of project staffs, Demographic characteristics of target beneficiaries, and Performance of poverty reduction projects. The chapter underscores the theoretical foundations of the study variables before pointing out some research gaps. Towards the end, a conceptual framework is extracted and hypotheses stated.

2.2 Theoretical Foundation of the Study

This study is anchored on the theory of Social Marketing. Other important theories include, Public Policy Formation and Marketing, Adoption and Diffusion of innovations. The theory of social marketing is relevant since poverty is a social issue and interventions need marketing to the intended beneficiaries. The principles of social marketing are therefore more appropriate than those of commercial marketing. On the other hand, interventions come in form of policies to be marketed to target adopters hence the need to understand the theory of Public Policy Formation and Marketing. Target beneficiaries have the choice of either adopting the policy products or rejecting them. The Theory of Diffusion and Adoption of innovations together with Buyer Behaviour therefore become necessary to this study. These three theories are briefly discussed.

2.2.1 Social Marketing Theory

Social Marketing Institute (SMI) defines social marketing as the planning and implementation of programmes designed to bring about social change concepts from commercial marketing. Social marketing is a process that applies marketing principles and techniques to create, communicate and deliver value in order to influence target audience behaviours that benefit society and the target audience (Nancy &Kotler, 2011).

A public policy, whether economic or fiscal, is a specific recommendation, prescription or a course of action and therefore a solution product proposed to solve identified social problems (Andreasen, 2002). It can therefore be marketed using the principles of social marketing (Nancy &Kotler, 2011).

2.2.2 Theory of Public Policy Formulation and Marketing

The theory of public policy formulation process, according to Anderson (2003), follows five stages. First, identifying the problem and setting the agenda. This involves identifying problems to be solved by public policies. The second stage focuses on formulation of proposed courses of action sometimes called available alternatives or options. The third stage is adoption, which comprise choosing the best alternative. Here, taking no action is an option. The fourth stage is implementation which involves the actual activities done to apply adopted policies and finally fifth, monitoring and evaluation which involves activities to determine whether the policy is achieving its intended goals, and also identifying divergences and other unintended consequences.

According to Buurma (2001), policy marketing is very different from a tangible product or even service marketing because the choice made by the target beneficiaries directly affects their welfare. Marketing of a public policy requires a different marketing mix from the traditional one. In addition to the traditional 4Ps of marketing (product, price, place and promotion), Weinreich(2010) proposes four additional social marketing Ps, namely publics, partnership, policy environment and purse strings. Publics are the external and internal groups which are active in the programme. Social marketers of necessity have a multiplicity of audiences involved in their programme in order to succeed. By their nature, social issues are complex and one agency cannot make an impact by itself, hence the need to form partnerships. Weinreich(2010) argues that social marketing programmes needs a supportive policy environment in which the programmes are operating. Most organizations involved in social marketing programmes are funded by foundations, governments or donations from individuals. There is therefore another dimension of the holder of purse strings.

2.2.3 Theory of Adoption and Diffusion of Innovations and Buyer Behaviour

Diffusion and Adoption of Innovation (D&AOI) theory (Rogers, 1995, 2003), proposes five adopter categories. These are Innovators, Early Beneficiaries, Early Majority, Late Majority and Laggards. Most beneficiaries tend to be in the middle. Adesope, (2012) gives five factors influencing adoption of an innovation. These include first, relative advantage meaning the extent to which an innovation is perceived to be better than the idea, programme or product it seeks to replace. The second is compatibility which involves the extent to which the innovation is consistent with experiences, values, and the needs of the

target beneficiaries. The third factor is complexity which indicates the degree to which the innovation is easy to understand and/or use. The fourth factor is Triability which indicates how difficult it is to test or experiment the innovation before the beneficiary decides to adopt it. The fifth factor is observability which reveals the extent to which the innovation provides tangible results.

Buyer behaviour may be taken to comprise the study of processes involved when individuals or groups select, purchase, use or dispose of products, services, ideas or experiences to satisfy needs and desires (Solomon et al., 2013).The Utility Theory (UT) is the most common model and proposes that the choices made by consumers are based on what they expect as outcomes of their decisions. Buyers make rational decision based on their self-interest (Schiffmanet al, 2014). Njuguna (2013) concludes that because of buyer behaviour of social products, there is need for a social marketing policy.

2.3 Public Policy Marketing Practices and Performance of Poverty Reduction Projects

Smith (2000) concluded that selling is a necessity whether selling a tangible product such as soap or an intangible product such as a school choice. The author asserts that a policy reform idea or a loaf of bread is unlikely to walk off the shelf on its own. Most intellectuals do not understand how the marketing of a policy is different from marketing of a tangible product (Smith, 2000). Buurma (2001) focused on the concept of public policy marketing practices as a tool to "sell" policies to citizens. The author concluded that public policy marketing improves implementation of public policies and that citizen participation is critical to success. These studies addressed the theoretical aspects of policy marketing but did not look at performance of projects and did not consider role of beneficiaries on the public policy marketing practices.

Yasmin (2013) found that projects that succeed; meet the set objectives, are implemented and maintained within a set timeline, and are financially efficient, deliver expected outcomes and have good return on investment. The author asserts that the most critical factors in project success are effective management and governance. The most critical project characteristics for success according to Yasmin (2013) include first clearly articulated goals. Second is detailed comprehensive and long-term planning. Third, the deliverable quality criteria need to be identified early in the project. Fourth the project

needs an active support from the executive who shares the vision of the project. This study did not look at policy marketing. There is a need therefore for studies that look at performance of projects and the role of beneficiaries on the public policy marketing practices.

2.4 Public Policy Marketing Practices, Managerial Qualities of Project Staffs And Project Performance

Cross and Brohmann (2015) identified several challenges for project managers and policy makers. These include: identification of critical issues and relevant stakeholders for evolving technologies; introduction of relevant projects in the right contexts; directing timely marketing effort to the right beneficiaries using the best method and evaluating the impact at appropriate stages. Thieme et al (2003) concluded that project staffs with strong technical, marketing, and management skills, who believe in participative style of management, are more likely to succeed in implementing poverty reduction projects. Government support and allocation of adequate resources are factors that increase the probability of adoption.

Larsen (2011) found that a project manager who portrays confidence will be remembered by clients long after a project is completed. The author concluded that effective project staffs will always take charge and never shy from making unpopular decisions. They will support their workers whenever necessary, and are focused on meeting their clients' needs. Although the above studies have highlighted some issues, it would be useful to have a study that links Public Policy Marketing practices, Managerial Qualities of Project Staffs and Project performance.

2.5 Public Policy Marketing Practices, Demographic Characteristics of Target Beneficiaries and Project Performance

Kibera (1979) concluded that while several demographic and socioeconomic variables may explain the earliness-lateness dimension of innovative behaviour, they do not substantially influence the intensity of the adoption process. Munyoki (2007) reported that technology transfer in a commercial setting positively affects organizational performance. The study focused on the technology transfer in a commercial setting. The current study considered a social setting. Rynell (2008) focused on finding out the causes of poverty in the United States of America. Based on empirical studies, she concluded that poverty is widespread in America and that poor population is heterogeneous with different triggers for entry into

poverty. The author confined herself to the American situation, mainly, the causes of poverty.

Venkatesh et al (2008) identified four demographic characteristics of target beneficiaries, namely gender, age, experience and voluntariness of use. The authors asserts that expectation of behaviour is a predictor that may explain the limitations of the intention of behaviour, provides facilitating conditions and gives a better understanding of how to use technology. They argued that the cognitions that are behind the intentions of behaviour and expectation may be different. Further the mechanisms used to influence different conceptualizations of use may also differ. They concluded that gender, age, level of education and income moderates the relationship between perceived usefulness, ease of use, and intention to use. They focused on developing a theoretical model to explain behavioural expectations rather than its application. An empirical study based on the African context is therefore useful.

2.6 Public Policy Marketing Practices, Managerial Qualities of Project Staffs, Demographic Characteristics of Target Beneficiaries and Project Performance

Wymer (2011) provided better understanding of the factors behind poor results of social marketing campaigns. The author proposed a model which may be used to guide strategic social marketing planning to improve programme outcomes. This conceptual study found that over-reliance on commercial marketing tactics and an over-emphasis on individual behaviour change limits social marketing planning. The author did not consider the effect of policy as a product. Donovan (2011) described and dispelled eight "mythunderstandings" common with social marketing practitioners. The study presented observations on issues that arise from social marketing forums and conferences and suggested that a look at the history of marketing could help dispel some of the observed myths. The author however, did not consider social marketing mix.

Viswanathan et al (2012) described findings of a study of informal economy of consumers and owners of survivalist microenterprises in subsistence marketplace in South India. They carried out a descriptive cross-sectional field survey and concluded that general environment in such settings is characterized by pervasive interdependence among people. The authors did not consider the role of social marketing. Njuguna (2013) concluded that there is need for a social marketing policy after studying Community Based Organizations

operating in Nairobi County only. It was important therefore to have a study that considers the social marketing mix in other counties.

2.7 Summary of Knowledge Gaps

Literature has exposed gaps among the relationships of public policy marketing practices, managerial qualities of project staffs and demographic characteristics of target beneficiaries, and performance of poverty reduction projects. The gaps relate to conceptual, contextual and methodological issues. The conceptual gaps include those identified in literature regarding the relationships between the concepts under study. The contextual gaps relate to poverty reduction policy in Kenya while methodological include gaps in population, sample sizes, research design and data analysis gaps. Table 2.1 summarizes knowledge gaps and how this study narrowed some of them.

Table 2.1: Summary of Knowledge Gaps

Study	Focus of Study	Methodology	Study Findings	Knowledge gaps	Focus of this study
Irwin , D. (2014)	Reviewed Tanzanian business associations' attempts to influence public policy.	Empirical interviews with business associations	Activities and strategies used to influence public policy described.	Author did not consider policy marketing.	Current study focused on marketing of public policy
Yasmin (2013)	Qualities of successful projects.	Descriptive survey.	Found successful projects meet set objectives, are delivered and maintained on schedule, within budget & deliver expected outcomes	Study did not look at public policy as it relates to project performance.	This study looked at public policy and its effect on project performance.
Njuguna (2013)	The performance of community based HIV and AIDs organizations in Nairobi and their strategic social marketing operating environment.	Descriptive cross-sectional survey.	There is need for a social marketing policy.	Study looked at Community Based Organizations based in Nairobi.	This study focused on individual beneficiaries rather than organizations

Viswanathan et al (2012)	Authors give results of informal economy study of consumers & owners of survivalist microenterprises in subsistence marketplace in south India.	Descriptive cross-sectional field survey	Study concludes that general environment in such settings is characterized by pervasive interdependence among people.	Authors did not consider the role of social marketing (8Ps)	Current study focused on the role of social marketing in public policy marketing practices
Wymer (2011)	Poor results in social marketing campaigns. A model to guide social marketing strategic planning to improve programme outcomes was proposed.	This is a conceptual study	Over-reliance on commercial marketing and an over-emphasis on individual behaviour change were found to limit social marketing planning.	The author did not consider the effect of policy as a product.	This study considered policy as a product to be sold using social marketing principles.
Donovan (2011)	Author describes and dispels eight "mythunderstandings" common with social marketing practitioners.	Presents observations on issues that arise from social marketing forums	The study suggested that a look at the history of marketing could help dispel some of these myths.	Does not talk about the social marketing mix.	Current study described and explained the social marketing mix (8Ps).
Fosu, A.(2011)	Evidence globally was found on the transformation of economic growth to poverty reduction in developing countries.	World Bank data was analyzed for the $1.25 and $2.50-level poverty headcount ratios.	Declines and increases in poverty was found to be driven mainly by income growth.	Author did not consider the role of social marketing of policies.	Current study focused on the role of public policy practices in poverty reduction.
Turkyilmaz, A., et al. (2011)	Identify factors that determine public employee satisfaction.	A survey covering 220 employees of a Social Security Institution in Turkey.	A strong relationship between employee satisfaction and loyalty.	Author did not consider quality of staffs.	Current study looked at managerial qualities of staffs.
Linna,P. et al (2010)	Meaning of productivity in public sector and its measurement.	Empirical interviews and workshops.	Productivity in Public sector must consider the issue of effectiveness.	Authors did not study quality of staffs.	Current study looked at managerial qualities of staffs.
Singh, G. et al (2010)	Survey citizen perception of how e-governance could fight corruption.	A survey of 918 citizens in Ethiopia, Fiji and India.	Developing countries benefits equally just as the developed countries from using egovernance.	Authors did not consider marketing of egovernance policy.	Current study looked at policy marketing.

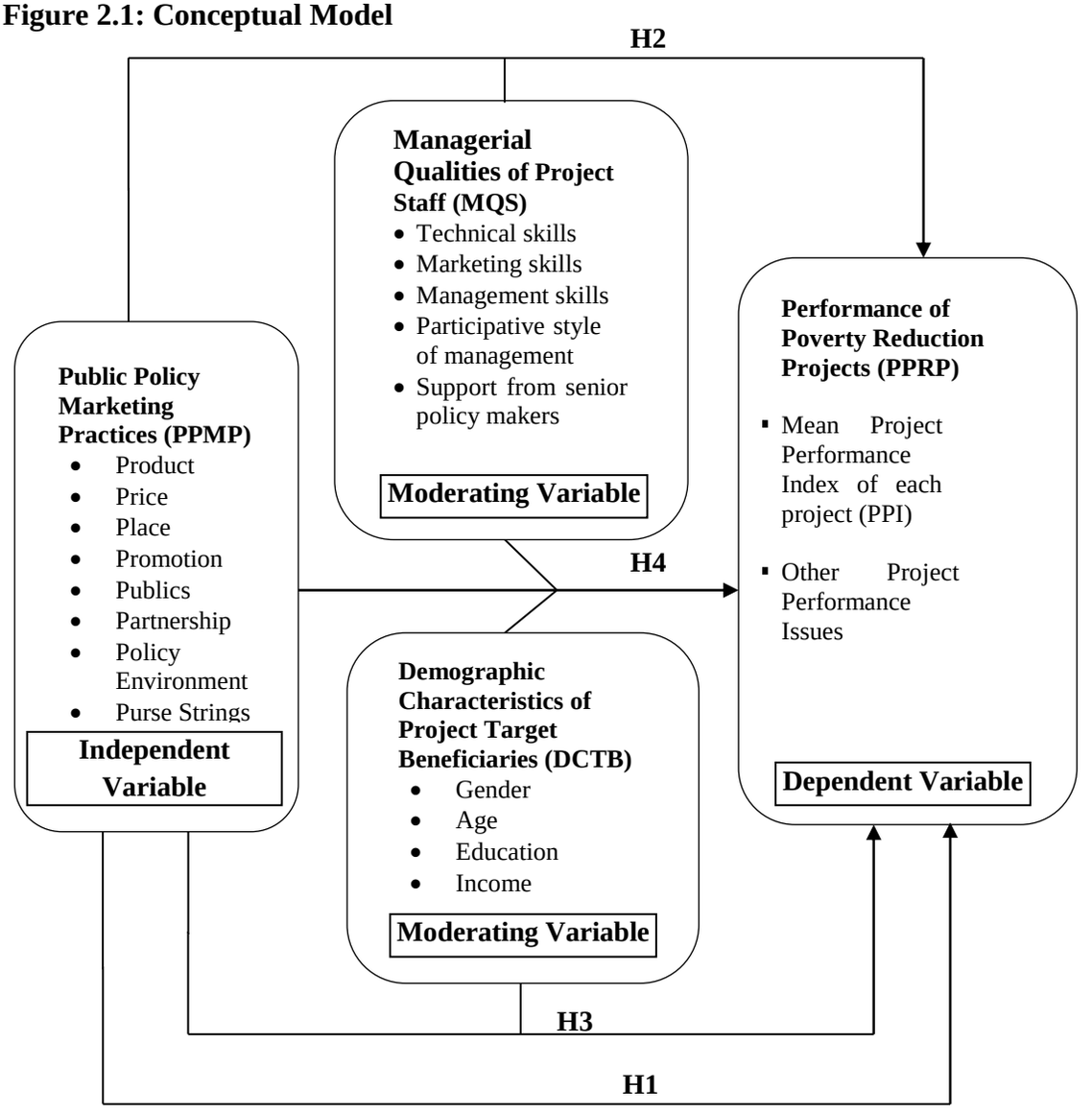
Ayiro, L. (2010).	Identified key entrepreneurial variables contributing to enhancement of impact of HIV/AIDS policy.	The study adopted a cross-sectional survey design.	Results showed 53 percent of variation was explained by work discretion, rewards management support and time availability and organizational boundaries.	The author did not consider the marketing of the HIV/AIDS policy to patients	This study focused on the public policy marketing practices.
Rynell (2008)	Focused on finding the causes of poverty in the USA.	Used a survey of published empirical studies.	Poverty is widespread in America. Poor population is not uniform and has different triggers for entry into poverty.	Author confined herself to American situation mainly the causes of poverty.	This study focused on central Kenya and on public policy aimed at reducing poverty.
Venkatesh et al (2008)	Authors studied expectation of behaviour as a predictor that may explain the limitations of the intention of behaviour.	Used empirical data from past studies to improve on the model.	They argued that the cognitions that are behind the intentions of behaviour and expectation may be different.	Focused on developing a theoretical model to explain behavioural expectations rather than its application.	This study focused on the application of the model to public policy marketing practices.
Bredgaard, & Larsen, F. (2007).	Authors analyzed formal policy reforms and operational policies to get interconnections	Interviewed respondents, observations at service delivery agencies, and desk studies of existing research.	They found that quasi-market models do not meet preconditions for a well-functioning market, and political expectations.	Focused on public employment service.	This study focused on application of the model to public policy marketing practices.
Munyoki (2007)	Author studied effects of technology transfer on organizational performance in Kenyan firms	Descriptive Cross-sectional design	Technology transfer positively affects organizational performance in manufacturing firms in Kenya.	The study focused on technology transfer in a commercial setting.	Current study looked at technology transfer in a social setting.
Kiriti & Tisdell, C. (2005)	Determined the effect of social/cultural and economic factors on size of family in rural Kenya	Case study of families in Nyeri, Kenya.	Both factors found to be important influences on family size.	Study did not consider demographics of beneficiaries	Current study considered demographics of beneficiaries
Buurma (2001)	The concept of Public policy marketing practices as a tool to "sell" policies to citizens.	General Review of studies in this area.	Public policy marketing improves implementation of policies.	Role of beneficiaries on the Public policy marketing practices not considered.	The current study considered the role of target beneficiaries.

Source: Current Researcher

2.8 Conceptual Framework

This chapter reviewed several concepts such as social marketing; poverty reduction efforts; public policy, formation, adoption and implementation; public policy as a social product and its marketing; and finally managerial qualities of staffs and demographic characteristics of target beneficiaries. Figure 2.1 summarizes these concepts and consolidates them into a model. It presents the conceptualized interaction between the independent variable, Public Policy Marketing Practices (PPMPP), the dependent variable, Performance of Poverty Reduction Projects (PPRP) and the moderating variables, Managerial Qualities of Project Staffs (MQS) and Demographic Characteristics of Project Target Beneficiaries (PCPB).

Figure 2.1: Conceptual Model



Source: Current Researcher

Based on the discussion thus far, it was postulated that a public policy (in this case the poverty reduction policy) is a social product that can be marketed using principles of social marketing. Depending on qualities of this product and projects designed to implement the policy, if the product is properly sold, it can be bought (adopted) by the target market hence resulting in reduction of poverty. The following was the proposed conceptual hypotheses.

2.9 Conceptual Hypotheses

The conceptual hypotheses were stated in the alternative form as follows:

- **H1:** Public policy marketing practices will significantly influence performance of poverty reduction projects in the agricultural sector in Kenya.
- **H2:** Managerial qualities of project staffs have moderating influence on the relationship between public policy marketing practices and performance of poverty reduction projects in the agricultural sector in Kenya.
- **H3:** Demographic characteristics of project target beneficiaries have a moderating influence on the relationship between public policy marketing practices and performance of poverty reduction projects in the agricultural sector in Kenya.
- **H4:** Public policy marketing practices, managerial qualities of project staffs and demographic characteristics of project target beneficiaries have joint influence on the performance of poverty reduction projects in the agricultural sector in Kenya.

2.10 Chapter Summary

The purpose of this chapter was to review the literature relevant to this study. The theoretical foundation of the study was reviewed together with the theories of Social Marketing; Public Policy Formulation; and the theory of Adoption and Diffusion of Innovations and Buyer Behaviour. Literature was also reviewed on the concepts of: Public Policy Marketing Practices and Performance of Poverty Reduction Projects; Public Policy Marketing Practices, Managerial Qualities of Project Staffs and Project Performance; Public Policy Marketing Practices, Demographic Characteristics of Target Beneficiaries and Project Performance; Public Policy Marketing Practices, Managerial Qualities of Project Staffs and also the Demographic Characteristics of Target Beneficiaries and Project Performance. A summary of knowledge gaps was extracted from which a conceptual framework and a Conceptual Model were presented. Finally four conceptual hypotheses were postulated. The next chapter describes the methodology applied in this study.

CHAPTER THREE
RESEARCH METHODOLOGY

3.1 Introduction

In this chapter the methodology used in this study is discussed. Also discussed is the procedure for selecting the projects included in the study population and the research tools used. The chapter also discusses the operationalization of the research variables and presents operational definitions of the study hypotheses.

3.2 Philosophical Foundation of the Study

Research philosophy refers to perceptions, beliefs and assumptions of how knowledge is obtained. Two broad categories of research philosophy have been proposed, namely: Positivism and Phenomenology.

Phenomenology developed by Husserl (1907), is the investigation and description of phenomena as consciously experienced. It does not consider the theories about their causal explanations or their objective reality. According to Manen (2007), phenomenologic inquiry focuses on people's experience of phenomena and how such experiences are interpreted. Its main aim is therefore to seek to understand how people construct meaning. Understanding people's perceptions, perspectives and understandings of a particular situation (or phenomenon) is the primary aim of a phenomenological research study.

Manen (2007) asserts that, Phenomenologists' main concern is what things mean, and not identification or measurement of phenomena. Phenomenologists in particularly believe that human experience is in itself a source of data. Measuring the existence of physical phenomena does not necessarily constitute the only true research.

Positivism philosophical system fronted by Comte (1850), argues that knowledge is more about description and not just questioning. Positivists can only recognize positive facts and events that can be observed. Saunders, Lewis and Thornhill, (2009) posit that the positivist philosophy considers only observable facts that can both be measured and counted. The positivist system follows the traditional, scientific view of the world. It is characterized by formulation and measurement of hypothesis based on existing theory of observable social realities. The positivism system uses empirical measurement based on quantitative

methods, experiments and surveys as well as statistical analysis (Saunders, Lewis & Thornhill, 2009).

The current study aligned itself with the positivist paradigm. This is because the variables discussed in this study namely the Public Policy Marketing practices, success of poverty reduction projects as well as the moderating effects of managerial qualities of project staffs and demographic characteristics of target beneficiaries is based on existing theories as discussed earlier in this study. Some hypotheses were developed from existing theory and were tested through measurement of observable social realities. The variables were measured empirically using quantitative methods of observed facts while statistical tools were used for analysis.

3.3 Research Design

A research design is the plan and structure of investigation so conceived as to obtain answers to research questions (Cooper & Schindler, 2001). Research design expresses both the structure of the research problem and the plan of investigation used to obtain empirical evidence on relationships of the pertinent variables.

The study adopted a descriptive cross-sectional research design. This is because data was collected across several projects at one point in time to determine association among Public Policy Marketing practices, success of poverty reduction projects, the moderating effects of managerial qualities of project staffs and demographic characteristics of target beneficiaries and project performance. This type of design has been successfully used in marketing studies by several researchers including Akyol and Akehurst (2003), Munyoki (2007), CA De Matos (2008) and Njuguna (2013).

3.4 Research Setting

The study was carried out in the 8 counties comprising the former central province in Kenya, namely Nairobi, Kĩambu, Mũrang'a, Embu, Kĩrĩnyaga, Nyeri, Nyandarua, Laikipia, (Appendix V). In the current system of governance, Kenya is divided into 47 Counties equivalent to the former districts in the old system. The following table 3.1 provides some pertinent secondary data for the study area.

Table 3.1 Population Distribution by Gender, Number of Households, Area and Density of Counties in the Study

	County	No. of Households	Area in Sq. Km.	Population Density (Total per Sq. Km.)	Male	Female	Total
1	Nairobi	985,016	10,323	304	1,605,230	1,533,139	3,138,369
2	Kĩambu	469,244	4,946	328	802,609	820,673	1,623,282
3	Mũrang'a	255,696	2,517	374	457,864	484,717	942,581
4	Embu	131,683	1,296	398	254,303	261,909	516,212
5	Kĩrĩnyaga	154,220	1,401	377	260,630	267,424	528,054
6	Nyeri	201,703	2,077	334	339,725	353,833	693,558
7	Nyandarua	143,879	1,259	474	292,155	304,113	596,268
8	Laikipia	103,114	1,023	390	198,625	200,602	399,227
	Total	**2,444,555**	**24,842**	**2,980**	**4,211,141**	**4,226,410**	**8,437,551**

Source: Kenya Bureau of Statistics(2009)

The counties included in this study are located around Mt. Kenya region in central Kenya. As table 3.1 shows, the counties included in this study have a total area of 24,842 square kilometers and a population density of 2,980 persons per square kilometer. The combined counties have 2,444,555 households and a total population of 8,437,551 persons with almost equal numbers of both male 4,211,141(50%) and female (4,226,410) (50%).

3.5 Population of the Study

The population of this study comprised all poverty projects implemented in the agricultural sector in central Kenya. This was a census study and hence all the projects under ASDSP were included.

There were a total of 53 projects with Kiambu having the highest number of projects (12), followed by Mũrang'a which had 10 projects and Nyeri with 6 projects. The other counties had 5 projects each.

3.6 Data Collection

This study used primary data from field surveys and secondary data obtained from project staffs based on their knowledge of the project(s). The individual project was used as the unit of analysis. Project Performance Index (PPI) of each project was computed. PPI is a ratio that measures the performance of each project compared to its stated targets (Bible & Bivins, 2012; Chia & Shiu, 2014). To calculate the PPI, the objectives of each project were listed in order of their importance. The performance of each project's objective was then obtained from project staffs. The achieved performance (at the time of interview) of each objective was divided by the stated target to get Objective Performance Index (OPI). The PPI was taken as the average of the OPIs. For example if a project had Objective 1: Train 30 women groups on chicken husbandry, and at the time of interview 20 women groups had been trained, the performance index for that objective would be 20/30=0.67. On the other hand if Objective 2 was to: increase indigenous chicken population from 1,000 to 10,000 in the county and at the time of interview it had trained 8,500 women groups, the OPI would be 8,500/10,000=0.85. The PPI would then be (0.67+0.85)/2=0.76.

The primary data were collected from the field using a semi-structured questionnaire (Appendix II (a)). The key staffs of the project were interviewed and their responses recorded. The dependent variable, Performance of Poverty Reduction Projects (PPRP) was measured using Project Performance Index (PPI). Demographic Characteristics of Project Target Beneficiaries (DCTB) and Managerial Qualities of Staffs (MQS) were obtained from the questionnaire filled by the project staffs. Data on Managerial Qualities of Staffs (MQS) were also obtained from questionnaire filled by project staffs.

3.7 Reliability and Validity Tests

When collecting and analyzing data, two important criteria namely; reliability and validity are important. Reliability focuses on establishing whether the results of a study can be repeated elsewhere. Validity refers to the extent to which the variables as operationally defined actually portray correctly the theoretical meaning of the concept being studied (Mugenda, 2003).

3.7.1 Reliability Test

Reliability, according to Bryman (2004), is the ability of a system to routinely perform and maintain its functions in all circumstances. In quantitative research it refers to the statistical reliability of a data set (Bryman, 2004). In order to test the reliability of each study variable, the researcher used the Cronbach's Alpha Coefficient (Sekaran, 2005). The Chronbach's alpha coefficient was computed for each construct studied. The Chronbach alpha coefficient ranges from 0 to 1. Different scholars have used different Cronbach's Alpha coefficients cut-off points. Hair et al (2007) asserts that alpha coefficient below 0.6 implies that the strength of association among data instruments is poor. Cronbach alpha values of above 0.6 generally indicate sound and reliable measures for further analysis (Mokhtar, et al, 2009). All the variables and their indicators used in this study had a Cronbach alpha coefficient of over 0.6 with the lowest, Place (distribution)(0.629) and the highest, Price (0.724) (Appendix IV(a)). The measures used were found to be internally consistent and therefore satisfactory and to have adequately measured the relevant study variables and hence suitable for further analysis (Table 3.2).

Table 3.2 Reliability of Study Instruments

Variable and Its Indicators	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Policy Marketing(Aggregate)	47.0822	4.777	.965	.643
Performance of Projects(Index)	50.3860	5.260	.373	.682
Performance of Projects(Other Issues)	47.1022	4.854	.602	.658
Quality of Staffs	46.8682	4.712	.401	.673
Demographics(Average)	51.0655	5.668	-.111	.700

Source: Primary Data

3.7.2 Validity Test

Validity refers to how accurately the data obtained captures what it is designed and purports to measure (Mugenda, 2003). Construct validity was tested using discriminant validity test. This is the extent to which scores on a scale correlates to scores on other scales measuring different constructs. According to Hair et al. (2007) a pre-test of five to ten representative respondents is sufficient to validate an instrument. The questionnaire was pre-tested with a sample of six staffs to check for any weaknesses in design of the questionnaire. This was necessary in order to clear any problems of comprehension or administrative issues. The final instrument is attached in Appendix II.

Next, each study variable was subjected to factor analysis (results present in Appendix IV(b)), using Principal Component Analysis (PCA) technique. This was used together with Varimax rotation (with Kaiser Normalization) to discover the underlying drivers of the predictor variables. PCA procedure bundles together a larger set of highly correlated variables into a smaller set (components) accounting for most of the variation. Thus minimizing redundancy and maximizing reliability of research instrument. Varimax rotation was applied for its value in maximizing the dispersion of loadings within the components. It attempts to consolidate fewer numbers of variables which are highly correlated onto each factor. Any items showing Eigen values which are greater than 1.0 and loadings greater than 0.5 are good and hence they were extracted.

3.8 Operationalization of the Study Variables

Operationalizing refers to defining a concept to make it measurable. It is done by assessing the behavioural dimensions, facets, or properties of the concept Sekaran (2003). They are converted into elements that can be observed and measured in order to develop an index of measurements of the concept. The purpose of the study was to understand the effect of marketing on the adoption of public policy and hence the effect on poverty reduction. Table 3.3 describes the operationalization of the various variables used in this study.

Table 3.3: Summary Operationalization of the Study Variables

	Variable	Operational Indicators	Measures used	Supporting Literature	Questionnaire items
1	Public policy marketing practices (Independent variable)	Product, Price, place, Promotion, Publics, Partnership, Policy Environment, Purse Strings	Interval: 5-Point rating scale	Weinreich (2010) Kotler et al (2007) Gitu (2001)	Section 1 Questions 1.01 - 1.78
2	Managerial qualities of project staffs (Moderating variable)	Technical, Marketing & Management Skills Participative style of management, Support from senior policy makers	Interval: 5-Point rating scale	Thieme et al (2003) Baker (2010)	Section 2 Questions 2.01 – 2.10
3	Demographic Characteristics of Project target Beneficiaries (Moderating variable)	Gender, Age, Education, Income	Nominal Ordinal: Direct	Venkatesh et al (2008) Rogers (2003) Kibera (1979)	Section 3 Questions 3.01-3.05
4	Performance of Poverty Reduction Projects (Dependent variable)	Project Performance Index	Ratio	Chia, L. & Shiu, P. (2014) Bible, M.J & Bivins,.S.(2012) .	Section 4 Questions 4.01-4.13

Source: Current Researcher (2016)

3.9 Tests of Statistical Assumptions

The study data were tested for the major assumptions of non-parametric data analysis. These include tests of linearity, normality, multicollinearity and homoscedasticity.

3.9.1 Test of Linearity of the Data

Linearity was tested by using ANOVA and Linearity test. The dependent variable, Performance of Poverty Reduction Projects and the independent variable, Public Policy Marketing practices along with Managerial Qualities of Staffs were tested for linearity. Test results showed an alpha value less than 0.05, implying a linear relationship between the variables. Relevant results are contained in table 3.4.

Table 3.4: Test of Linearity of the Data

ANOVA Table							
			Sum of Squares	df	Mean Square	F	Sig.
Performance Of Project * Policy Marketing	Between Groups	(Combined)	.778	4	.194	10.080	.000
		Linearity	.607	1	.607	31.486	.000
		Deviation from Linearity	.170	3	.057	2.944	.043
	Within Groups		.868	45	.019		
	Total		1.646	49			

ANOVA Table							
			Sum of Squares	df	Mean Square	F	Sig.
Performance Of Project * Quality Of Staffs	Between Groups	(Combined)	.918	3	.306	19.327	.000
		Linearity	.280	1	.280	17.688	.000
		Deviation from Linearity	.638	2	.319	20.147	.000
	Within Groups		.728	46	.016		
	Total		1.646	49			

Source: Primary Data

3.9.2 Test of Normality of the Data

To test normality, Kolmogorov-Smirnov (K-S) one-sample test was used. K-S is a non parametric goodness-of-fit test for continuous scaled data. According to Malhotra and Dash (2011), the K-S test makes comparisons in the cumulative distribution functions for variables in a specified distribution. The goodness-of-fit test was used to evaluate whether observations could have come from the specified distribution. The K-S test results of the specified study variables, namely, Public Policy Marketing Practices(PPMP), Managerial Qualities of Staffs(MQS), Demographic Characteristics of Project Beneficiaries(both Gender)(DCPB) and Performance of Poverty Reduction Projects(PPRP) revealed that the data were normally distributed (table 3.5).

Table 3.5: Test of Normality of the Data

One-Sample Kolmogorov-Smirnov Test						
		Policy Marketing	Quality of Staffs	Demography of Beneficiaries (Male)	Demography of Beneficiaries (Female)	Performance of Project
N		50	50	50	50	50
Normal Parameters[a]	Mean	4.248	4.462	.4260	.5860	2.0376
	Std. Deviation	.2073	.4485	.04431	.02268	.18329
Most Extreme Differences	Absolute	.259	.320	.461	.451	.233
	Positive	.173	.320	.461	.269	.182
	Negative	-.259	-.285	-.279	-.451	-.233
Kolmogorov-Smirnov Z		1.832	2.266	3.262	3.193	1.647
Asymp. Sig. (2-tailed)		.002	.000	.000	.000	.009
a. Test distribution is Normal.						

Source: Primary Data

3.9.3 Test of Multicollinearity

Multicollinearity was tested using regression procedure together with examination of correlation coefficient among variables. Multicollinearity (or collinearity) refers to a situation where two or more predictor multiple regression variables are highly correlated. It is the linear correlation among variables. This means their correlation coefficients tends to +1 when there exists a high positive multicollinearity or tends to -1 when the multicollinearity is negative. In this study, the general objective was to determine the effect of Public Policy Marketing Practices on the Performance of Poverty Reduction Projects in the agricultural sector in central Kenya. The following sections present the correlations among the various variables and their indicators. The results implied that some independent variables did not highly correlate. However, some dependent and independent variables correlated highly.

3.9.3.1 Public Policy Marketing Practices and Performance of Poverty Reduction Projects

Based on the conceptual framework, the Public Policy Marketing practices construct had eight indicators that comprise the 8Ps of social marketing, namely, Product, Price, Place, Promotion, Publics, Partnership, Policy Environment and Purse Strings. On the other hand Performance of Poverty Reduction Projects construct had two indicators, namely: mean project performance index and other project performance issues. A Pearson product moment correlation coefficient analysis was done to examine the relationship between policy marketing and performance of projects. Relevant results are contained in table 3.6.

Table 3.6: Correlations for Public Policy Marketing and Performance of Poverty Reduction Projects

	Item	1	2	3	4	5	6	7	8	9	10
1	Product	1									
2	Price	-.059	1								
3	Place	.124	-.209	1							
4	Promotion	.058	-.637**	.490**	1						
5	Publics	.015	.609**	.486**	-.137	1					
6	Partnerships	.088	.256	.877**	.167	.834**	1				
7	Policy Environment	.081	.111	.881**	.337*	.820**	.965**	1			
8	Purse Strings	-.076	-.257	-.342*	.468**	-.111	-.370**	-.133	1		
9	Mean Performance Index of Projects	.178	-.451**	.343*	.529**	-.192	.091	.147	.060	1	
10	Other Project Performance Issues	-.032	-.012	.161	.547**	.451**	.250	.463**	.802**	.083	1

Method: Pearson Product Moment Correlation
**. Correlation is significant at the 0.01 level (2-tailed).
*. Correlation is significant at the 0.05 level (2-tailed).
Sig. (2-tailed, for all was 0.000 less than the P- value or 0.01 and 0.05.
Sample (N)=50
1. Product, 2. Price, 3. Place 4. Promotion, 5. Publics, 6. Partnerships, 7. Policy Environment 8. Purse Strings

Source: Primary Data

The results presented in table 3.6 show varied degree of interrelationships. Both the Mean Performance Index of Projects and Other Project Performance Issues are significantly positively correlated with promotion ($r=0.529$, $p<0.01$; $r=0.547$, $p<.01$; (2-tailed) respectively. This high positive correlation suggests that the performance of projects may be greatly improved by promotion in terms of creating awareness to the beneficiaries.

Other Project Performance Issues are highly positively correlated to publics (r=0.451); to policy environment (r=0.463); and to Purse Strings (r= 0.802) all at (p<.01, 2-tailed). This may suggest that performance of projects is positively impacted by the publics involved in the projects such as local leaders and administration officials. The high positive correlation with policy environment suggests that the policies guiding the implementation of the project will have an important impact on the performance of the project. The highest positive correlation (r= 0.802) is between the project performance and the purse strings suggesting as expected that adequate funding of a project is critical to its success. This supports the ideas fronted by authors such as Weinreich (2011) who posits that funding agencies highly influence the outcomes of specific projects and programmes.

The Mean Performance Index of Projects is correlated to place (distribution) (r=0.343 p<0.05; (2-tailed) which suggest that success of the projects can be enhanced if the products/services offered by the project is efficiently distributed to the intended beneficiaries. However Mean Performance Index of Projects has a high negative correlation with price (r= -0.451; p<0.01). This suggests that a project requiring a high price (either in cash or in kind) from the beneficiaries will have little chance of succeeding.

3.9.3.2 Managerial Qualities of Staffs and Project Performance

A Pearson product moment correlation analysis was done to determine the correlation between Managerial Qualities of Staffs and performance of Projects. The indicators of Managerial Qualities of Staffs were correlated with project performance indicators. Pertinent results are shown in table 3.7.

Table 3.7: Correlations for Managerial Qualities of Staffs and Project Performance

Correlations				
		Quality of Staffs	Mean Performance Index of Projects	Other Project Performance Issues
Quality of Staffs	Pearson Correlation	1		
Mean Performance Index of Projects	Pearson Correlation	.569**	1	
Other Project Performance Issues	Pearson Correlation	-.081	.083	1
**. Correlation is significant at the 0.01 level (2-tailed).N=50				

Source: Primary Data

The correlation results presented in Table 3.7 suggests that the Mean Performance Index of Projects and Managerial qualities of staffs are significantly positively correlated ($r=0.569$, $p<.01$; sig. 2-tailed $=0.000<0.05$). This high positive correlation suggests that the capacity of staffs to implement poverty reduction projects is critical to success of those projects. However, quality of staffs does not seem to affect other project performance issues.

3.9.3.3 Demographic Characteristics of Beneficiaries and Project Performance

In order to explore whether significant associations existed between Demographic Characteristics of Beneficiaries and performance of projects, data for each of the variables were subjected to Pearson product moment correlation analysis. Relevant results are presented in table 3.8.

	Table 3.8 Correlation of Indicators of Demographic Characteristics of Beneficiaries																
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1	1																
2	.[a]	.[a]															
3	.677**	.[a]	1														
4	-.699**	.[a]	-.979**	1													
5	.468**	.[a]	.459**	-.629**	1												
6	.666**	.[a]	.844**	-.935**	.864**	1											
7	.768**	.[a]	.702**	-.618**	.016	.407**	1										
8	-.852**	.[a]	-.749**	.706**	-.225	-.560**	-.976**	1									
9	.792**	.[a]	.604**	-.721**	.846**	.853**	.499**	-.674**	1								
10	-.229	.[a]	-.077	.277	-.921**	-.600**	.289*	-.076	-.685**	1							
11	-.520**	.[a]	-.804**	.813**	-.481**	-.746**	-.488**	.551**	-.542**	.188	1						
12	.537**	.[a]	.764**	-.820**	.667**	.835**	.383**	-.492**	.666**	-.414**	-.972**	1					
13	.468**	.[a]	.796**	-.753**	.247	.600**	.572**	-.579**	.370**	.071	-.966**	.878**	1				
14	.468**	.[a]	.796**	-.753**	.247	.600**	.572**	-.579**	.370**	.071	-.966**	.878**	1.000**	1			
15	-.146	.[a]	-.379**	.415**	-.364**	-.435**	.001	.054	-.219	.242	.274	-.312*	-.214	-.214	1		
16	.411**	.[a]	-.001	.004	-.013	-.008	.379**	-.391**	.275	.014	-.052	.045	.057	.057	.714**	1	
17	-.311*	.[a]	-.330*	.326*	-.165	-.287*	-.289*	.310*	-.257	.041	.393**	-.374**	-.388**	-.388**	.291*	.083	1

a. Cannot be computed because at least one of the variables is constant. **. Correlation is significant at the 0.01 level (2-tailed).
*. Correlation is significant at the 0.05 level (2-tailed).
1. Male, 2.Female, 3.Age(18-30)yrs, 4.Age(31-40)yrs, 5. Age(41-50)yrs, 6. Age(Over 50)yrs, 7. Education(Primary), 8. Education(Secondary), 9. Education(College), 10. Education(University), 11. Income(0-25,000)pm, 12. Income (25,001-75,000)pm, 13. Income (75,001-150,000)pm, 14. Income (Over 150,00)pm, 15.Policy Marketing PPMP(Aggregate), 16.Project Performance(Other Issues) and 17.Performance of Projects(Index).

Source: Primary Data

Table 3.8 shows varied correlations among the various demographic variables. Performance of projects (index) (17) appears significantly (at 0.01 level) and positively correlated to Income (0-25,000)pm (11), with a correlation coefficient of 0.393. This implies that performance of a project has a lot of impact on the poorest beneficiaries who earn the lowest monthly income. Performance of projects(Index) is also significant (at 0.05 level) and positively correlated to Age(31-40)yrs, (4), with a correlation coefficient of 0.326 indicating that beneficiaries at this age bracket are key to project success. The significant positive correlation coefficient (0.310 at 0.05 level) of project performance (Index) with Education (Secondary)(8) may imply that those beneficiaries with highest education up to secondary school has a high impact on performance of a project. This is as expected since those who do not perform well to continue to university education are more likely to remain in the rural areas where these projects are being implemented.

3.9.4 Test of Homoscedasticity of the Data

Homoscedasticity (homogeneity of variance), assumes that the variances around the regression line are the same for all values of the independent variables. According to Hair et al(1998), homoscedasticity assumes that independent variable exhibits similar amounts of variance across the range of values for that dependent variable. However, a slight heteroscedasticity (divergence of variance) is said to have little effect on significance tests. Levene (1960) test for equality of variance was computed based on one-way Anova procedure to test for homoscedasticity. The dependent variable, Performance of poverty reduction projects, was tested against the key explanatory indicator, Policy Marketing (Aggregate). The intervening variables, namely quality of staffs and demography of beneficiaries (both Male and female) were also tested. Results are presented in table 3.9.

Table 3.9: Test of Homogeneity of Variances

	Performance of Project			
	Levene Statistic	df 1	df 2	Sig
Policy Marketing(Aggregate)	2.828	4	45	.036
Quality of Staffs	15.855	3	46	.000
Demography of Beneficiaries(Male)	.872	1	48	.355
Demography of Beneficiaries(Female)	.265	1	48	.609

Source: Primary Data

Table 3.9 indicates that demography of beneficiaries for both male and female have a Levene statistic with a p-value>0.05 hence not significant. This implies that the variances are homogeneous in these variables. However Policy marketing (aggregate) has a Levene p-value of .036 which is slightly significant since p<0.05. The Quality of staffs has a Levene statistic with a p-value<.05 implying it is significant. However, according to John(2015), the main assumptions underlying ANOVA in order of importance are; Random independent samples; Normality; and Homogeneity of variance. If data has passed the first two tests, the Levene's test does not invalidate the data. Raid Amin(2015), argues that if Levene test is significant, the use of non-parametric test, such as Kolmogorov-Smirnov, validates the data. In this study, the data have passed both the other tests and partially passed Levene test hence they are good for further analysis.

3.10 Data Analysis

This study applied mainly quantitative techniques to analyze the data. However, qualitative analysis was also done so as to organize raw data collected from the field. Since primary data corrected in raw form is not easy to interpret, they need cleaning, coding and analysis, Mugenda and Mugenda (2003). A similar task was carried out in this study.

In order to meet the study objectives, quantitative analysis was done comprising of both descriptive and inferential statistical procedures. The data was subjected to both descriptive and inferential analyses. Basic analysis of raw data was done using the Microsoft Excel spreadsheet software. The results of statistical data analysis were obtained using Statistical Package for Social Scientists (SPSS) software.

3.10.1 Descriptive Statistics

Descriptive statistics was used in order to explore the underlying features in the data. The data covered several aspects such as the response rate, geographical distribution of the study projects, profile of individual respondents, demographics and all response variables. The descriptive statistics of each variable and its indicators were used.

For each of the indicators of each variable, the mean score of the responses was calculated. Then the standard deviation of each indicator was also calculated and finally the Coefficient of Variation (CV) was calculated as a percentage so as to give an indication of how each of the responses varied and to simplify comparison of the relevant variations.

3.10.2 Inferential Statistical Procedures

The role of inferential statistics is to make inferences about a population, (Harper et al, 1977). This study performed inferential statistical tests to understand the relationships between various variables and to test the hypotheses postulated. Inferential statistical procedures were applied in order to reveal important aspects that could not be brought out by descriptive statistics. The data was subjected to simple and multiple and moderated hierarchical regression analysis.

Multiple regression analysis helps to predict the magnitude of the dependent variable based on the values for the independent variables. This was applied in analyzing the moderating effect of managerial qualities of staffs, demographic characteristics of beneficiaries between public marketing and project success. Moderated regression analysis supposes existence of moderator variable. Pearson Product Moment Correlation Coefficient(r) was computed to reveal the nature and strength variable relationships. The amount of variation in the dependent variable explained by moderating variables was measured using the coefficient of determination (R^2).

Hypothesis one (H1) which postulated that Public Policy Marketing practices will significantly influence performance of poverty reduction projects in the agricultural sector in central Kenya, was tested using multiple linear regression Model(1). The moderating effects, hypothesis two (H2) proposed that managerial qualities of project staffs have influence on the relationship between public policy marketing practices and performance of poverty reduction projects in the agricultural sector in central Kenya. Here a linear regression model (Model 2) was used. Model(3) also a multiple linear regression was used to test hypothesis three (H3) which sought to establish whether demographic characteristics of project target beneficiaries have influence on the relationship between public policy marketing practices and performance of poverty reduction projects in the agricultural sector in central Kenya. Finally, Hypothesis four (H4) sought to establish whether or not Public policy marketing practices, managerial qualities of project staffs and demographic characteristics of project target beneficiaries have joint influence on the performance of poverty reduction projects in the agricultural sector in Kenya. A linear regression model (4) was used here. Table 3.10 summarizes the objectives of the study, hypotheses that were tested and the theoretical models used together with analysis method and interpretation.

Table 3.10: Summary of Objectives, Hypotheses and Analytical Models

Objectives	**Hypotheses**	**Analysis Method**	**Analysis Method and Interpretation**
Objective (i): Determine the influence of public policy marketing practices on the performance of poverty reduction projects in the agricultural sector in Kenya.	Hypothesis:H1 Public policy marketing practices will significantly influence performance of poverty reduction projects in the agricultural sector in Kenya.	Regression model(Model1):Performance of Poverty Reduction Projects (PPRP)=a + β_i(Public policy marketing practices /8Ps) + error term PPRP=a+ $\beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \beta_5X_5 + \beta_6X_6 + \beta_7X_7 + \beta_8X_8 + \varepsilon_1$ Where; a=regression constant, $\beta_{1.....,}\beta_8$ are coefficients. X_1=Product characteristic X_2=Price X_3=Place X_4=Promotion X_5=Publics X_6=Partnership X_7=Policy Environment X_8=Purse Strings ε_1=Error	R^2 Pearson's product moment correlation (r) r=0 means there is no correlation between Project Success and Public policy marketing practices r<0 means there is negative correlation r>0 means there is positive correlation r>0.5 means there is strong correlation
Objective (ii): Assess the influence of managerial qualities of project staffs on the relationship between Public policy marketing practices and performance of poverty reduction projects in the agricultural sector in Kenya.	Hypothesis:H2 Managerial qualities of project staffs have influence on the relationship between public policy marketing practices and performance of poverty reduction projects in the agricultural sector in Kenya.	Regression model(Model2): Performance of Poverty Reduction Projects (PPRP) =a+ β_i(Managerial Qualities of staffs + Public policy marketing practices/8Ps)+ error term PPRP=a+ $\beta_9\overline{X_9}+ \beta_{10}\overline{X_{10}} + \varepsilon_2$ Where; a= regression intercept $\beta_{9,}\beta_{10}$ are coefficients $\overline{X_9}$= Mean Score of MQS $\overline{X_{10}}$= mean score of PPMP ε_2= Error term	R^2 Pearson's product moment correlation (r) --- r=0 means no influence of managerial qualities of project staffs-between public policy marketing practices and success of poverty reduction projects. r<0 means negative effect r>0 means positive effect r>0.5 means strong positive effect
Objective (iii): Investigate the influence of demographic characteristics of project target beneficiaries on the relationship between Public policy marketing practices and performance of poverty reduction projects in the agricultural sector in Kenya.	Hypothesis:H3 Demographic characteristics of project target beneficiaries have influence on the relationship between public policy marketing practices and performance of poverty reduction projects in the agricultural sector in Kenya.	Regression model(Model3): Performance of Poverty Reduction Projects (PPRP)= a+ β_i(PCPB: Gender, Age, Education, Income + Public policy marketing practices/8 Ps) +error term PPRP=a+$\beta_{11}\overline{X_{11}}+\beta_{12}\overline{X_{12}} +\varepsilon_3$ Where; $\overline{X_{11}}$=Mean score of PCPB $\overline{X_{12}}$ =Mean score of PPMP $\varepsilon_3 = Error\ term$	R^2 Pearson's product moment correlation (r) --- r=0 means no influence of demographic characteristics of target beneficiaries-between Public policy marketing practices and success of poverty reduction projects. r<0 means -ve effect r>0 means +ve effect r>0.5 means strong +ve effect

Objective (iv): Evaluate the joint influence of Public policy marketing practices, managerial qualities of project staffs and demographic characteristics of Project target beneficiaries on performance of poverty reduction projects in the agricultural sector in Kenya.	Hypothesis:H4 Public policy marketing practices, managerial qualities of project staffs and demographic characteristics of project target beneficiaries have joint influence on the performance of poverty reduction projects in the agricultural sector in Kenya.	Regression model(Model4): Performance of Poverty Reduction Projects (PPRP)= Public policy marketing practices/8Ps(PPMPP)+ Managerial Qualities of Staffs(MQS)+Demographic Characteristics of target beneficiaries(PCPB) + error term $PPRP=a+\beta_{13}\overline{X_{13}}+\beta_{14}\overline{X_{14}}+\beta_{15}\overline{X_{15}}+\varepsilon_4$ Where; a=regression constant(intercept) $\beta_{13.....}\beta_{15}$ are regression coefficients $\overline{X_{13}}$= Mean score of PPMPP $\overline{X_{14}}$= Mean score of MQS $\overline{X_{15}}$= Mean score of PCPB ε_4=Error term	R^2 Pearson's product moment correlation (r) ---------- r=0 means no joint influence of managerial qualities of Project staffs and demographic characteristics of Project target beneficiaries on the relationship between Public policy marketing practices and success of poverty reduction projects in Kenya. r<0 means negative effect r>0 means positive effect r>0.5 means strong positive effect

Source: Current Researcher

3.11 Chapter Summary

This chapter described the research methodology adopted (by the researcher) in the current study. The chapter explained the research philosophy, research design, population of the study, data collection instruments, reliability and validity of the data instruments. The chapter also showed the results of multicollinearity tests and gave an outline of how the study variables were operationalized. The study variables together with descriptive and inferential statistical data techniques were also outlined. The analytical models used for data analysis and hypotheses testing were also provided. In the next chapter, data analysis, findings and the interpretation of the results is presented.

CHAPTER FOUR
DATA ANALYSIS AND FINDINGS

4.1 Introduction

This chapter presents the results of data analysis and research findings together with the interpretation based on the research objectives and hypotheses of this study. The study aimed to determine the effect of public policy marketing practices on the performance of poverty reduction projects in the agricultural sector in central Kenya. The moderating effects of managerial qualities of project staffs and demographic characteristics of target beneficiaries were also examined. The response rate and various assumptions are described. The chapter also presents a summary of projects and profiles of key respondents. Relationships between the study variables and hypotheses test results are also discussed. A new conceptual framework based on the key findings of the study is presented.

4.2 Response Rate

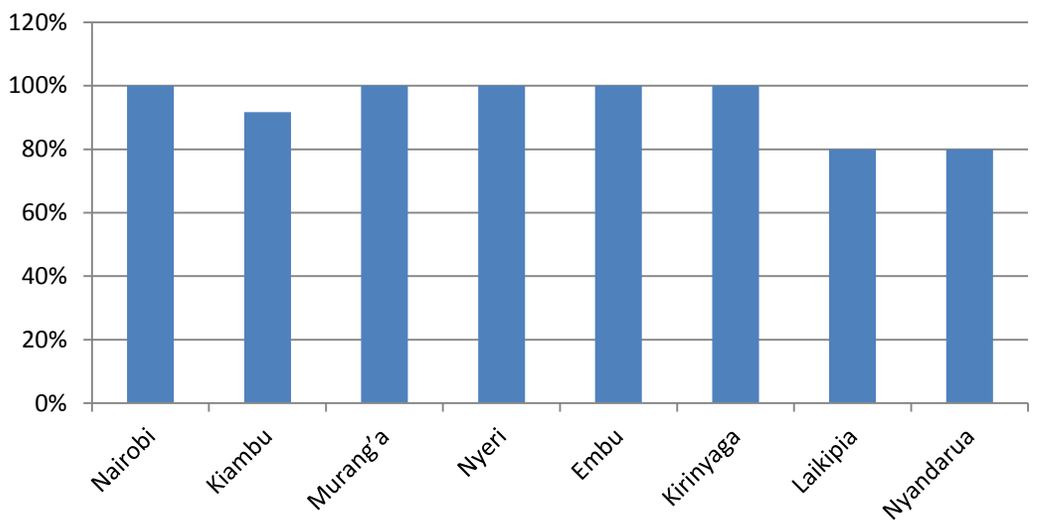
Data was collected coded and then cleaned to ensure consistency before analysis. Data was collected from the agricultural sector in central counties of Kenya. This is because the beneficiaries in this region have similar characteristics suitable for the study. Although Nairobi is mainly urban, Dagoretti sub-county which is included in Nairobi County is mainly rural with similar characteristics as the other counties in central Kenya and hence its inclusion in the study. The survey collected data from 53 projects but three questionnaires were found to have serious data gaps and were therefore left out of the analysis. Gaps considered not serious were filled based on projections from the other questionnaires by comparing what the common score was for a particular item in the other questionnaires. The scores in such cases were adopted for the missing data. Analysis was done on the remaining 50 projects representing a response rate of 94%. This was achieved through the support of the National Project Coordinator of ASDSP, County coordinators and other officials from the Ministry of Agriculture, Livestock and Fisheries (MoLF). Other national and county activities funded as part of a larger programme across several sectors, if relevant to this study were also included. The respondents were contacted and the questionnaire explained to them. Some respondents chose to give immediate responses while others asked for more time. In such cases the questionnaires were left and picked later. Pertinent results are shown in table 4.1.

Table 4.1: Response Rate

County	Number of Projects (N)	Projects included in the Analysis	Projects included in the Analysis (%)
Nairobi	5	5	100
Kiambu	12	11	92
Murang'a	10	10	100
Nyeri	6	6	100
Embu	5	5	100
Kirinyaga	5	5	100
Laikipia	5	4	80
Nyandarua	5	4	80
TOTAL	**53**	**50**	**94**

Source: Primary Data

Figure 4.1 Percentage of Geographical Distribution of Projects in the Study



Source: Primary Data

4.3 Geographical Distribution of the Study Projects

Studied projects were drawn from 8 counties within central Kenya as illustrated in table 4.1 and fig. 4.1. As shown in the two figures, Kĩambu County had the highest number of participating projects at 11 representing 92%. The questionnaire of one project had no data in the performance section and hence was not included in the analysis. Mũrang'a County hand 10 projects and all were analyzed representing 100%. Nyeri, Embu and Kĩrĩnyaga had 6, 5 and 5 respectively and 100% were analyzed. Laikipia and Nyandarua had 5 each and 4 were analyzed from each county representing 80% of each.

4.4 Profile of Individual Respondents

Identifiable characteristics relating to respondents included length of time in service within the civil service (years), designation, gender, and highest level of education attained at the time of the interview.

4.4.1 Respondents' Gender and Highest Level of Education

In the study, individual respondents were both male and female and had attained varied levels of education. The results are presented in table 4.2.

Table 4.2 Respondents' Highest Level of Education across Gender

Level of education	Male		Female		Total	
	N	%	N	%	N	%
Bachelors Degree	27	54	14	28	41	82
Masters degree	6	12	3	6	9	18
PhD degree	0	0	0	0	0	0
Total	**33**	**66**	**17**	**34**	**50**	**100**

Source: Primary Data

The result shows that out of the 50 respondents 33(66%) were male while 17(34%) were female. The education levels showed that 27(54%) male had a bachelor's degree while 14(28%) female had the same level of education. The master's degree was attained by 6(12%) male and 3(6%) of the female. None of the interviewed respondents had attained a doctor of philosophy degree or its equivalent. The results appear to be consistent with the Government policy that all project managers should have at least a bachelor's degree.

4.4.2 Respondents' length of service in the Civil Service

Respondents' length in civil service was profiled against gender as shown in Table 4.3.

Table 4.3 Respondents' Length of Service across Gender

Years in the Civil Service	Male		Female		Total	
0-5 years	5	10	3	6	8	16
6-10 years	11	22	6	12	17	34
11-20 years	12	24	3	6	15	30
Over 20 years	5	10	5	10	10	20
Total	**33**	**66**	**17**	**34**	**50**	**100**

Source: Primary Data

The length of service shows that 5(10%) of the male had under 5 years in the service while 11(22%) and 12(24%) hand 6-10 years and 11-20 years respectively. Those over 21 years of experience were 5(10%). Their female counterparts were 3(6%) under 5 years in the civil service while 6(12%) and 3(6%) had 6-10 years and 11-20 years respectively. The female respondents with over 21 years experience were also 5(10%). The results show that the respondents were well experienced and competent to give relevant information about their projects.

4.5 Descriptive Statistics of the Study Variables

The next section provides descriptive statistics for public policy marketing practices, managerial qualities of project staffs, demographic characteristics of target beneficiaries and performance of poverty reduction projects in the agricultural sector in central Kenya. In order to facilitate better data interpretation, the study adopted a scale of mean scores. If the mean score was greater than 4.50, then the respondents were considered to agree to a very large extent on a particular issue. A mean score of between 3.50 and 4.49 means that the respondents agree to a large extent; between 2.50 to 3.49 means they moderately agree; between 1.50 to 2.49 means they agree to a small extent while a means score of 0 to 1.45 means the respondents did not agree at all.

4.5.1 Public Policy Marketing Practices

According to Buurma (2001), public policy marketing practices practiced by a government comprise the process of planning and executing of policies the government applies to bring about marketing exchanges that can cause the social impact aimed for. Weinreich (2010) proposed 8Ps of social marketing namely, product, price, place, promotion, publics, partnership, policy environment and purse strings.

The meanings of the 8Ps as proposed by Weinreich (2010) were adopted in this study. The product means tangible products or services being offered by the project. Price refers to actual money or effort needed to be paid or offered by the target beneficiaries in order to obtain the product and/or services offered by the project. Place is the distribution channels used to distribute the actual product or method used to provide the services to beneficiaries. Promotion is the method used to promote products or services of the project while by publics is meant the external and internal groups directly involved in implementing the project. It also means the different audiences the project needs to address in order to succeed. Partnership refers to organizations within the project area with which partnerships have been formed. Policy environment is the situation in which the project/programme is operating and finally purse strings refer to the funds from donors, foundations, governmental grants or donations.

Questions of Public Policy Marketing Practices on the study instrument were designed on a 5-point rating scale where 5=strongly agree down to 1=strongly disagree. The questions asked on each of the 8Ps, the means score of the responses, the standard deviation and the Coefficient of Variation (CV) are next presented. The Coefficient of Variation (CV) is calculated as a percentage of mean score (Standard Deviation/ Mean Score) x 100.

4.5.1.1 Product Characteristics of Policy Marketing

The product characteristics refer to the quality or nature of the tangible products or services offered by the project. The respondents were asked the extent to which the products or services offered by the project met the needs of the beneficiaries. The statements posed to respondents and the analyses of their responses are presented in table 4.4.

Table 4.4: Responses for Product Characteristics

Product Characteristics	N	Mean Score	Standard Deviation	CV%
The project makes use of the latest design and state of the art technology in its products/services.	50	4.16	0.468	11.2
The project takes into consideration the usability/ease of use of the individual project' products and services.	50	4.36	0.485	11.1
The project takes into consideration the usefulness and value for money of the individual project products and services.	50	4.22	0.910	21.6
The project takes into consideration the need to deliver quality to target beneficiaries.	50	4.52	0.544	12.0
The project takes into consideration the need to maintain the brand image to target beneficiaries.	50	4.56	0.501	11.0
The project management regularly reviews the design and technology used in the projects' products/services.	50	4.12	0.718	17.4
The project management evaluates the usability/ease of use of the individual projects' products and services.	50	3.86	0.729	18.9
The project management assesses the usefulness and value for money of the individual projects' products and services.	50	4.32	0.471	10.9
The project management review quality and delivery systems of products and services to target beneficiaries.	50	4.26	0.565	13.3
The project management monitors and reviews the brand image to target beneficiaries.	50	4.2	0.700	16.7
Grand Mean Score		**4.26**	**0.314**	**7.37**

Source: Primary Data

The results in table 4.4 reveal a grand mean score of 4.26 and a Coefficient of Variation (CV=7.4%). This indicates that the respondents agree to a large extent that the characteristics of the products (whether tangible or a service) being offered by the project will have a major impact on the performance of a given project. The need for the project to take into consideration the importance of maintaining the brand image to target beneficiaries was rated highest with a mean score of 4.56. The lowest rating was 3.86 which are still high meaning that the respondents agreed to a large extent that the project management need to evaluate the usability/ease of use of the individual project products and services.

Adesope (2012) posits that a beneficiary of a project will adopt or not adopt a project based on the relative advantage of the new product. This means the degree to which a new product or service being introduced by the project is seen as better than the idea, programme, or product it purports to replace. The issue of whether the project takes into consideration the usefulness and value for money of the individual projects' products and services had the highest variation with a standard deviation of 0.910 and a coefficient of variation of (CV=21.6%). The need for project management to assess the usefulness and value for money of the individual projects' products and services had the lowest variation (CV=10.9%).

4.5.1.2 Price Dimension of Policy Marketing

The product price is the actual money, or if the project has no product to sell directly, the effort the beneficiary needs to pay/give to get the product and/or services offered by the project. The respondents were asked to indicate the suitability of the pricing of the products or services offered by the project. The statements posed to respondents and the analysis of their responses is presented in table 4.5.

As depicted in table 4.5 the analysis yielded a grand mean of 4.28 and a coefficient of variation (CV=6.5%). This implies that the respondents agree to a large extent that the pricing of the products (whether tangible or a service) being offered by the project is critical to the success of a given project. It is generally agreed in economic literature that the poor are very price sensitive. Any small change in price will have a big impact on the sales of the products or services. To a very large extent therefore, a project will succeed or fail based on the pricing structure of its products. The need for project staffs to review the price of products/services in order to enhance affordability by target beneficiaries was rated highest with a mean score of 4.58.The issue of whether the project considers the need to combine products and services together with special offers and special promotions to make prices appear attractive was rated the lowest but still high at 3.96. All the ratings were above this indicating that the respondents agree to a large extent that the pricing is important for project performance.

Table 4.5: Responses for Price

Price	N	Mean Score	Standard Deviation	CV %
The project has priced its products in a way to enhance affordability by target beneficiaries.	50	4.10	0.580	14.2
The project has priced its products in a way to enhance the perception of quality by target beneficiaries.	50	4.34	0.626	14.4
The project considers the need to change the terms and conditions of sale so as to spread the payment over a series of periods.	50	4.34	0.626	14.4
The project considers the need to combine products and services together with special offers and special promotions to make prices appear attractive.	50	3.96	0.807	20.4
The project is open to the need for revising the prices, if necessary, to remain competitive, to survive and thrive in a fast-changing marketplace.	50	4.30	0.614	14.3
The project staffs review the price of products/services in order to enhance affordability by target beneficiaries.	50	4.58	0.499	10.9
The project staffs review the price of products/services in order to enhance perception of quality by target beneficiaries.	50	4.34	0.557	12.8
The project staffs reconsider the terms and conditions of sale so as to spread the payment over a series of periods.	50	4.12	0.328	8.0
The project staffs review the need to combine products and services together with special offers and special promotions to make prices appear attractive.	50	4.48	0.614	13.7
The project staffs revise the prices, if necessary, to remain competitive, to survive and thrive in a fast-changing marketplace.	50	4.28	0.573	13.4
Grand Mean Score		**4.28**	**0.277**	**6.50**

Source: Primary Data

Smith (2000) asserts that selling is necessary whether dealing with a tangible product such as soap or intangible products like school choice initiatives. The need to consider combining products and services together with special offers and special promotions to make prices appear attractive in addition to being rated the lowest had also the highest Standard Deviation(SD) of 0.807 and still the highest CV=20.4%. In addition, whether the project staffs reconsiders the terms and conditions of sale so as to spread the payment over a series of periods, this had the lowest CV of only 8% and a mean score of 4.12 implying that the respondents agreed to a large extent on this issue.

4.5.1.3 Distribution (Place) Dimension of Policy Marketing

Place refers to the distribution channels used to deliver the actual product or method used to provide the services to beneficiaries. The respondents were asked to respond to various issues touching on the distribution of the products of their projects. The questions asked to the respondents and the analysis of their responses is presented in table 4.6.

Table 4.6: Responses for Place

Place	N	Mean Score	Standard Deviation	CV %
The project staffs have entered into strategic alliances with profit making firms to distribute the products to target beneficiaries.	50	4.52	0.580	12.8
The project staffs has entered into strategic alliances with NGOs to distribute the products to target beneficiaries.	50	4.10	0.544	13.3
The project staffs have entered into strategic alliances with Community Based Organizations (CBO) to distribute the products to target beneficiaries.	50	4.54	0.542	11.9
The project staffs have entered into strategic alliances with local administration (chiefs and village elders) to distribute the products/ services to target beneficiaries.	50	4.50	0.614	13.7
The project uses technological inventions, such as cell phones, Mpesa, to facilitate the access to and payments for project products.	50	4.50	0.544	12.1
Project staffs constantly seek strategic alliances with profit making firms to distribute products to target beneficiaries.	50	4.24	0.687	16.2
The project staffs actively seek strategic alliances with NGOs to distribute the products to target beneficiaries.	50	4.30	0.814	18.9
The project staffs actively seek strategic alliances with Community Based Organizations (CBO) to distribute the products to target beneficiaries.	50	4.32	0.713	16.5
The project staffs actively seek strategic alliances with local administration to distribute the products/ services to target beneficiaries.	50	4.54	0.542	11.9
The project staffs actively seek to use technological inventions, eg cell phones, Mpesa, to facilitate access to/and payments for project products.	50	4.56	0.577	12.7
Grand Mean Score		**4.41**	**0.460**	**10.4**

Source: Primary Data

Table 4.6 reveals the distribution of products and services scored a grand mean of 4.41 and a coefficient of variation (CV=10.4%). This shows that respondents agree to a large extent that distribution of products (whether tangible or a service) offered by the project has a major impact on a given project. On whether project staffs actively seek to use technological inventions, such as cell phones, electronic money transfer services, for example Mpesa, to facilitate access to/and payments for the project's products was rated highest(mean score=4.56). Issue of whether project staffs have entered into strategic alliances with Non-Government Organizations (NGOs) to distribute the products to target beneficiaries was least rated but still high at 4.10.

Yasmin (2013) says that successful projects in addition to meeting their set objectives also ensure the products are delivered and maintained on schedule. On whether the project staffs have entered into strategic alliances with Community Based Organizations (CBO) to distribute the products to target beneficiaries; and whether the project staffs actively seek strategic alliances with local administration to distribute the products/ services to target beneficiaries was both rated at 4.54 and had the least CV of 11.9% and a SD of 0.542. The respondents therefore agreed to a very large extent on this issue.

4.5.1.4 Promotion Dimension of Policy Marketing

By promotion it is meant the method used to persuade the target beneficiaries to buy products or services or to adopt social products being offered by the project. This promotion can take many forms such as awareness creation, advertisement, public meetings (barazas) and any other method that may be applied. Several issues were put to the respondents and their responses together with some analysis are presented in table 4.7.

Table 4.7: Responses for Promotion

Promotion	N	Mean Score	Standard Deviation	CV %
The project invests in mass media advertisement of its products/services.	50	4.00	1.030	25.8
The project invests in a sales force for direct selling of its products/ services.	50	4.30	0.580	13.5
The project uses special offers to market the products/services.	50	4.30	0.505	11.7
The project use gifts to market products/services	50	3.94	1.058	26.8
The project allows user testing in marketing the products/services.	50	4.36	0.776	17.8
The project staffs use mass media to advertise the products/services.	50	4.28	0.701	16.4
The project staffs use sales force for direct selling of the products/ services	50	4.40	0.495	11.2
The project staffs use special offers to market the products/services.	50	4.04	0.947	23.4
The project staffs use gifts to market products/services.	50	3.90	1.093	28.0
The project staffs allow users to test the products/services.	50	4.42	0.609	13.8
Grand Mean Score		**4.19**	**0.623**	**14.8**

Source: Primary Data

Smith (2000) asserts that Promotion is necessary. As social product such a policy reform idea or a tangible product like a bar of soap cannot be expected to walk off the shelf by itself without marketing. Table 4.7 suggests that promotion had a rating with a grand mean of 4.19, overall SD 0.623 and a coefficient of variation (CV=14.8%). This implies that the respondents agree to a large extent that promotion of the project's products is likely to have a positive effect on the performance of the project. On whether the project staffs allows users to test the products/services had the highest rating of 4.42 (SD=0.609, CV=13.8%). The issue of whether the project staffs use gifts to market products/services had the lowest rating of 3.90. All the ratings show the respondents agree on all the promotion issues to a large extent.

4.5.1.5 Publics Dimension of Policy Marketing

Publics are the internal and external groups involved in the implementation of the project. It also means different audiences the project needs to address in order to succeed. Respondents were asked to indicate the extent to which they agree with the way the publics of the project were being managed. The responses are presented in table 4.8

Table 4.8: Responses for Publics

Publics	N	Mean Score	Standard Deviation	CV %
The project has put in place procedures for addressing the internal groups involved in the project.	50	4.58	0.538	11.7
The project has put in place procedures for addressing the external groups involved in the project.	50	4.50	0.614	13.7
The project has made efforts to identify key audiences/stakeholders to be addressed.	50	4.14	0.535	12.9
The project actively involves the internal groups involved in the project.	50	4.26	0.487	11.4
The project actively involves the external groups involved in the project.	50	4.20	0.571	13.6
The project staffs constantly address the internal groups involved in the project.	50	4.36	0.485	11.1
The project staffs constantly addressthe external groups involved in the project.	50	4.06	0.470	11.6
The project staffs constantly identify key audiences/ stakeholders to be addressed.	50	4.26	0.487	11.4
The project staffs actively involve the internal groups involved in the project.	50	4.26	0.487	11.4
The project staffs actively involve the external groups involved in the project.	50	4.12	0.422	10.2
Grand Mean Score		**4.30**	**0.346**	**8.1**

Source: Primary Data

Table 4.8 reveals respondents agreement to a large extent with the importance of publics in the performance of projects with a mean score rating of 4.30(S.D. = 0.346; CV=8.1%). The need for the project to put in place procedures for addressing the internal groups involved in the project was rated the highest at 4.58 mean score hence the respondents agreed to a very large extent on this issue. The mean scores of all other issues were above 4.00 indicating an agreement to a large extent on all the issues.

Weinreich (2010) argues that publics are important for project success. The Kenya Constitution 2010 requires public participation in the design and implementation of all public policy. The result reveals that the projects staffs appear to have a general agreement with this principle of public participation. This may be deduced from the results since all the means score are high and the CV is low at 8.1%.

4.5.1.6 Partnerships Dimension of Policy Marketing

By Partnerships is meant organizations within the project area with which partnerships have been formed. These partnerships, if formed, enhance the performance of the project. For example the performance of a micro loans project can be enhanced by forming partnerships with local financial institutions. Table 4.9 depicts responses from respondents.

Table 4.9: Responses for Partnerships

Partnerships	N	Mean Score	Standard Deviation	CV %
The project has close collaboration with private firms such as financial institutions.	50	4.44	0.705	15.9
The project has the support of the local community	50	4.48	0.677	15.1
The project has close collaboration with community-based organizations (CBOs).	50	4.44	0.577	13.0
The project has close collaboration with International Development Organizations such as World Bank, IMF, WHO, FAO etc.	50	4.20	0.67	16.0
The project has the support of the local administration such as the police force and the chief.	50	4.52	0.54	12.0
The project staffs seek close collaboration with private firms such as financial institutions.	50	4.28	0.5	11.6
The project staffs seek the support of the local community	50	4.36	0.525	12.0
The project staffs seek close collaboration with community-based organizations (CBOs).	50	4.24	0.476	11.2
The project staffs seek close collaboration with International Development Organizations such as Work Bank, WHO, FAO.	50	4.08	0.488	12.0
The project staffs havethe support of the local administration such as the police force and the chief.	50	4.28	0.501	11.7
Grand Mean Score		**4.3**	**0.36**	**8.2**

Source: Primary Data

Table 4.9 reveals respondents agreement to a large extent with the importance of forming partnerships to enhance project performance. On whether the project has the support of the local administration such as the police force and the chief, the respondents were in agreement to a very large extent with a mean score of 4.52(CV=12%). This is not surprising since the local administrators are government employees as well as the respondents. As in publics the mean scores of all the issues was above 4.00 indicating an agreement to a large extent on all the issues of partnerships.

Cross and Brohmann (2015), assert that identifying appropriate stakeholders is critical for introducing appropriate projects in appropriate contexts. The result reveals that the project staffs appear to have a general agreement with the principle of forming partnerships. This may be deduced from the results since all the mean scores are high and the CV is low at 8.2%.

4.5.1.7 Policy Environment Dimension of Policy Marketing

Policy environment is the governmental governance conditions in which the project/programme is operating. This is important because if the governance climate is not supportive, the project has little chance of succeeding. Respondents were asked to indicate the agreement or otherwise with a set of statements. The results are reported in table 4.10.

Table 4.10 shows respondents agree to a large extent that the policy situation in which the project operates is important for project performance (Mean Score=4.36; CV=7.4%). The very low standard deviation of 0.32 and a low CV of 7.4% imply a general consensus on these issues. On whether Stakeholders' participation, consensus, co-operation, commitment and ownership in the policy process exist, was rated highly and all respondents appear to agree to a large extent on this issue.

Table 4.10: Responses for Policy Environment

Policy Environment	N	Mean Score	Standard Deviation	CV %
The project operates in a situation where proactive policy analysis process exists.	50	4.50	0.580	12.9
There is availability of adequate, accurate and timely information during the policy formulation process.	50	4.32	0.513	11.9
A policy marketing system exists.	50	4.50	0.580	12.9
The key actors have the capacity to understand policies.	50	4.30	0.763	17.7
Stakeholders' participation, consensus, co-operation, commitment and ownership in the policy process exist.	50	4.62	0.490	10.6
The project staffs operate in a situation where proactive policy analysis process exists and is encouraged.	50	4.16	0.370	8.9
The project staffs have access to adequate, accurate and timely information during the Policy Formulation process.	50	4.08	0.340	8.3
The project staffs are actively involved in a policy marketing system.	50	4.42	0.499	11.3
The key project staffs has the capacity to understand policies.	50	4.32	0.471	10.9
The project staffs and Stakeholders get involved, participate in consensus, co-operate, are committed and feel ownership in the policy process.	50	4.38	0.494	11.3
Grand Mean Score		**4.36**	**0.32**	**7.4**

Source: Primary Data

Viswanathan et al (2012) say that the general policy environment in which pro-poor projects operate is characterized by pervasive interdependence among people. The result reveals that although the respondents had agreement to a large extent, they appear to have doubts on whether the project staffs have access to adequate, accurate and timely information during the policy formulation process since this was the lowest rating on this issue at (MS=4.08) and had also the lowest coefficient of variation(CV=8.3%).

4.5.1.8 Purse Strings Dimension of Policy Marketing

Purse Strings refer to funds from donors, foundations, governmental grants or donations. The funding levels a project has will make or break the implementation of the project and will largely impact on its performance. The respondents were requested to indicate whether or not they agreed with the following set of statements. Results are indicated in table 4.11.

Table 4.11: Responses for Purse Strings

Purse Strings	N	Mean Score	Standard Deviation	CV %
The project has received adequate financial support from the sponsoring ministry.	50	3.34	1.479	44.3
The project has received skilled and qualified staffs from the sponsoring ministry.	50	4.32	0.551	12.8
The project has received vehicles and transport support from the sponsoring ministry.	50	3.88	0.872	22.5
The project has received adequate office space, furniture and computers support from the sponsoring ministry.	50	3.98	0.915	23.0
The project staffs constantly seek adequate financial support from the sponsoring ministry.	50	4.28	0.497	11.6
The key skilled and qualified staffs from the sponsoring ministry are in place.	50	4.44	0.541	12.2
The project always receives vehicles and transport support from the sponsoring ministry.	50	3.92	0.877	22.4
The project always receives adequate office space, furniture and computers support from the sponsoring ministry.	50	3.92	0.900	23.0
Grand Mean Score		**4.01**	**0.423**	**10.6**

Source: Primary Data

Table 4.11 shows that the purse string issue is one of the lowest rated at 4.01(CV=10.6%). The highest mean score of 4.44(CV=12.2%) indicate that the respondents agree to a large extent that the key skilled and qualified staffs from the sponsoring ministry are in place. However, the lowest score of 3.34(CV=44.3%) seems to indicate that the projects do not received adequate financial support from the sponsoring ministry. This is followed by the next lowest rating of 3.88(CV=22.5%) suggesting that projects do not receive adequate vehicles and transport support from the sponsoring ministry.

Weinreich (2010) argues that in most cases, organizations involved in social marketing programmes are funded by foundations, grants from governments or donations. The result reveals that the projects staffs appear to have a general agreement that the projects have good and qualified staffs but lack adequate financial support from the sponsors of the projects.

4.5.1.9 Summary of Descriptive Statistics for Public Policy Marketing Practices

The results of the aggregate scores of public policy marketing practices together with the various dimensions (8Ps) are summarized in table 4.12**.**

Table 4.12: Summary of Descriptive Statistics for Public Policy Marketing Practices

	N	Mean Score	Standard Deviation	CV %
Product Characteristics	50	4.26	0.314	7.37
Price	50	4.28	0.277	6.50
Place	50	4.41	0.460	10.4
Promotion	50	4.19	0.623	14.8
Publics	50	4.30	0.346	8.1
Partnerships	50	4.30	0.36	8.2
Policy Environment	50	4.36	0.32	7.4
Purse Strings	50	4.01	0.423	10.6
Aggregate Policy Marketing Mean Score	**50**	**4.20**	**0.243**	**0.1**

Source: Primary Data

Results indicate that the aggregate mean score of public policy marketing practices is 4.20(CV=0.1%) implying respondents agree to a large extent that policy marketing is important for success of poverty projects. The near zero CV indicates almost unanimity among the respondents on this issue. Policy environment was rated the highest with a mean score of 4.36(CV=7.4%) while purse strings had lowest rating of 4.01(CV=7.4).

4.5.2 Managerial Qualities of Project Staffs (MQS)

Managerial Qualities of Project Staffs (MQS) had five indicators. First, the Technical skills, which means the skills of staffs managing the project in terms of education, training and experience. Second, is the Marketing skill which means specific ability of staffs to market the projects. Third, Management skills which mean the capacity to manage the projects. Fourth, proven ability to use participative techniques in managing projects; and fifth the extent to which the project managers are supported by senior policy makers. Respondents were asked to indicate their agreement or otherwise with the following managerial statements. Table 4.13 displays the questions and some analysis of the results.

Table 4.13: Managerial Qualities of Project Staffs (MQS)

Managerial Qualities of Project Staffs (MQS)	N	Mean Score	Standard Deviation	CV %
The project staffs have adequate technical skills.	50	4.30	0.505	11.7
The project staffs have adequate marketing skills.	50	4.30	0.544	12.7
The project staffs have adequate management skills.	50	4.30	0.544	12.7
The project staffs use participative style of management.	50	4.22	0.679	16.1
The project has a lot of support from senior policy makers.	50	4.28	0.497	11.6
The project staffs demonstrate adequate technical skills.	50	4.46	0.734	16.5
The marketing skills of the project staffs are evident.	50	4.28	0.784	18.3
It is easy to notice management skills of the project staffs.	50	4.36	0.693	15.9
Participative style of management is always used by the project staffs.	50	4.32	0.513	11.9
Senior policy makers enthusiastically support the project staffs.	50	4.08	0.851	20.9
Grand Mean Score		**4.29**	**0.495**	**12.0**

Source: Primary Data

The results reported in table 4.13 reveal a grand mean score of 4.29(CV=12%) and very low SD of 0.5 indicating that the respondents agree to a large extent on the indicators of project staffs managerial skills. The issue of project staffs demonstrating adequate technical skills was the highest rated at 4.46(CV=16.5%) while senior policy makers enthusiastically supporting the project staffs was rated the least at a mean score of 4.08(CV=21%. This seems to suggest that although adequate project staffs with requisite technical skills are in place, support from senior policy makers appears lacking or inadequate at best.

Thieme et al (2003) posits that project staffs with strong technical, marketing, and management skills, who believe in participative style of management, are more likely to succeed in implementing poverty reduction projects. However although the right human resource is a necessary condition for success of projects, it is not sufficient. Government support and allocation of adequate resources are necessary factors that increase the probability of success of poverty reduction projects.

4.5.3 Demographic Characteristics of Target Beneficiaries (DCTB)

The Demographic Characteristics of Target Beneficiaries (DCTB) comprised four dimensions namely, gender, age, education levels and income bracket of the beneficiaries. Respondents were first requested to give an estimate of the percentage of each gender (male and female) of target beneficiaries for each project. Second, they were then asked to estimate the percentage of project beneficiaries in each of the age categories (18-30 years; 31-40 years; 41-50 years; and 51 years & above). Third, the respondents were then requested to estimate the percentage of beneficiaries who had attained each level of education (Primary; Secondary; Tertiary/College; and University). Finally, they were requested to estimate the percentage of beneficiaries in each bracket of monthly income (Kenya shillings 0-25,000; 26,000-75,000;76,000-150,000; and 151,000 and above). To compare the magnitude of each category, relative frequencies(RF) were computed for each indicator. Table 4.14 presents the results of the respondents' responses and analysis.

According to Adeoti (2009) demographic characteristics of target beneficiaries namely age, gender, level of education and income are important factors influencing adoption of poverty reduction policy by target beneficiaries.

Table 4.14 Demographic Characteristics of Target Beneficiaries (DCTB) (Percent for each Category)

Indicator	Demographic category	N	Mean Score	Standard Deviation	RF %
Gender	Male	50	0.45	0.066	44.6
	Female	50	0.55	0.066	55.4
Age in Years	18-30 years	50	0.14	0.201	13.6
	31-40 years	50	0.66	0.313	65.8
	41-50 years	50	0.15	0.076	14.8
	51 years and above	50	0.06	0.104	5.8
Highest Level of Education	Primary	50	0.42	0.114	8.3
	Secondary	50	4.44	0.075	87.3
	Tertiary/College	50	0.14	0.065	2.8
	University	50	0.08	0.061	1.6
Income Bracket (Kenya shillings)	0-25,000	50	0.78	0.283	78.4
	26,000-75,000	50	0.09	0.119	9.2
	76,000-150,000	50	0.08	0.110	8.0
	151,000 and above	50	0.04	0.071	4.4
	Grand Mean Score		**0.58**	**1.139**	

Source: Primary Data

RF=Relative Frequency of a category for each indicator

Table 4.14 suggests that female beneficiaries were slightly more representing 55% compared to 45% of male beneficiaries. About 66% of beneficiaries were between the age 31-40 years but over 80% were between 31-50 years. This means most of the target beneficiaries were in their middle ages. On education over 87 percent of beneficiaries had attained up to secondary school education implying a high level of literacy among the beneficiaries. The results also reveal that most of the beneficiaries (over 78%) earned below 25,000 Kenya shilling a month. This appears to be consistent with the general objective of the poverty projects whose aim was to focus on the beneficiaries who are at the lowest bracket of income.

4.5.4 Performance of Poverty Reduction Projects

Performance of Poverty Reduction Projects refers to the extent to which a given project has achieved its stated objectives. Performance was assessed based on performance indexes of its stated objectives and also using a scale rating. Respondents were asked to list project objectives in order of their priority/importance as stated in the project document. The two key objectives were listed from which a performance index was calculated based on the achievement of each objective. Other performance issues were assessed using a scale rating. The results are reported in table 4.15.

Table 4.15: Performance of Poverty Reduction Projects

	Performance	N	Mean Score	Standard Deviation	CV %
Project's stated objectives/activities in order of importance(OPI)	Objective Performance Index 1	50	0.91	0.232	25.5
	Objective Performance Index 2	50	0.96	0.234	24.5
Other project performance Issues	The project operated (is operating) within the allocated budget and did/does not need extra funds.	50	3.40	1.195	35.2
	The project was completed (will be completed) within the expected time frame	50	3.30	1.147	34.8
	The products/services offered to the beneficiaries of the project were of very high quality.	50	2.86	1.525	53.3
	Number of target beneficiaries reached each project year was/is as per target.	50	4.42	0.642	14.5
	Income levels of beneficiaries increased/will increase significantly after the project.	50	4.00	0.286	7.1

	The level of education of beneficiaries increased/will increase significantly after the project.	50	4.16	0.422	10.1
	Health status of beneficiaries increased/will increase significantly after the project	50	4.16	0.468	11.2
	Food and nutritional status of beneficiaries increased/will increase significantly after the project.	50	4.12	0.435	10.6
	Grand Mean Score		**3.229**	**1.3016**	**40.31**

Source: Primary Data

OPI: Objective Performance Index

The results reveal that the overall mean score was 3.2(CV=40.3%) implying that the respondents had moderate agreement on the performance of projects. Performance index for objectives 1 had a mean score of 0.91(CV=25.5) while Objective performance index 2 had a mean score of 0.96(CV=24.5). This suggested that the performance indexes of the projects were nearly equal. The question of whether the number of target beneficiaries reached each project year was as per target was rated the highest at mean scores of 4.42(CV=14.5). The lowest rated issue was whether the products/services offered to the beneficiaries of the project were of very high quality with a mean score of 2.86 and had also the highest CV of 53.3. This seemed to suggest that there was moderate agreement among the respondents on this issue.

According to Greene (1990) a good project should have a prioritized list of objectives with well-defined benchmarks and timelines. One way of measuring performance of projects is to gauge the perception of project staffs on what they feel the project has achieved, Gondi (2005). The moderate overall mean score of 3.2 and a high CV of 40.3 imply that the project staffs perceive the performance of their projects as only moderate.

4.5.5 Summary of the Study Variables

This study was based on the interrelationships between four variables namely, public policy marketing practices, managerial qualities of staffs, demographic characteristics of target

beneficiaries and performance of projects. The summarized descriptive statistics of the pertinent study variables is presented in table 4.16.

Table 4.16: Summary of the Descriptive Statistics of the Study Variables

	N	Mean Score	Standard Deviation	CV %
Policy Marketing Practices(Aggregate)	50	4.20	0.243	0.1
Managerial Qualities of Project Staffs	50	4.29	0.495	12.0
Demographic Characteristics of Target Beneficiaries	50	0.58	1.139	x
Performance of Poverty reduction Projects	50	3.23	1.3016	40.31

Source: Primary Data

X-The CV was not calculated here since the measure was based on Relative Frequency (RF)

The findings presented in table 4.16 suggest that Managerial Quality of Staffs had the highest mean score at 4.29(12%) implying that the respondents agreed to a large extent that Managerial Quality of Staffs is important for better performance of projects. The second highest mean score came from public policy marketing with a mean score of 4.20(CV=0.1%). This suggests that respondents agreed to a large extent that policy marketing is important for better performance of poverty projects. The nearly zero CV seem to imply that there was a near unanimity that policy marketing is critical to performance of poverty reduction projects at least in central Kenya. The performance of poverty reduction projects with a mean score of 3.23(CV=40.3%) came third which means that the respondents also agreed moderately on this issue of how the projects were performing. However the high coefficient of variance (CV) at 40.3% suggests there were varied views on the issue. The aggregate score of Demographic Characteristics of Target Beneficiaries had the least mean score of 0.58. This has no CV since the measure was based on Relative Frequency (RF). The very low mean score suggest there were major differences in the views given by respondents about this issue.

4.6. Regression Analyses and Tests of Hypotheses

This section reports the results of testing hypothesis using inferential statistical analyses, and the interpretations of relationships. The current study was based on the premise that public policy marketing practices influences performance of poverty reduction projects.

However, this influence is moderated by managerial qualities of staffs and demographic characteristics of target beneficiaries. In order to test the respective hypotheses, simple and multiple linear regression analyses were conducted at 95 percent confidence level (ά=0.05). Because measuring of Public Policy Marketing Practices (PPMP), Managerial Qualities of Staffs (MQS), Demographic Characteristics of Target Beneficiaries (DCTB) and Performance of Poverty Reduction Projects (PPRP) was done using more than one measure, each performance indicator was regressed against each dimension of independent and moderating variables using simple regression analysis. Thereafter, aggregate mean scores for performance were regressed against each dimension of Public Policy Marketing Practices, Managerial Qualities of Staffs (MQS) and Demographic Characteristics of Target Beneficiaries as well as against aggregate mean scores of Public Policy Marketing Practices. To evaluate the contribution of each construct in the independent and moderating variables, simple and multiple regression analysis was carried out. The summarized results are presented in the following subsections.

4.6.1 Project Performance (Index) predicted by Public Policy Marketing (Aggregate)

Objective one of the study was to determine the influence of Public Policy Marketing practices on the performance of poverty reduction projects in the agricultural sector in central Kenya.

Hypothesis H_1 postulated that;
Public policy marketing practices will significantly influence performance of poverty reduction projects in the agricultural sector in central Kenya.

The Regression model (Model 1) was formulated as follows;

Performance of Poverty Reduction Projects (PPRP)=a+β_i(Public Policy Marketing Practices /8Ps) + error term

$$PPRP = a + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \beta_5X_5 + \beta_6X_6 + \beta_7X_7 + \beta_8X_8 + \varepsilon_1$$

Where; a = regression constant, $\beta_{1.....,}\beta_8$ are coefficients.

X_1=Product characteristic	X_5=Publics
X_2=Price	X_6=Partnership
X_3=Place	X_7=Policy Environment
X_4=Promotion	X_8=Purse Strings
	ε_1=Error

4.6.2 Simple Regression: Project Performance (Index) predicted by Public Policy Marketing Practices (Aggregate)

To test H_1 and evaluate influence of Policy Marketing on Performance of Projects, a simple regression analysis was carried out. The results are presented in table 4.17.

Table 4.17: Simple Regression: Project Performance (Index) predicted by Public Policy Marketing Practices (Aggregate Score)

(a) The Goodness-of-Fit				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.291	0.084	0.065	0.21680
a. Predictors: (Constant), Policy Marketing(Aggregate)				

(b) The Overall Significance						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	0.208	1	0.208	4.429	0.041
	Residual	2.256	48	0.047		
	Total	2.464	49			
a. Predictors: (Constant), Policy Marketing(Aggregate)						
b. Dependent Variable: Performance of Projects(Index)						

(c) The Individual Significance						
		Unstandardized Coefficients		Standardized Coefficients		
Model		B	Std. Error	Beta	t	Sig.
1	(Constant)	-0.392	0.636		-0.616	0.541
	Policy Marketing(Aggregate)	0.314	0.149	0.291	2.104	0.041
a. Dependent Variable: Performance of Projects(Index)						

Source: Primary Data

The simple regression results of Performance of Projects (Index) predicted by Public Policy Marketing Practices (Aggregate Score) shows R^2 of 0.084. This implies that the aggregated indicator of Policy Marketing Practices explain 8.4% of the variation of the Performance of Projects when the Performance Index is considered. Further, the results also reveal a statistically significant positive linear relationship between Policy marketing (Aggregate) and Performance of Projects (Index) (beta 0.314, p-value=0.041**).** The significance p-value is less than the significance level (ά=0.05), which indicates that the

results are statistically significant. This implies that aggregate Public Policy Marketing practices will significantly influence performance of poverty reduction projects in the agricultural sector in central Kenya. This indicates that hypothesis H_1 is not rejected.

The equation extracted from the analysis becomes as follows;

Performance of Poverty Reduction Projects (PPRP)=a + β_i(Public Policy Marketing Practices /8Ps) + error term

Or PPRP(Index) = -0.392 + 0.314PPMP(Aggregate)

The significant positive slope (β= 0.314) implies that there is a positive correlation between the policy marketing and project performance. This implies that increased and improved policy marketing practices would result in increased outcomes of performance of poverty reduction projects hence reducing poverty.

Table 4.18: Project Performance (Other Issues) Predicted by Public Policy Marketing (Aggregate)

(a) The Goodness-of-Fit				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.714	0.510	0.500	0.20205
a. Predictors: (Constant), Policy Marketing(Aggregate)				

(b) The Overall Significance						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2.041	1	2.041	50.003	0.000
	Residual	1.960	48	0.041		
	Total	4.001	49			
a. Predictors: (Constant), Policy Marketing(Aggregate)						
b. Dependent Variable: Performance of Projects(Other Issues)						

(c) The Individual Significance						
		Unstandardized Coefficients		Standardized Coefficients		
Model		B	Std. Error	Beta	t	Sig.
1	(Constant)	0.045	0.592		0.075	0.940
	Policy Marketing(Aggregate)	0.985	0.139	0.714	7.071	0.000
a. Dependent Variable: Performance of Projects(Other Issues)						

Source: Primary Data

Table 4.18 shows that when Public Policy Marketing practices (Aggregate Score) was used to predict other project performance issues, the results improved (R^2 =0.510). This indicates that the aggregated indicator of Public Policy Marketing practices explains 51% of the variation. The results also show a statistically significant positive linear relationship (β=0.985 and p-value=0.000**).** This implies that aggregate Public Policy Marketing practices will significantly influence performance of poverty reduction projects in the agricultural sector in Kenya. As indicated in the previous section hypothesis H_1 is supported.

The equation extracted from the analysis becomes as follows;

Performance of Poverty Reduction Projects (PPRP)=a + β_i(Public Policy Marketing Practices /8Ps) + error term

Or PPRP(Other Issues) = 0.045 + 0.985 PPMP(Aggregate)

The significant positive slope (β= 0.985) implies that there is a high positive correlation between the policy marketing and project performance. This implies that increased and improved policy marketing practices would result in increased outcomes of performance of poverty reduction projects hence reducing poverty.

4.6.3 Multiple Regression: Project Performance (Index) predicted by various indicators of Policy Marketing Practices

To evaluate influence of the various indicators of policy marketing, multiple regression analyses were carried out on each of the 8Ps. The results are presented in table 4.19 below.

Table 4.19: Project Performance (Index) predicted by various indicators of Policy Marketing Practices.

	R	R^2	Sig (p)	Constant	B	S.E.	β beta	t
Product	0.178	0.032	0.216	0.164	0.237	0.2230	0.178	1.254
Price	0.451	0.204	0.001	3.132	-0.499	0.2022	-0.451	-3.503
Place	0.343	0.117	0.015	0.138	0.175	0.2129	0.343	2.527
Promotion	0.529	0.280	0.000	0.272	0.157	0.1923	0.529	4.318
Publics	0.192	0.037	0.181	1.488	-0.124	0.2224	-0.192	-1.357
Partnerships	0.091	0.008	0.530	0.622	0.072	0.2256	0.091	0.633
Policy Environment	0.147	.022	0.309	0.459	0.109	0.2241	0.147	1.029
Purse Strings	0.060	0.004	0.678	0.843	0.843	0.2262	0.060	0.418

Source: Primary Data

Based on the results reported in table 4.19, Promotion appears to have the highest $R^2$of 0.280 meaning it explains 28% of the variation between project performance and marketing. Price explains 20.4% ($R^2 = 0.204$) while the other indicators have low explanatory power with Place, Publics, Product, Policy Environment having $R^2 = 0.117$; 0.037; 0.032; 0.022 respectively. Purse strings had the lowest of 0.004 implying it explains less than 1% of the variation.

Significance results shows that out of the 8Ps only three are significant namely Price (p=0.001), Place (0.015) and Promotion (p=0.000). The other Ps are not significant at the 95% level (ά=0.05). This seems to indicate that only Price, Place and Promotion will have a significant impact on the performance of poverty projects.

The βs of both Promotion (0.529) and Place (0.343) are positive indicating there is positive correlation between these two indicators and the performance of poverty projects. The significant positive slope (β= 0.529 p= 0.000) of Promotion implies that there is a positive correlation between the Promotion and Project performance. This implies that Promotion efforts (in form of awareness creation, advertisements of the products and services offered by the project) is likely to significantly increase performance outcomes of poverty reduction projects resulting in reduced poverty. This suggests that implementers of poverty projects need to focus on promotion (creating awareness) of the products and services the project is offering.

Further the significant positive slope (β= 0.343 p=0.015) of Place (distribution of the products and services offered by the project) implies that there is a positive correlation between the Place and Project performance. This implies that efforts to distribute the products and services offered by the project to ensure easy access will significantly increase outcomes of performance of poverty reduction projects resulting in reduced poverty. This further suggests that the implementers of projects should also focus on distribution of the products and services offered by the project to ensure that these products and services reach the target beneficiaries in a way that is most convenient to them.

The significant negative slope (β= -0.451 p=0.001) of Price implies that there is a negative (inverse) correlation between the Price and Project performance. This implies that increased effort both in cash and/or in kind that beneficiaries have to pay to get the project's products or services would result in decreased outcomes of performance of poverty reduction projects

hence the higher the price the less poverty is reduced. This supports the general theory of the inverse relationship between a normal good and its price. Implementers of poverty projects need therefore to ensure that the price beneficiaries have to pay is as low as possible.

4.6.4 Multiple Regression: Project Performance (Other Issues) predicted by Product characteristics

To evaluate influence of the various indicators of policy marketing, a multiple regression analysis was carried out on each of the 8Ps. The results are presented in table 4.20.

Table 4.20: Project Performance (Other Issues) predicted by various indicators of Policy Marketing Practices.

	R	R^2	Sig (p)	Constant	B	S.E.	β beta	t
Product	0.032	0.001	0.828	4.388	-0.037	0.2886	-0.032	-0.219
Price	0.012	0.000	0.933	4.304	-0.017	0.2887	-0.012	-0.085
Place	0.161	0.026	0.265	3.746	0.105	0.2850	0.161	1.128
Promotion	0.547	0.299	0.000	3.343	0.207	0.2417	0.547	4.528
Publics	0.451	0.203	0.001	2.604	0.371	0.2577	0.451	3.498
Partnerships	0.250	0.063	0.080	3.099	0.253	0.2795	0.250	1.791
Policy Environment	0.463	0.214	0.001	2.280	0.438	0.2559	0.463	3.616
Purse Strings	0.802	0.643	0.000	2.515	0.545	0.1725	0.802	9.302

Source: Primary Data

The regression results of Performance of Projects (Other Issues) predicted by Product characteristics show a low $R^2$of 0.001. This implies that the Product characteristic explain only 0.1% of the variation of the performance of projects when Project Performance (Other Issues) is considered. Further, the results reveal a negative linear relationship statistically not significant between Product characteristics and Performance of Projects (Other Issues) (beta -0.032, p-value=0.828). This might imply that Product characteristics do not appear to significantly influence performance of poverty reduction projects in the agricultural sector in central Kenya. The negative slope (β= -0.032) further implies that there is a negative correlation between the Product characteristics and Project performance. In addition Price (beta -0.012, p-value=0.933), Place(beta 0.161, p-value=0.265) and Partnerships(beta 0.250, p-value=0.080) also appear to reveal a linear relationship that is not statistically significant when other issues of project performance are regressed with these indicators.

However results show the other four indicators, Promotion ($R^2 = 0.299$, β=0.547, p-value=0.000); Publics ($R^2 = 0.203$, β=0.451, p-value=0.001); Policy Environment (R^2 =0.214, β=0.463, p-value=0.001) and Purse Strings ($R^2 = 0.643$, β=0.802, p-value=0.000) explain much higher proportions of variation and have strong statistically significant positive linear relationships when regressed with other project performance issues. This implies that Promotion efforts (in form of awareness creation, advertisements of products and services offered by the project) will significantly increase outcomes of performance of poverty reduction projects resulting in reduced poverty.

Further positive results indicates that Publics (in form of external and internal groups involved in the project) appear to significantly influence performance of poverty reduction projects when regressed with other performance issues. The positive slope (β= 0.451) implies that there is a positive correlation between the Publics and Project performance. This indicates that Publics appear to significantly increase outcomes of performance of poverty reduction projects.

When Policy Environment is regressed with other issues of project performance, the positive slope (β= 0.463) implies a positive correlation between the Policy Environment and Project performance. This indicates that Policy Environment (Policy environment in which the project/programme is operating) appear to significantly influence performance of projects in the agricultural sector in central Kenya and is therefore likely to increase outcomes of performance of poverty reduction projects.

The Purse Strings (Funds from donors, foundations, governmental grants or donations) also appear to significantly influence performance of poverty reduction projects in the agricultural sector in central Kenya. The positive slope (β= 0.802) indicates a strong positive correlation between the Purse Strings and Project performance. This indicates a positive impact on the outcomes of performance of poverty reduction projects.

4.6.5 Multiple Regression: Project Performance (Index) predicted by Mean Score of MQS and Policy Marketing (Aggregate)

Objective two of the study set to assess the influence of Managerial Qualities of project Staffs on the relationship between Public Policy Marketing Practices and performance of poverty reduction projects in the agricultural sector in central Kenya.

Hypothesis H_2 postulated that;

Managerial qualities of project staffs have influence on the relationship between public policy marketing practices and performance of poverty reduction projects in the agricultural sector in central Kenya.

The regression model was as follows;

Performance of Poverty Reduction Projects (PPRP) = a + β_i(Managerial Qualities of Staffs + Public Policy Marketing Practices/8Ps) + error term

$$PPRP = a + \beta_9\overline{X_9} + \beta_{10}\overline{X_{10}} + \varepsilon_2$$

Where; a = regression intercept, β_9, β_{10} are coefficients
$\overline{X_9}$ = Mean score of MQS
$\overline{X_{10}}$ = Mean score of PPMP
ε_2 = Error term

To evaluate influence of Publics on performance of projects using performance index, simple and stepwise multiple regression analyses were carried out. Simple regression results are presented in table 4.21.

Table 4.21: Project Performance (Index) predicted by Mean Score of MQS and Policy Marketing (Aggregate)

(a) The Goodness-of-Fit				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.574	0.329	0.300	0.18757
a. Predictors: (Constant), Quality of Staffs, Policy Marketing(Aggregate)				

(b) The Overall Significance						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	0.811	2	0.405	11.519	0.000
	Residual	1.654	47	0.035		
	Total	2.464	49			
a. Predictors: (Constant), Quality of Staffs, Policy Marketing(Aggregate)						
b. Dependent Variable: Performance of Projects(Index)						

(c) The Individual Significance						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-0.625	0.553		-1.130	0.264
	Policy Marketing(Aggregate)	0.087	0.140	0.081	0.621	0.538
	Quality of Staffs	0.269	0.065	0.537	4.138	0.000
a. Dependent Variable: Performance of Projects(Index)						

Source: Primary Data

The regression results of Performance of Projects (Index) predicted by Mean Score of MQS and Policy Marketing (Aggregate) shows an $R^2$of 0.329. This implies that both these variables explain 32.9% of the variation of the performance of projects when the Performance (Index) is considered. Further, the results also reveal a statistically significant linear relationship between these two variables and Performance of Projects (Index) (β (beta) 0.269 and 0.087p-value=0.000). Since Significance Value (p=0.000) is less than the significance level (ά=0.05), this indicates that the results are statistically significant. This implies that Managerial Qualities of Staffs jointly with the aggregate of Policy Marketing will significantly influence performance of poverty reduction projects in the agricultural sector in Central Kenya. Hence H2 is supported.

The equation extracted from the analysis becomes as follows;

Performance of Poverty Reduction Projects (PPRP) = a + β_i(Managerial Qualities of Staffs + Public policy marketing practices/8Ps) + error term

$PPRP = a + \beta_9\overline{X_9} + \beta_{10}\overline{X_{10}} + \varepsilon_2$

Or PPRP(Index) = -0.625 + 0.269 MQS + 0.087 PPMP

The positive slopes (β= 0.269 and 0.087) implies a positive correlation between the Managerial Qualities of Staffs, Public Policy Marketing Practices and Project performance. This implies that Managerial Qualities of Staffs and Public Policy Marketing Practices jointly significantly increase outcomes of performance of poverty reduction projects.

4.6.6 Multiple Regression: Project Performance (Other Issues) predicted by Mean Score of MQS and Policy Marketing (Aggregate)

To evaluate influence of Publics on performance of projects using other performance issues, simple and stepwise multiple regression analyses were carried out. Simple regression results are presented in table 4.22.

Table 4.22: Project Performance (Other Issues) predicted by Mean Score of MQS and Policy Marketing (Aggregate)

(a) The Goodness-of-Fit				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.814	0.663	0.649	0.16931
a. Predictors: (Constant), Quality of Staffs, Policy Marketing(Aggregate)				

(b) The Overall Significance						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2.653	2	1.327	46.280	0.000
	Residual	1.347	47	0.029		
	Total	4.001	49			
a. Predictors: (Constant), Quality of Staffs, Policy Marketing(Aggregate)						
b. Dependent Variable: Performance of Projects(Other Issues)						

(c) The Individual Significance						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	0.279	0.499		0.560	0.578
	Policy Marketing(Aggregate)	1.214	0.127	0.880	9.573	0.000
	Quality of Staffs	-0.271	0.059	-0.425	-4.621	0.000
a. Dependent Variable: Performance of Projects(Other Issues)						

Source: Primary Data

The regression results of Performance of Projects (Other Issues) predicted by mean score of MQS and Policy Marketing (Aggregate) shows an R^2 of 0.663. This implies that both these variables explain 66.3% of the variation of the performance of projects when the Performance (Other Issues) is considered. Further, the results also reveal a statistically significant linear relationship between these two variables and Performance of Projects (Other Issues) (β = -0.271and 1.214 p-value=0.000). Since significance value (p=0.000) is less than the significance level (ά=0.05), this indicates that the results are statistically significant. This implies that Managerial Qualities of Staffs jointly with the aggregate of Policy Marketing will significantly influence performance of poverty reduction projects in the agricultural sector in central Kenya. However since MQS has a negative (β (beta) -0.271), this implies that Managerial Qualities of Staffs have a negative impact on performance of projects when the Performance (Other Issues) is considered.

The equation extracted from the analysis becomes as follows;
Performance of Poverty Reduction Projects (PPRP) = a + β_i(Managerial Qualities of Staffs + Public Policy Marketing Practices/8Ps) + error term

$$PPRP = a + \beta_9\overline{X_9} + \beta_{10}\overline{X_{10}} + \varepsilon_2$$

Or PPRP(Other Issues) = 0.279 - 0.271 MQS + 1.214 PPMP (aggregate)

The positive slope (β=1.214) implies that there is a positive correlation between Public Policy Marketing Practices and Project performance. This implies that Public Policy Marketing practices significantly increase outcomes of performance of poverty reduction projects. However the negative slope (β= -0.271) for Managerial Qualities of Staffs indicates that this variable may have a negative impact on the project performance. This may be explained by the fact that, low quality staffs will negatively impact performance of projects.

4.6.7 Multiple Regression: Project Performance (Index) predicted by Mean Score of DCPB and Policy Marketing (Aggregate)

Objective three of the study had sought to investigate the influence of demographic characteristics of project target beneficiaries on the relationship between Public Policy Marketing Practices and performance of poverty reduction projects in the agricultural sector in central Kenya.

Hypothesis H3 stated that;

Demographic characteristics of project target beneficiaries have influence on the relationship between Public Policy Marketing Practices and performance of poverty reduction projects in the agricultural sector in central Kenya.

Regression model (Model 3) was formulated as below;

Performance of Poverty Reduction Projects(PPRP) = a + β_i(DCPB: Gender, Age, Education, Income) + Public Policy Marketing Practices/8 Ps) + error term

$$PPRP = a + \beta_{11}\overline{X_{11}} + \beta_{12}\overline{X_{12}} + \varepsilon_3$$

Where;

$\overline{X_{11}}$ = Mean score of DCPB
$\overline{X_{12}}$ = Mean score of PPMP
$\varepsilon_3 = Error\ term$

4.6.8 Project Performance (Index) predicted by Mean score of DCPB and Policy Marketing (Aggregate)

To investigate the influence of demographic characteristics of project target beneficiaries on the relationship between Public Policy Marketing Practices and performance (using performance index) of poverty reduction projects in the agricultural sector in central Kenya, multiple regressions were performed regressing the performance index with all the demographic indicators of the beneficiaries at the same time. The results are presented in table 4.23. The results were computed from estimates provided by respondents in Part 3 of the questionnaire. The estimates were taken as the mean scores which indicated the perception of project staffs.

Table 4.23: Project Performance (Index) predicted by Mean score of DCPB and Policy Marketing (Aggregate)

	R	R^2	Sig (p)	B	S.E.	β (beta)	t
Mean score of DCPB and Policy Marketing (Aggregate)	0.495	0.245	0.049	0.0226	0.208		
Constant			0.759	0.226	0.735		-0.308
Male			0.643	-0.709	1.518	-0.143	-0.467
Age (18-30)yrs			0.217	0.475	.379	0.446	1.254
Age (41-50)yrs			0.771	-0.353	1.206	-0.071	-0.293
Education (Primary)			0.535	-0.781	1.249	-0.228	-0.625
Income(75,001-150,000)pm			0.050	-1.706	0.845	-0.461	-2.018
Policy Marketing(Aggregate)			0.054	0.340	0.172	-.315	1.978

Source: Primary Data

Table 4.23 results shows that when performance index is regressed with demographic characteristics of beneficiaries, out of 14 indicators (Male, Female, Age1(18-30)yrs, Age2(31-40)yrs, Age3(41-50)yrs, Age4(Over 51)yrs, EduPr, EduSec, EduColle, EduUni, Income1(0-25,000)pm, Income2(25,001-75,000)yrs, Income3(75,001-150,000)yrs and Income4(150,001 and above), only 5 indicators (Male, Age1, Age3, EduPr, Income3) were entered into the model. The results returned an R^2 of 0.245. This implies that the included variables explain 24.5% of the variation of the performance of projects when the Performance (Index) is considered. However, only income (75,001-150,000)pm that appears significant(β= -0.461 p-value=0.050). The other variables are not statistically significant (all p-values >0.05). This may imply that only income level of beneficiaries will significantly influence performance of poverty reduction projects in the agricultural sector in central Kenya.

The equation extracted from the analysis becomes as follows;

Performance of Poverty Reduction Projects (PPRP) = a + β_i(DCPB: Gender, Age, Education, Income) + Public Policy Marketing Practices/8 Ps)+error term

$PPRP = a + \beta_{11}\overline{X_{11}} + \beta_{12}\overline{X_{12}} + \varepsilon_3$

PPRP = 0.226 - 0.709Male + 0.475Age (18-30)yrs - 0.353Age (41-50)yrs
- 0.781Education (Primary) - 1.706Income(75,001-150,000)pm
+ 0.340Policy Marketing(Aggregate)

The negative βs (slopes) implies that there is a negative correlation between the Performance of Poverty Reduction Projects and those variables with negative betas (Male, Age(41-50)yrs, Education(Primary) and Income(75,001-150,000)pm.

Each of the 14 indicators was then regressed individually with the project performance index. The results of the output are summarized in table 4.24.

As the results in table 4.24 show, when each of the 14 indicators is regressed individually with the project performance index, only one category of Education(University)(p=0.776) and one category of Age(41-50)yrs (p=0.251) was found not to be statistically significant since their p-values were more than the α=0.05. All the other indicators were found to be statistically significant since all their p-values are less than α=0.05. The direction of the betas varies from one category of indicators to the other implying each category influences the performance of projects differently.

Table 4.24: Project Performance (Index) predicted separately by each of the Indicators of Demography (DCPB) and Policy Marketing (Aggregate)

	R	R^2	Sig (p)	Constant	B	S.E.	β (beta)	t
Male	0.311	0.097	0.028	1.602	-1.54	0.678	-0.31	-2.265
Female								
Age (18-30)yrs	0.330	0.109	0.019	0.975	-0.35	0.145	-0.33	-2.418
Age (31-40)yrs	0.326	0.106	0.021	0.718	0.29	0.120	0.33	2.389
Age (41-50)yrs	0.165	0.027	0.251	1.037	-0.83	0.710	-0.17	-1.162
Age (51 and over)yrs	0.287	0.082	0.044	0.971	-2.94	1.418	-0.29	-2.072
Education (Primary)	0.289	0.083	0.042	1.421	-0.99	0.474	-0.29	-2.090
Education (Sec)	0.310	0.096	0.028	0.648	0.83	0.368	0.31	2.260
Education (College)	0.257	0.066	0.071	1.174	-2.01	1.092	-0.26	-1.844
Education (Uni)	0.041	0.002	0.776	0.880	1.31	4.574	0.04	0.286
Income(0-25,000)pm	0.393	0.154	0.005	0.454	0.54	0.181	0.39	2.957
Income(25,001-75,000)pm	0.374	0.140	0.008	0.988	-0.95	0.339	-0.37	-2.792
Income(75,001-150,000)pm	0.388	0.150	0.005	0.987	-1.44	0.209	-0.39	-2.915
Income(150,001 and above)pm	0.388	0.150	0.005	0.987	-4.31	1.477	-0.39	-2.915
Policy Marketing(Aggregate)	0.291	0.084	0.041	-0.392	0.31	0.149	0.29	2.104

Source: Primary Data

This study identified four key indicators of demographic characteristics of target beneficiaries namely, gender, age, education and income. Except one category each in age and education that were not statistically significant, all other indicators were significant. Hence we conclude that the four key indicators significantly influence project performance. This study therefore supports Hypothesis H_3 that demographic characteristics of project target beneficiaries have influence on the relationship between Public Policy Marketing Practices and performance of poverty reduction projects in the agricultural sector in central Kenya.

4.6.9 Project Performance (Index) predicted by Mean Score of MQS and Mean score of DCPB

Objective four of the study had set to assess the joint influence of public policy marketing practices, managerial qualities of project staffs and demographic characteristics of project target beneficiaries on performance of poverty reduction projects in the agricultural sector in central Kenya.

Hypothesis H_4 postulated that:

Public policy marketing practices, managerial qualities of project staffs and demographic characteristics of project target beneficiaries have joint influence on the performance of poverty reduction projects in the agricultural sector in central Kenya.

The regression model was formulated as follows;

Performance of Poverty Reduction Projects (PPRP) = Public Policy Marketing practices/8Ps(PPMP) + Managerial Qualities of Staffs(MQS) + Demographic Characteristics of Target Beneficiaries(PCPB) + error term

$$PPRP = a + \beta_{13}\overline{X_{13}} + \beta_{14}\overline{X_{14}} + \beta_{15}\overline{X_{15}} + \varepsilon_4$$

Where;

a = regression constant (intercept) $\beta_{13.....,}\beta_{15}$ are regression coefficients

$\overline{X_{13}}$ = Mean score of PPMP
$\overline{X_{14}}$ = Mean score of MQS
$\overline{X_{15}}$ = Mean score of DCPB
ε_4 = Error term

To evaluate the joint influence of Public Policy Marketing Practices, Managerial Qualities of project staffs and Demographic Characteristics of Project Target Beneficiaries on performance (using performance index) of poverty reduction projects in the agricultural sector in central Kenya, multiple regressions were done. Performance index was the dependent variable while predictors were the aggregate score of public policy marketing practices, the mean score of managerial qualities of project staffs and scores of all the 14 indicators of demographic characteristics of project target beneficiaries. The results are presented in table 4.25.

Table 4.25: Project Performance (Index) predicted by policy marketing practices, Mean Score of MQS and Mean score of DCPB

(a) The Goodness-of-Fit				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.615	0.378	0.274	0.19104
a. Predictors: (Constant), Beneficiary Income(Over 150,000)pm, Beneficiary Education(University), Policy Marketing(Aggregate), Quality of Staffs, Beneficiary Education(Secondary), Beneficiary (Male), Beneficiary Age(18-30)yrs				

(b) The Overall Significance						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	0.931	7	0.133	3.646	0.004
	Residual	1.533	42	0.036		
	Total	2.464	49			
a. Predictors: (Constant), Beneficiary Income(Over 150,000)pm, Beneficiary Education(University), Policy Marketing(Aggregate), Quality of Staffs, Beneficiary Education(Secondary), Beneficiary (Male), Beneficiary Age(18-30)yrs						
b. Dependent Variable: Performance of Projects(Index)						

(c) The Individual Significance						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-0.990	1.288		-0.769	0.446
	Policy Marketing(Aggregate)	0.095	0.178	0.087	0.531	0.598
	Quality of Staffs	0.250	0.084	0.500	2.994	0.005
	Beneficiary (Male)	0.609	1.462	0.123	0.417	0.679
	Beneficiary Age(18-30)yrs	0.172	0.324	0.162	0.531	0.598
	Beneficiary Education(Sec)	0.279	0.867	0.104	0.323	0.749
	Beneficiary Education(Univ)	1.571	4.839	0.050	0.325	0.747
	Beneficiary Income(Over 150,000)pm	-3.582	2.386	-0.323	-1.501	0.141
a. Dependent Variable: Performance of Projects(Index)						

Source: Primary Data

The results in Table 4.25 show that when Project Performance (Index) is predicted jointly by the aggregate policy marketing practices, the mean score of quality of staffs and demographic characteristics of beneficiaries, both Policy Marketing(Aggregate) and Quality of Staffs are entered into the analysis. However out of 14 indicators of demographic characteristics only five Male, Age(18-30)years, Education(Secondary), Education(University) and Income(over 150,000)pm, Quality of Staffs) were entered into the model. The rest were excluded in the analysis.

The equation extracted from the analysis becomes as follows;

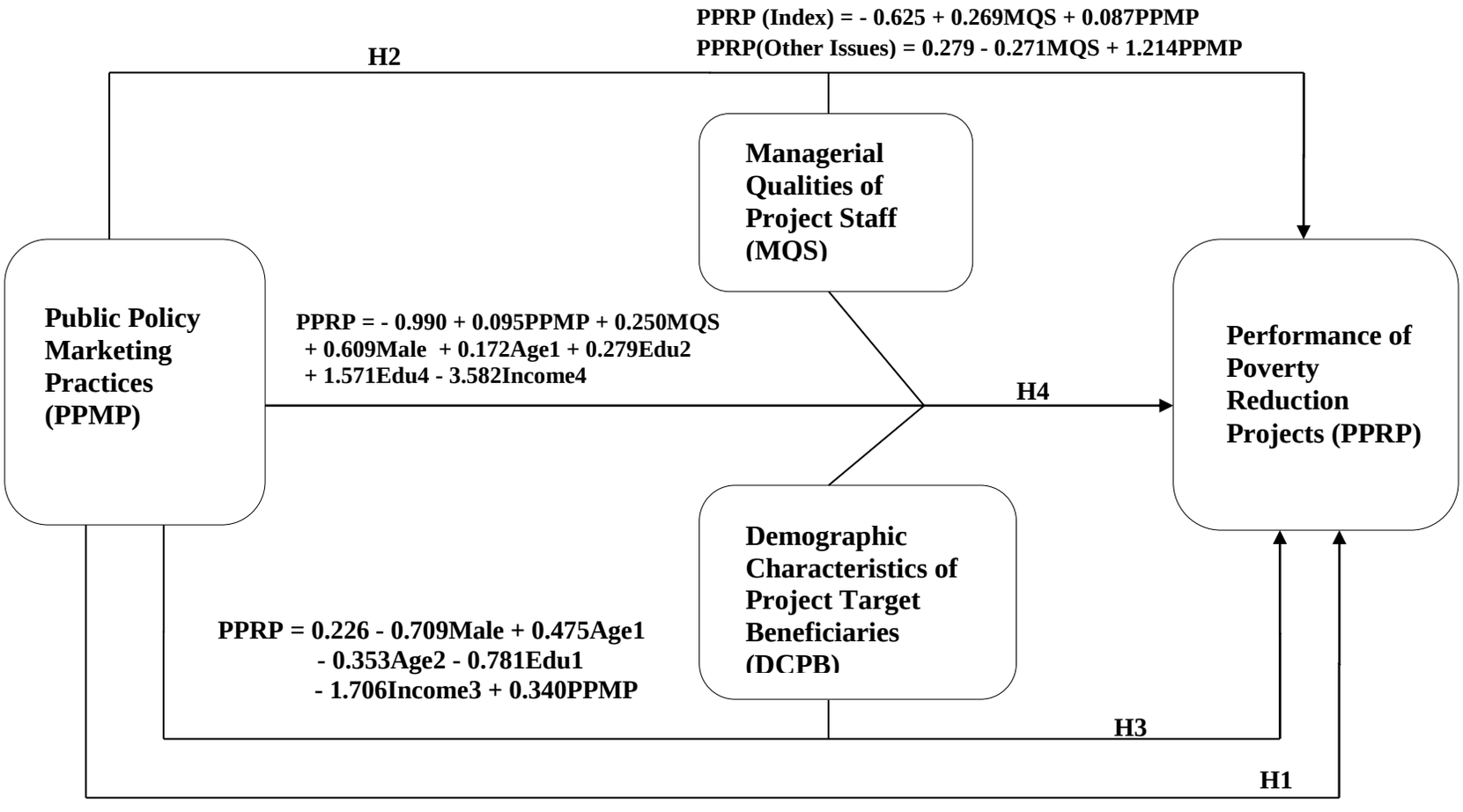
Performance of Poverty Reduction Projects (PPRP) = Public Policy Marketing Practices/8Ps(PPMP) + Managerial Qualities of Staffs(MQS) + Demographic Characteristics of Target Beneficiaries(PCPB) + error term

$$PPRP = a + \beta_{13}\overline{X_{13}} + \beta_{14}\overline{X_{14}} + \beta_{15}\overline{X_{15}} + \varepsilon_4$$

PPRP = - 0.990 + 0.095Policy Marketing(Aggregate) + 0.250Quality of Staffs + 0.609Male + 0.172Age (18-30) yrs + 0.279Education (Secondary) + 1.571Education (University) -3.582Income(Over 150,000)pm

The individual variables show that only Quality of Staffs appears statistically significant (β=0.500 P=0.005) while the other variables entered in the model appear not significant (all p-values >0.05) at the 5% level. However, the overall results return an R^2 of 0.378. This implies that these variables explain 37.8% of the variation of the performance of projects when the Performance (Index) is considered. The model is also statistically significant at the 5% level (p-value=0.004). The study therefore supports H4 that Public Policy Marketing Practices, Managerial Qualities of project staffs and Demographic Characteristics of project Target Beneficiaries have joint influence on the performance of poverty reduction projects in the agricultural sector in central Kenya.

Figure 4.2: Revised Conceptual Model and Summary of Hypotheses Results



Source: Current Researcher

PPRP (Index) = - 0.392 + 0.314PPMP
PPRP (Other Issues) = 0.045 + 0.985PPMP

4.7. Chapter Summary

Figure 4.2 illustrates the new conceptual framework based on the research findings as well as the results of hypotheses. The summary indicates that Public Policy Marketing Practices (PPMP) have a statistically significant effect on the Performance of Poverty Reduction Projects (PPRP) when evaluated individually. The moderating effect of Managerial Qualities of Project Staffs (MQS) on the relationship between Public Policy Marketing Practices and Performance of Poverty Reduction Projects is also statistically significant. It is further shown that the moderating effect of Demographic Characteristics of Project Target Beneficiaries (DCPB) on the relationship between Public Policy Marketing Practices and Performance of Poverty Reduction Projects is also statistically significant. The joint effect of Managerial Qualities of Project Staffs and Demographic Characteristics of Project Target Beneficiaries on the relationship between Public Policy Marketing Practices and Performance of Poverty Reduction Projects is also shown to be statistically significant.

Thus the conceptual framework and the hypothesis test results ascertains hypothesized relationships that: Public Policy Marketing Practices will significantly influence performance of poverty reduction projects in the agricultural sector in central Kenya; Managerial Qualities of project staffs have influence on the relationship between Public Policy Marketing Practices and performance of poverty reduction projects in the agricultural sector in central Kenya. Demographic Characteristics of project Target Beneficiaries have influence on the relationship between Public Policy Marketing Practices and performance of poverty reduction projects in the agricultural sector in central Kenya; Public policy marketing practices, managerial qualities of project staffs and personal characteristics of project target beneficiaries have joint influence on the performance of poverty reduction projects in the agricultural sector in central Kenya. The next chapter discusses the above results as articulated here.

CHAPTER FIVE
DISCUSSION OF THE STUDY RESULTS

5.1 Introduction

In this chapter, discussions of the results of this study are presented. The study aimed to determine the influence of Public Policy Marketing Practices on the performance of poverty reduction projects in the agricultural sector in central Kenya. It also set to assess the influence of Managerial Qualities of project staffs, the influence of Demographic Characteristics of Target Beneficiaries and their joint effect on the relationship between Public Policy Marketing Practices and performance of these projects.

Public Policy Marketing Practices was evaluated using the 8Ps indicators, namely product, price, place, promotion, publics, partnership, policy environment and purse strings. Performance of Poverty Reduction Projects was evaluated using two indicators including project performance index and other performance issues. The moderating effects of Managerial Qualities of Project Staffs was evaluated as a mean score of its five indicators namely technical skills, marketing skills, management skills, Use of participative style and support from senior policy makers. The moderating effect of demographic characteristics of target beneficiaries was tested using its four indicators of gender, age, education and income levels.

The results are discussed to show whether they support previous studies done in this area. The chapter discusses the convergence and divergent aspects of the conceptual issues advanced in this study. The chapter also points out whether the findings agreed with the assumptions advanced by the key theories that formed the foundation of this study. Finally the chapter ends by proposing the implications of the study to theory, policy and practice.

5.2 Results and Discussion

The key objective of the study was to determine the influence of public policy marketing practices on the performance of poverty reduction projects in the agricultural sector in central Kenya. To achieve this key objective, four objectives were specified and their corresponding hypotheses, stated positively were tested.

It was observed that public policy marketing practices will significantly influence performance of poverty reduction projects in the agricultural sector in central Kenya (R^2=0.084; β=0.291 p-value=0.041). Hypothesis H_1 was accepted and hence objective one was achieved. Equally, Hypothesis H_2 that managerial qualities of project staffs have an influence on the relationship between public policy marketing practices and performance of poverty reduction projects in the agricultural sector in Kenya was supported (R^2=0.329; β=0.537 p-value=0.000). Hence objective 2 was also achieved. Similarly, H_3 that demographic characteristics of project target beneficiaries have influence on the relationship between public policy marketing practices and performance of poverty reduction projects in the agricultural sector in central Kenya was also supported (R^2=0.245; β= -0.461 p-value=0.050). This also shows Objective 3 was achieved. Finally, H_4 which postulated that public policy marketing practices, managerial qualities of project staffs and demographic characteristics of project target beneficiaries have joint influence on the performance of poverty reduction projects in the agricultural sector in central Kenya was also supported (R^2=0.378; β=0.250 p-value=0.004). Again objective 4 of this study was achieved. The sections that follow provide a highlight of the key discussions based on the results organized according to the objectives of the study.

5.2.1 Public Policy Marketing Practices and Performance of Poverty Reduction Projects

To achieve objective one of this study, hypothesis H_1 was tested. It stated that public policy marketing practices will significantly influence performance of poverty reduction projects in the agricultural sector in central Kenya. The aim of objective one was to determine the influence of public policy marketing practices on the performance of poverty reduction projects in the agricultural sector in central Kenya.

Several authors opined that marketing of a policy is important for its implementation. For example Smith (2000) in his study concluded that selling is necessary whether dealing with a tangible product such as soap or intangible products for instance choice initiatives. Buurma (2001) found that adoption of policies by citizens cannot happen without effective public policy marketing practices. Tangible products cannot move unless the producers of those products make effort to sell them to consumers. In the same way, a policy reform idea is unlikely to walk off the 'shelf' by itself (Smith, 2000). However, according to the author, few intellectuals understand the difference between marketing of policy and that of a product.

In this study, the researcher sought to extend the frontiers of knowledge regarding how marketing of a policy contributes to its adoption thereby achieving its set objectives. Poverty has been a key developmental issue particularly in the developing world. In Kenya, the fighting of poverty was declared as one of the key pillars of economic development at the inception of independence in 1963. However, in spite of all efforts by both the government and developmental partners, poverty has continued to rise. According to Gitu (2001), this rise in poverty is not due to lack of good policies but to policy implementation. A policy idea will not be implemented unless it is sold to the intended beneficiaries. Public policy marketing improves implementation of public policies and that citizen participation is critical to success, Buurma (2001). This study sought to empirically agree or disagree with this concept of the necessity to sell public policy to intended beneficiaries.

The results in this study found that indeed, public policy marketing practices will significantly influence performance of poverty reduction projects in the agricultural sector in Kenya. This indicates that hypothesis H_1 is supported and hence objective 1 achieved. The regression results of Performance of Projects (Index) predicted by Public Policy Marketing Practices (Aggregate Score) showed $R^2$of 0.084 which implies that the aggregated indicator of Policy Marketing Practices explained 8.4% of the variation of the performance of projects when the Performance Index is considered. However, the results revealed a statistically significant positive linear relationship between Policy Marketing (Aggregate) and Performance of Projects (Index) (beta 0.291, p-value=0.041**).**

Although the results in this study showed that, only 8.4% of the variation is explained by the specified model, studies have pointed out that, low R-squared values are not always bad, and are even expected in studies of this nature. Odundo (2012) points out that such level is acceptable given that the study only focused on a few variables rather than modeling for performance indicators in general. Adegbite et al. (2006) in their study in Nigeria observed that the ten personal characteristics applied in regression analysis could only explain 19.7 percent of variation in the sales turnover. Islam et al. (2011) in a study on project success in Bangladesh obtained the R^2 of 0.213 which explained 21.3% of variation.

From the outset, this study appreciated the fact that Performance Index is not the only likely indicator of project success. Other issues not captured by the performance index may be pertinent. These other issues as indicated by the respondents were also modeled and the results were even better than in the performance index model. When Public Policy Marketing Practices (Aggregate Score) was used to predict other project performance issues, the results improved ($R^2 = 0.510$). This indicated that the aggregated indicator of Policy Marketing Practices explained a better 51% of the variation when other project performance issues were considered. The results also showed a statistically significant positive linear relationship (β= 0.714 and p-value=0.000**).** This results further supported hypothesis H_1 thus enhancing achievement of

objective 1. The combined effect of both the performance index and other issues account for (8.4+51) = 59.4% of the variation. This implies that both the models captured an above average degree of explanatory power.

The fact that aggregate of Marketing Practices has a statistically significant positive linear relationship with the Performance of Projects, whether considered as a performance index or other performance issues, implies that aggregate Public Policy Marketing practices will significantly influence performance of poverty reduction projects in the agricultural sector in Kenya. This shows that the implementers of poverty projects would significantly improve performance if aggressive public awareness of benefits of projects is done before implementation and continuously during implementation. This support finding of other authors such as Njuguna (2013) who found that strategic social marketing is the key to performance of social projects implemented by HIV and AIDs Community Based Organizations (CBOs) in Nairobi County, Kenya. The findings of this study also support the theory of Social Marketing as fronted by (Nancy & Kotler, 2011).

5.2.2 Public Policy Marketing Practices, Managerial Qualities of Project Staffs and Project Performance

To achieve objective two of this study, hypothesis H_2 was tested. It postulated that managerial qualities of project staffs have influence on the relationship between public policy marketing practices and performance of poverty reduction projects in the agricultural sector in Kenya.

The second objective of this study was to determine whether managerial qualities of project staffs have any influence on the relationship between public policy marketing practices and performance of poverty reduction projects in the agricultural sector in Kenya. Larsen (2011) in his study concluded that effective project staffs take charge and are not afraid to make unpopular decisions. His study pointed out that a project manager who portrays confidence will be remembered by clients long after a project is completed. According to Thieme et al (2003), project staffs with strong technical, marketing, and management skills, who believe in participative style of management, are more likely to succeed in implementing poverty reduction projects. On the other

hand, Brohmann (2015) posited that good quality project staffs is necessary to confront any emerging challenges for project implementation; implementing the right projects in appropriate contexts; marketing to the right persons, using the right way in timely version, and evaluating the impact at appropriate stages. Baker (2010) asserts that an effective project staff will command authority naturally. Such a manager should have the flexibility to adapt to changing circumstances. The author says that such managers monitor and re-evaluate priorities of the project frequently.

The researcher in this study sought to add to knowledge regarding how managerial qualities of project staffs may influence the relationship between public policy marketing practices and performance of poverty reduction projects in the agricultural sector in Kenya and elsewhere. Scholars have argued that project staffs of poverty reduction projects, which possess strong technical, marketing, and management skills are more likely to succeed in getting the projects adopted (Thieme et al, 2003). This study sought to provide empirical evidence to either support or negate such an assertion.

When Performance of Projects (Index) was predicted by Mean Score of MQS and Policy Marketing (Aggregate), this showed $R^2$of 0.329 which meant that both these variables explained 32.9% of the variation of the performance of projects when the Performance (Index) is considered. The results were statistically significant (β (betas) =0.537 and 0.081 p-value=0.000). Results in this study found that Managerial Qualities of Staffs jointly with the aggregate of Policy Marketing will significantly influence performance of poverty reduction projects in the agricultural sector in Kenya. Hence H_2 is supported and objective 2 achieved.

The regression analysis results of Performance of Projects (Other Issues) predicted by Mean Score of MQS and Policy Marketing (Aggregate) showed an $R^2$of 0.663. This implies that both these variables explain 66.3% of the variation of the performance of projects when the Performance (Other Issues) is considered. The results also show a linear relationship, statistically significant, between these two variables and Performance of Projects (Other Issues) (β = -0.425 and 0.880 p-value=0.000). The

combined effect of both the performance index and other issues account for (32.9+66.3) = 99.2% of the variation. This shows that both this models captured a high degree of explanatory power.

This implies that managerial qualities of staffs significantly influence performance of poverty reduction projects in the agricultural sector in Kenya. This is in line with findings of other scholars such as Thieme et al (2003) who found that project staffs with strong technical, marketing, and management skills and who believe in participative style of management, are more likely to succeed in implementing poverty reduction projects. Government support and allocation of adequate resources are factors that increase the probability of adoption. The study supports the theories of Social Marketing (Nancy &Kotler, 2011), and also the theory of Public Policy Formation and Marketing (Anderson, 2003).

5.2.3 Public Policy Marketing Practices, Demographic characteristics of target beneficiaries and Project Performance

To achieve objective three of this study, hypothesis H_3 was tested. The hypothesis stated that demographic characteristics of project target beneficiaries have influence on the relationship between public policy marketing practices and performance of poverty reduction projects in the agricultural sector in central Kenya.

Objective three aimed to determine whether demographic characteristics of project target beneficiaries have influence on the relationship between public policy marketing practices and performance of poverty reduction projects in the agricultural sector in central Kenya. Several authors have looked at studies that touch on demographics of beneficiaries. Kibera (1979) in his study in Kiambu, Kenya posited that while several demographic and socioeconomic variables may explain the earliness-lateness dimension of innovative behaviour, they do not substantially influence the intensity of the adoption process. Venkatesh et al (2008) identified four demographic characteristics of target beneficiaries, namely gender, age, experience and voluntariness of use.

The demographic characteristics of target beneficiaries was operationalized by four indicators namely gender, age, education and income. The project staffs were asked to indicate various percentages for each category of demographics (Questionnaire Part 3). Gender was separated into male and female beneficiaries while age was put into four categories of (18-30), (31-40), (41-50) and (over 50) years. Education was considered in four separate levels of primary, secondary, college and university while income was categorized in four classes namely, (0-25,000), (25,001- 75,000), (75,001-150,000) and (Over 150,00)per month.

When each of the 14 indicators was regressed individually with the project performance index, 12 indicators were found to be statistically significant with their p-values less than α=0.05. Only one category of education (University) (p=0.776) and one category of age(41-50)years (p=0.251) was found not to be statistically significant since their p-values were more than α=0.05. The direction of the betas however varied from one category of indicators to the other implying each category influences the performance of projects differently. The study therefore found that the four key indicators of demographic characteristics of target beneficiaries namely, gender, age, education and income significantly influence project performance. Further these demographic indicators influence the relationship between public policy marketing practices and performance of poverty reduction projects in the agricultural sector in central Kenya. This evidence supports other scholars such as Adeoti (2009) who found that these characteristics are important factors influencing adoption of poverty reduction policy by target beneficiaries.

This study supports Hypothesis H_3 that demographic characteristics of project target beneficiaries have significant influence on the relationship between public policy marketing practices and performance of poverty reduction projects in the agricultural sector in central Kenya. The findings supports other scholars such as Venkatesh et al, (2008) who concluded that the relationship between perceived usefulness, ease of use, and intention to use may be moderated by gender, age, level of education and income. The study also supports the theory of Diffusion and Adoption of Innovation (D&AOI)

proposed by (Rogers, 1995; 2003). This is because the beneficiaries pass through the various stages suggested by Rogers (2003) before deciding whether or not to adopt the social products proposed by the project.

5.2.4 Public Policy Marketing Practices, Managerial Qualities of Project Staffs, Demographic characteristics of target beneficiaries and Project Performance

Hypothesis H_4 postulated that public policy marketing practices, managerial qualities of project staffs and demographic characteristics of project target beneficiaries have joint influence on the performance of poverty reduction projects in the agricultural sector in central Kenya. The aim of objective four was to establish whether public policy marketing practices, managerial qualities of project staffs and demographic characteristics of project target beneficiaries have joint influence on the performance of poverty reduction projects in the agricultural sector in central Kenya.

Several authors have linked quality of staffs, demographics of consumers with performance though mainly in business setting rather than in developmental project setting. Wekesa(2015) in his study of entrepreneur characteristics in non-timber forest products in Kenya found that the entrepreneur characteristics had a significant link with the competitive strategy drivers. He concluded that the relationship between age and competitive strategy drivers was negative, while that of gender, education, managerial skills, industry experience and social skills with the three competitive strategy drivers was positive. This demonstrates that firms operated by young, well-educated and skilled male entrepreneurs had highest levels of application of competitive strategy drivers.

Other studies such as Viswanathan et al (2012) described findings of a study of informal economy of consumers and owners of survivalist microenterprises in subsistence marketplace in South India. They concluded that general environment in such settings is characterized by pervasive interdependence among people. Authors did not consider the role of social marketing.

Njuguna (2013) in her descriptive cross-sectional survey concluded there is need for a social marketing policy. The study looked at Community Based Organizations based in Nairobi only. It was important therefore to have a study that considers the social marketing mix in other counties.

The current study looked at the joint influence of public policy marketing practices, managerial qualities of project staffs and demographic characteristics of project target beneficiaries on performance of poverty reduction projects in the agricultural sector in central Kenya. The study used multiple regressions where aggregate scores of policy marketing was regressed with the two indicators of project performance (performance index and other performance issues). This was also jointly regressed with mean score of managerial qualities of project staffs and the 14 indicators of demographic characteristics.

The analysis resulted in an overall statistical significance at the 5% level with a reasonable goodness-of-fit where these variables explained 37.8%($R^2 = 0.378$; p-value=0.004) of the variation of the performance of projects when the Performance (Index) is considered. This indicates that public policy marketing practices, managerial qualities of project staffs and demographic characteristics of project target beneficiaries jointly moderate the performance of poverty reduction projects in the agricultural sector in central Kenya. The empirical analysis in this study supported H_4 that public policy marketing practices, managerial qualities of project staffs and demographic characteristics of project target beneficiaries have joint influence on the performance of poverty reduction projects in the agricultural sector in central Kenya and hence objective four was achieved.

The findings support Larsen (2011) who found that projects managed by good project staffs who listens to their workers and clients are more likely to succeed. This also supports Njuguna(2013) who concluded that social marketing programmes should always be developed with an understanding of the existing environment. The study supports the theories of Social Marketing (Nancy &Kotler, 2011), and also the theory of Public Policy

Formation and Marketing (Anderson, 2003). The study also support the theory of Diffusion and Adoption of Innovation (D&AOI) proposed by (Rogers, 1995; 2003).

5.3 Chapter Summary

This chapter presented the discussion of key results of this study in establishing relationships in the public policy marketing practices to performance of poverty reduction projects in central Kenya as per the research objectives. Justification was articulated based on conceptual issues for each relationship and the corresponding hypothesis tested. Further, key results found by this study based on each research objective were presented and a discussion offered describing how the results agreed with other studies. It was indicated clearly whether each research hypothesis was supported by the finding and if each objective was achieved.

The chapter also presented how the findings of this study contributed to knowledge by discussing whether the key findings agreed with the assumptions advanced by various theories that formed the foundation of this study. All the four research objectives by this study were achieved with the results indicating significant relationships between public policy marketing practices, managerial qualities of project staffs and demographic characteristics of project target beneficiaries on the performance of poverty reduction projects in the agricultural sector in central Kenya. The next chapter reports the summary, conclusions and suggested recommendations of the study.

CHAPTER SIX
SUMMARY, CONCLUSION AND RECOMMENDATIONS

6.1 Introduction

This chapter presents a summary of the study findings, conclusions and recommendations. Theoretical, policy and managerial implications are highlighted. Limitations are also pointed out and suggestions for further research suggested.

6.2 Summary

The general objective of this study aimed to determine the effect of public policy marketing practices on the performance of poverty reduction projects in the agricultural sector in central Kenya. Specifically the study set to: determine the influence of public policy marketing practices on the performance of poverty reduction projects in the agricultural sector in Kenya; assess the influence of managerial qualities of project staffs on the relationship between public policy marketing practices and performance of poverty reduction projects; investigate the influence of demographic characteristics of project target beneficiaries on the relationship between public policy marketing practices and performance of poverty reduction projects and evaluate the joint influence of public policy marketing practices, managerial qualities of project staffs and demographic characteristics of project beneficiaries on performance of poverty reduction projects.

6.2.1 Public Policy Marketing Practices and Performance of Poverty Reduction Projects

Objective one was to determine the influence of public policy marketing practices on the performance of poverty reduction projects in the agricultural sector in central Kenya. Hypothesis H_1 postulated that public policy marketing practices will significantly influence performance of poverty reduction projects in the agricultural sector in Kenya. Empirical evidence revealed that aggregate Public Policy Marketing Practices will significantly influence performance of poverty reduction projects in the agricultural sector in central Kenya hence H_1 is affirmed.

The study found that varied degree of interrelationships existed among the various variables and their indicators. The two dimensions of project performance, performance index of projects and other project performance issues were found to be significantly positively correlated with promotion. Other project performance issues were found to be highly positively correlated to publics, policy environment, and to purse strings. The performance index of projects was found to be correlated to place (distribution) but price was found to be highly negatively correlation with performance index of projects.

Factor analysis results showed the key underlying drivers of public policy marketing is policy environment in which the project operates, partnerships formed in implementing the project, distribution of the products and/or services being offered by the project and the publics involved during the implementation of the project. The drivers of project performance were the indexes of the key objectives, health status and also food and nutritional status of beneficiaries. The four key drivers of managerial qualities of staffs were found to be participative style of management, adequate technical, management skills and support from policy makers. Demographic factor analysis revealed that male beneficiaries between 18-30 years with up to primary level of education and earning less than 25,000 shillings per month were the key underlying drivers.

Assessment of the impact of policy marketing practices (Aggregate Score) on project performance showed a statistically significant positive linear relationship with a very high positive correlation between the policy marketing and project performance. This implies policy marketing result in increased performance of poverty reduction projects hence reducing poverty. Individual evaluation of marketing dimensions showed, promotion had the highest impact on project performance. Price came next while purse strings had the lowest impact. As expected, price had a negative correlation with project performance. This implies that the higher prices (both cash and/or in kind) paid by the beneficiaries for the project's products or services have negative impact on performance of poverty reduction projects.

6.2.2 Public Policy Marketing Practices, Managerial Qualities of Project Staffs and Project Performance

Objective two set to assess the influence of managerial qualities of project staffs on the relationship between Public policy marketing practices and performance of poverty reduction projects in the agricultural sector in central Kenya. Hypothesis H_2 postulated that managerial qualities of project staffs have influence on the relationship between public policy marketing practices and performance of poverty reduction projects in the agricultural sector in Kenya.

It was revealed that Managerial Qualities of Staffs jointly with the aggregate of Policy Marketing will significantly influence performance of poverty reduction projects in the agricultural sector in central Kenya. Hence H_2 is supported.

Assessment of moderating impact of managerial qualities of project staffs revealed a statistically significant positive linear relationship with performance of projects. This implies that managerial qualities of staffs have a positive significant influence on performance of poverty reduction projects in the agricultural sector in central Kenya. Further managerial qualities of staffs were found to be significantly positively correlated with performance index but not with other project performance issues.

6.2.3 Public Policy Marketing Practices, Demographic characteristics of target beneficiaries and Project Performance

Objective three of this study aimed to investigate the influence of demographic characteristics of project target beneficiaries on the relationship between public policy marketing practices and performance of poverty reduction projects in the agricultural sector in central Kenya. Hypothesis H_3 stated that demographic characteristics of project target beneficiaries have influence on the relationship between public policy marketing practices and performance of poverty reduction projects in the agricultural sector in central Kenya.

This study supports Hypothesis H_3 that demographic characteristics of project target beneficiaries have influence on the relationship between public policy marketing practices and performance of poverty reduction projects in the agricultural sector in central Kenya.

The study also established that there are varied correlations among the various demographic variables. Performance of projects was found to be significantly and positively correlated to income. Performance of projects was also positively correlated to one category of age and education.

Analysis of moderating effect of demographic characteristics of target beneficiaries revealed that all the four key indicators significantly influence project performance. This indicated that demographic characteristics of project target beneficiaries have influence on the relationship between public policy marketing practices and performance of poverty reduction projects in the agricultural sector in central Kenya.

6.2.4 Public Policy Marketing Practices, Managerial Qualities of Project Staffs, Demographic characteristics of target beneficiaries and Project Performance

Objective four set to evaluate the joint influence of public policy marketing practices, managerial qualities of project staffs and demographic characteristics of target beneficiaries on performance of poverty reduction projects in the agricultural sector in central Kenya. Hypothesis H_4 postulated that public policy marketing practices, managerial qualities of project staffs and demographic characteristics of project target beneficiaries have joint influence on the performance of poverty reduction projects in the agricultural sector in central Kenya.

Empirical analysis in this study supported H_4 that public policy marketing practices, managerial qualities of project staffs and demographic characteristics of project target beneficiaries have joint influence on the performance of poverty reduction projects in the agricultural sector in central Kenya.

When managerial qualities of project staffs and demographic characteristics of target beneficiaries were assessed jointly, their moderating influence was found to be statistically significant. This means that public policy marketing practices, managerial qualities of project staffs and demographic characteristics of project target beneficiaries have joint influence on the performance of poverty reduction projects in the agricultural sector in central Kenya.

6.3 Conclusion of the Study

Based on findings of this study, it appears reasonable to conclude that the overall public policy marketing practices have a positive influence on the performance of poverty reduction projects in the agricultural sector in central Kenya. The very high positive correlation between the aggregate policy marketing practices and project performance indicates that good marketing practices of poverty reduction projects will increase positive outcomes of these projects. However it is important for implementers to note that careful pricing of products and services is important as high prices was found to have a negative impact on the performance of the projects.

The staffs who manage the poverty reduction projects were found to have a positive impact on the performance. It is therefore important to ensure that those who are charged with the responsibility of managing those projects have the necessary technical skills and are sufficiently experienced. In addition, participative style of management in line with the Kenya constitution 2010 and support from senior policy makers emerged as key to positive outcomes of poverty reduction projects.

Male target beneficiaries between 18-30 years with up to primary level of education and earning less than 25,000 shillings per month were found to be the key drivers of poverty reduction projects. This suggests implementers of project should make a deliberate effort to focus on the male youth who do not go beyond primary education. This appears to contradict a common perception that rural projects are mainly driven by rural women.

Managerial qualities of project staffs and demographic characteristics of target beneficiaries were found to jointly have a moderating influence on the performance of poverty reduction projects. Therefore Implementers needs to consider these aspects jointly rather than separately as this would improve performance of projects in the agricultural sector. Table 6.1 presents a summary of the study findings.

Table 6.1 Summary of the Hypotheses and the Study Findings

Hypotheses	Test Criteria	Finding	Conclusion
Hypothesis:H1 Public policy marketing practices will significantly influence performance of poverty reduction projects in the Agricultural Sector in central Kenya.	Reject hypothesis if p-value ≥ά, otherwise accept	p-value=0.041 ≤ ά(0.05) p-value=0.000 ≤ ά(0.05)	Accept the hypothesis
Hypothesis:H2 Managerial qualities of project staffs have influence on the relationship between public policy marketing practices and performance of poverty reduction projects in the Agricultural Sector in central Kenya.	Reject hypothesis if p-value ≥ά, otherwise accept	p-value=0.000 ≤ ά(0.05)	Accept the hypothesis
Hypothesis:H3 Demographic characteristics of project target beneficiaries have influence on the relationship between public policy marketing practices and performance of poverty reduction projects in the Agricultural Sector in central Kenya.	Reject hypothesis if p-value ≥ά, otherwise accept	Gender: p-value =0.028 ≤ ά (0.05) Age: p-values =0.019 =0.021 =0.044 ≤ ά(0.05) Education: p-values =0.042 =0.028 ≤ ά (0.05 Income: p-values =0.005 =0.008	Accept the hypothesis
Hypothesis:H4 Public policy marketing practices, managerial qualities of project staffs and personal characteristics of project target beneficiaries have joint influence on the performance of poverty reduction projects in the Agricultural Sector in central Kenya.	Reject hypothesis if p-value ≥ά, otherwise accept	P-value=0.004 ≤ ά(0.05)	Accept the hypothesis

Source: Primary Data

The hypotheses test results summarized in Table 6.1 were stated in the alternative form. The table indicates that all hypotheses 1-4 tested in this study were all accepted indicating that the hypothesized relationships between the predictor variables and dependent variables existed. This also means that all the four set objectives of the study were achieved.

6.4 Recommendations of the Study

This study makes several recommendations that have theoretical, policy and managerial implications. First, the study found that overall public policy marketing practices have a positive impact on the performance of poverty reduction projects in the agricultural sector in central Kenya. It is therefore recommended that implementers of poverty reduction projects should strive to craft a good marketing plan of poverty projects. Such a plan should then be meticulously implemented. It would be inaccurate to assume that the poor will automatically adopt the products or services of a project just because they are poor. When designing a marketing plan, project staffs and policy makers need to pay particular attention to pricing of the product and/or services offered by the projects. The poor tend to be price (elastic) sensitive and any unnecessary cost in form of effort and/or monetary price would impact negatively to the performance of such a project.

Second, this study also found that contrary to common perception that rural poverty projects are driven by rural women, youth (18-30) with low education not beyond primary school are key to success of rural poverty projects particularly in the agricultural sector. This may be because these youth are mainly at home and still living with their parents as their job opportunities outside their homes are limited. Implementers of these projects should therefore focus on this group.

Third, the study found that distribution of the products and/or services being offered by the project are important. Managers of the projects should have a changed mindset from that of “civil service mentality” to that of “commercial mentality” where beneficiaries are considered as customers of goods and services. The social products, inform of goods and services, offered by the project should be made available to them in such a way as to minimize the tangible cost and/or effort required from the target beneficiaries.

Fourth, the study found that the publics involved during the implementation of the project are also important for its success. Project staffs should therefore ensure those publics necessary for success of the project are well involved in the implementation. Managers of projects should ensure they use participative style of management to increase chances of success.

Fifth, the study found that the policy environment in which the project is operating is important. The policy makers should therefore ensure that there is adequate policy support to ensure project success. Again policy makers should ensure that project managers have adequate technical and management skills before they are deployed to manage projects. Continuous training on new management skill will enhance performance.

6.5 Implications of the Study Findings

This study was anchored on the relatively recent theory of social marketing; the theory of Public policy formation and marketing; and the theory of Diffusion and Adoption of Innovations. The scholarly implications proposed here relate to theories, policies makers and managers.

6.5.1 Theoretical Implications

This study was founded mainly on the theory of social marketing. Others included the theory of public policy formation; and the theory of diffusion and adoption of innovations. This study argued that the elusive poverty reduction can be accelerated by recognizing and treating the poverty reduction policy as a social product that can be marketed using social marketing principles. The policy to be marketed should itself be formulated based on the theory of public policy formulation while this social product should be implemented using the principles articulated in the theory of diffusion and adoption of innovations.

This study provided empirical evidence that if the poverty reduction policy is marketed using the theory of social marketing, there will be a corresponding positive outcome in

the performance of projects designed to implement the policy hence resulting in accelerated poverty reduction. Weinreich(2010) argues that the theory of social marketing is based on 8Ps namely product, price, place, promotion, publics, partnerships, policy environment and purse strings. However, when it comes to marketing of policies this study found that only 3Ps appear to be important namely; Price (R^2=0.204 α=0.001); Place (R^2=0.0.117 α=0.015) and Promotion (R^2=0.280 α=0.000). The other 5Ps, Product, Publics, Partnerships, Policy Environment and Purse Strings had α>0.5 and hence not significant at the 5% level. This appears to suggest that the theory of social marketing should be modified when it comes to its application on public policy marketing. This controversy presents an opportunity for further work in this area.

The moderating effect of the project staffs and target beneficiaries was also found to be statistically significant which confirms that the theories of public policy formulation and the theory of diffusion and adoption of innovations are important. Hence their use would add value to the performance of poverty reduction projects. This study made a significant contribution to knowledge by showing an integrated joint effect of four variables simultaneously.

6.5.2 Policy Implications

Kenya's first development plan after independence of 1963 identified poverty reduction as one of its key pillars of economic development. Subsequent development plans have all empathized poverty reduction. Development partners such as the World Bank, IMF and other bilateral partners have all laid special emphasis on the reduction of poverty. Yet government's own reports indicate that in over 50 years of independence, poverty has not reduced and in some cases it has actually increased. This unfortunate scenario of the poverty reduction policy was of the motivation for this study.

Prior to this study, there appeared to be little empirical evidence to support propositions articulated in this study. The findings of this study should therefore play a significant role in persuading policy makers that a paradigm shift is necessary in the methodology

of formulation and implementation of poverty reduction policy in order to enhance acceleration of poverty reduction. Public policy think tanks such as the Kenya Institute for Public Policy and Research Analysis (KIPPRA), Institute of Policy Analysis and Research (IPAR), Institute for Development Studies (IDS) and other researchers will find the results of this study useful in formulating their policy prescriptions to GoK for implementation.

6.5.3 Managerial Implications

This study found that the quality of staffs charged with the responsibility of implementing poverty reduction projects will significantly impact on the performance outcomes of those projects. The findings of the study indicate that project staffs with qualities such as good technical, marketing and management skills will significantly impact on the outcomes of the project performance. Such staffs however should be competent enough to practice participative style of management. Support from senior policy makers was also found to be critical to success of poverty reduction projects. It is therefore necessary for GoK to ensure that such projects are implemented by competent staffs that has these qualities.

The study also found that personal characteristics of project target beneficiaries such as gender, age, education and income do indeed significantly affect the performance outcomes of poverty reduction projects. Project staffs should therefore put this into consideration when implementing the projects. In particular the price/effort the beneficiaries have to put into a social product is inversely proportional to the rate of adoption. Managers of these projects should therefore ensure the pricing of the social products offered by the project is right and the intended beneficiaries are involved from the beginning.

6.6 Limitations of the Study

Although this study produced fruitful results, it has several limitations which may point to further research. First, the study was primarily conducted from the perspective of project staffs. This was found to be the most feasible given the limited resources and time available to the current researcher. However, with more resources and time, a study based on the perception of the beneficiaries may give another view of the study.

Second, the data was cross-sectional collected at a particular point in time. This has limitations in that since projects were mainly "work-in-progress" with highs and lows, longitudinal study may reveal other factors that may lead to different conclusions.

Third, the design for this study was limited to descriptive cross-sectional format which has its shortcomings in that the data is mainly describing what has already happened. A social experiment format may have given other insights. A social experiment is used to investigate the effects of a policy intervention. Randomly selected groups of target beneficiaries are assigned different treatments of a policy intervention. One group acts as a control and is assigned controlled conditions that represent the status quo. The other group or groups are assigned to the policy interventions and the end results of the two groups compared to see if they differ at the end of the experiment.

6.7 Suggestions for Further Research

This study revealed that overall public policy marketing practices have a significant positive effect on the performance of poverty reduction projects in the agricultural sector in central Kenya and therefore make the following suggestions;

First, an investigation into the influence of public policy marketing on performance of other projects involved in other social activities such as health, tourism, education and other sectors should be carried out. Research in other areas such as the Arid and Semi-Arid Land (ASAL) areas may give another perspective not captured in this study.

Second, further research should be carried out to evaluate impact of public policy marketing on marketing activities carried out by government agencies such as free primary education,

health care and technology specifically the free laptops to primary schools. This would be useful to policy makers and implementers of such programmes. For example, unrest in schools could be argued to have been partly caused by introduction of policies without marketing to the students. A research in that area could help shed more right in such an issue.

Third, the inclusion of other variables in the conceptual framework such as beneficiaries' perspective should be made and investigated. Further the design of this study was cross-section taking data at one point in time which has its limitations. A longitudinal study is likely to give other insights. In addition, research on a social experiment might give an insight into marketing of policies.

Fourth, some authors proposes 8Ps (Product, Price, Place, Promotion, Publics, Partnerships, Policy Environment, and Purse Strings) of social marketing. This study found that only 3Ps (Price, Place, Promotion) appears necessary in the case of poverty reduction projects. Further work in this area may help resolve this issue.

In conclusion, this study made useful contribution to the theoretical body of knowledge with theoretical, policy and practice implications. By applying an integrated approach to four variables namely; public policy marketing practices**,** managerial qualities of project staffs, demographic characteristics of project target beneficiaries and performance of poverty reduction projects, the study showed empirically that the elusive poverty reduction can be accelerated if policies designed to implement the policy are recognized as social products and marketed to target beneficiaries using the principles of social marketing. It is the hope of the current researcher that other scholars will pick some ideas from this work and extend knowledge. In particular policy makers and implementers of policies are encouraged to apply some of the suggestions articulated here in their service to humanity. If some of this happens, then my effort will well be worth it.

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APPENDIXES

Appendix I: Introduction Letter

UNIVERSITY OF NAIROBI
COLLEGE OF HUMANITIES AND SOCIAL SCIENCES
SCHOOL OF BUSINESS
DOCTORAL STUDIES PROGRAMME
Telephone: 4184160/1-5 Ext. 225
Email: dsp@uonbi.ac.ke
P.O. Box 30197
Nairobi, Kenya

6th October, 2015

TO WHOM IT MAY CONCERN

RE: GACUURU WA KARENGE: D80/8311/2000

This is to certify that, **GACUURU WA KARENGE: D80/8311/2000** is a Ph.D candidate in the School of Business, University of Nairobi. The title of his study is:
"Public Policy Marketing Practices, Managerial Qualities of Project Staff Personal Characteristics of Target Beneficiaries and Performance of Poverty Reduction Projects in the Agricultural Sector in Kenya".

The purpose of this letter therefore, is to kindly request you to assist and facilitate in carrying out the research/study in your organization. A questionnaire is herewith attached for your kind consideration and necessary action.

Data and information obtained through this exercise will be used for academic purposes only. Hence, the respondents are requested not to indicate their names anywhere on the questionnaire.

We look forward to your cooperation.

Thank you.

Graduate Studies Office
P.O. Box 30197
NAIROBI
Nairobi University School of Business

PROF. MARTIN OGUTU
FOR: ASSOCIATE DEAN
GRADUATE BUSINESS STUDIES
SCHOOL OF BUSINESS

MO/nwk

Appendix II (a): Questionnaire

University of Nairobi
School of Business

Project Name: _____

_____

Ministry: _____

Person Giving Information: _____

Phone: _____Email:_____

Official Title: _____ Length of Service: _____

Highest level of education: _____Signature:_____

Date: _____

==========

Introduction

This questionnaire seeks to collect data for a PhD thesis in the University of Nairobi titled "**Public Policy Marketing Practices and Performance of Poverty Reduction Projects in the Agricultural Sector in Central Kenya".** The study aims to answer the question "What is the effect, of Public policy marketing practices on the Performance of Poverty Reduction Projects in the AgriculturalSector in Kenya, and what role, if any, do the Managerial Qualities of Staffs and Demographic characteristics of Target Beneficiaries have?" We kindly ask you to take a few minutes of your busy schedule to answer the following questions as honestly as you can. **We assure you that the information provided in this questionnaire is purely for academic purposes only and will be kept strictly confidential.** Your cooperation will be highly appreciated.

PART 1: PUBLIC POLICY MARKETING PRACTICES

How good is/are the **product(s)/service(s)** offered by the project? Please indicate your degree of agreement or disagreement with the following statements.

	Product Characteristics	***Strongly agree (5)***	***Agree (4)***	***Neutral (3)***	***Disagree (2)***	***Strongly disagree (1)***
1.01	The project makes use of the latest design and state of the art technology in its products/services.					
1.02	The project takes into consideration the usability/ease of use of the individual project' products and services.					
1.03	The project takes into consideration the usefulness and value for money of the individual project products and services.					
1.04	The project takes into consideration the need to deliver quality to target beneficiaries.					
1.05	The project takes into consideration the need to maintain the brand image to target beneficiaries.					

	Other Product(s)/service(s)Quality issues	***Strongly agree (5)***	***Agree(4)***	***Neutral (3)***	***Disagree (2)***	***Strongly disagree (1)***
1.06	The project management regularly review the design and technology used in the projects' products/services.					
1.07	The project management evaluates the usability/ease of use of the individual projects' products and services.					
1.08	The project management assesses the usefulness and value for money of the individual					

	projects' products and services.					
1.09	The project management review quality and delivery systems of products and services to target beneficiaries.					
1.10	The project management monitors and reviews the brand image to target beneficiaries.					

How appropriate is the **price** of the product(s)/service(s) of the project? Please indicate your degree of agreement or disagreement with the following statements.

Price		***Strongly agree (5)***	***Agree (4)***	***Neutral (3)***	***Disagree (2)***	***Strongly disagree (1)***
1.11	The project has priced its products in a way to enhance affordability by target beneficiaries.					
1.12	The project has priced its products in a way to enhance the perception of quality by target beneficiaries.					
1.13	The project considers the need to change the terms and conditions of sale so as to spread the payment over a series of periods.					
1.14	The project considers the need to combine products and services together with special offers and special promotions to make prices appear attractive.					
1.15	The project is open to the need for revising the prices, if necessary, to remain competitive, to survive and thrive in a fast-changing marketplace.					

To what extent does the project staffs use the following criteria to assess the **price** of the product(s)/service(s) of Poverty Reduction Projects?

Other Price issues		***Strongly agree***	***Agree***	***Neutral***	***Disagree***	***Strongly disagree***
1.16	The project staffs reviews the price of products/services in order to enhance affordability by target beneficiaries.					
1.17	The project staffs reviews the price of products/services in order to enhance perception of quality by target beneficiaries.					
1.18	The project staffs reconsiders the terms and conditions of sale so as to spread the payment over a series of periods.					
1.19	The project staffs reviews the need to combine products and services together with special offers and special promotions to make prices appear attractive.					
1.20	The project staffs revises the prices, if necessary, to remain competitive, to survive and thrive in a fast-changing marketplace.					

How well is the **place (distribution)** of the product(s)/service(s) of the project done? Please indicate your degree of agreement or disagreement with the following statements.

Place		***Strongly agree (5)***	***Agree (4)***	***Neutral (3)***	***Disagree (2)***	***Strongly disagree (1)***
1.21	The project staffs has entered into strategic alliances with profit making firms to distribute the products to target beneficiaries.					
1.22	The project staffs has entered into strategic alliances with NGOs to distribute the products to target beneficiaries.					
1.23	The project staffs has entered into strategic alliances with Community Based Organizations (CBO) to distribute the products to					

Place		*Strongly agree (5)*	*Agree (4)*	*Neutral (3)*	*Disagree (2)*	*Strongly disagree (1)*
	target beneficiaries.					
1.24	The project staffs has entered into strategic alliances with local administration (chiefs and village elders) to distribute the products/ services to target beneficiaries.					
1.25	The project uses technological inventions, such as Cell phones, Mpesa, to facilitate the access to and payments for project's products.					

To what extent does the project staffs use the following criteria to assess the **place** of the product(s)/service(s) of Poverty Reduction Projects?

Other Place issues		*Strongly agree (5)*	*Agree (4)*	*Neutral (3)*	*Disagree (2)*	*Strongly disagree (1)*
1.26	Project staffs constantly seeks strategic alliances with profit making firms to distribute products to target beneficiaries.					
1.27	The project staffs actively seeks strategic alliances with NGOs to distribute the products to target beneficiaries.					
1.28	The project staffs actively seeks strategic alliances with Community Based Organizations (CBO) to distribute the products to target beneficiaries.					
1.29	The project staffs actively seeks strategic alliances with local administration to distribute the products/ services to target beneficiaries.					
1.30	The project staffs actively seeks to use technological inventions, eg Cell phones, Mpesa, to facilitate access to/and payments for project's products.					

How well are the **promotion** of the product(s)/service(s) of the project done? Please indicate your degree of agreement or disagreement with the following statements.

Promotion		***Strongly agree (5)***	***Agree (4)***	***Neutral (3)***	***Disagree (2)***	***Strongly disagree (1)***
1.31	The project invests in mass media advertisement of its products/services.					
1.32	The project invests in a sales force for direct selling of its products/ services.					
1.33	The project uses special offers to market the products/services.					
1.34	The project uses gifts to market products/services					
1.35	The project allows user testing in marketing the products/services.					

To what extent does the project staffs use the following criteria to assess the **promotion** of the product(s)/service(s) of Poverty Reduction Projects?

Other Promotion issues		***Strongly agree (5)***	***Agree (4)***	***Neutral (3)***	***Disagree (2)***	***Strongly disagree (1)***
1.36	The project staffs uses mass media to advertise the products/services.					
1.37	The project staffs uses sales force for direct selling of the products/ services					
1.38	The project staffs uses special offers to market the products/services.					
1.39	The project staffs uses gifts to market products/services.					
1.40	The project staffs allows users to test the products/services.					

How well are the **publics (**external and internal groups/audiences the project need to address) of the project involved? Please indicate your degree of agreement or disagreement with the following statements.

Publics		***Strongly agree (5)***	***Agree (4)***	***Neutral (3)***	***Disagree (2)***	***Strongly disagree (1)***
1.41	The project has put in place procedures for addressing the internal groups involved in the project.					
1.42	The project has put in place procedures for addressing the external groups involved in the project.					
1.43	The project has made efforts to identify key audiences/stakeholders to be addressed.					
1.44	The project actively involves the internal groups involved in the project.					
1.45	The project actively involves the external groups involved in the project.					

To what extent does the project staffs use the following criteria to assess the **publics** of Poverty Reduction Projects?

Other Publics issues		***Strongly agree (5)***	***Agree (4)***	***Neutral (3)***	***Disagree (2)***	***Strongly disagree (1)***
1.46	The project staffs constantly addresses the internal groups involved in the project.					
1.47	The project staffs constantly addresses the external groups involved in the project.					
1.48	The project staffs constantly identifies key audiences/ stakeholders to be addressed.					
1.49	The project staffs actively involves the internal groups involved in the					

	project.					
1.50	The project staffs actively involves the external groups involved in the project.					

How well is the **Partnership** (Organizations within the project area with which partnerships has been formed)of the project formed? Please indicate your degree of agreement or disagreement with the following statements.

	Partnership	***Strongly agree (5)***	***Agree (4)***	***Neutral (3)***	***Disagree (2)***	***Strongly disagree (1)***
1.51	The project has close collaboration with private firms such as financial institutions.					
1.52	The project has the support of the local community					
1.53	The project has close collaboration with community-based organizations (CBOs).					
1.54	The project has close collaboration with International Development Organizations such as World Bank, IMF, WHO, FAO etc.					
1.55	The project has the support of the local administration such as the police force and the chief.					

To what extent does the project staffs use the following criteria to assess the **Partnership** of Poverty Reduction Projects?

Other Partnership issues		***Strongly agree (5)***	***Agree (4)***	***Neutral (3)***	***Disagree (2)***	***Strongly disagree (1)***
1.56	The project staffs seeks close collaboration with private firms such as financial institutions.					
1.57	The project staffs has the support of the local community					
1.58	The project staffs has close collaboration with community-based organizations (CBOs).					
1.59	The project staffs has close collaboration with International Development Organizations such as Work Bank, WHO, FAO.					

1.60	The project staffs has the support of the local administration such as the police force and the chief.					

How supportive is the **Policy environment** in which the project/programme is operating? Please indicate your degree of agreement or disagreement with the following statements.

Policy environment		***Strongly agree (5)***	***Agree (4)***	***Neutral (3)***	***Disagree (2)***	***Strongly disagree (1)***
1.61	The project operates in a situation where proactive policy analysis process exists.					
1.62	There is availability of adequate, accurate and timely information during the Policy Formulation process.					
1.63	A policy marketing system exists.					
1.64	The key actors have the capacity to understand policies.					
1.65	Stakeholders' participation, consensus, co-operation, commitment and ownership in the policy process exist.					

To what extent do the project staffs use the following criteria to assess the **Policy environment** of Poverty Reduction Projects?

Policy environment issues		***Strongly agree (5)***	***Agree (4)***	***Neutral (3)***	***Disagree (2)***	***Strongly disagree (1)***
1.66	The project staffs operate in a situation where proactive policy analysis process exists and encouraged.					
1.67	The project staffs have access to adequate, accurate and timely information during the Policy Formulation process.					
1.68	The project staffs are actively involved in a policy marketing system.					
1.69	The key project staffs have the capacity to understand policies.					
1.70	The project staffs and Stakeholders get involved, participate in consensus, co-operate, are committed and feel					

	ownership in the policy process.					

How supportive is the **Purse strings** (Funding, grants or donations from Donors, Foundations, government) of the project? Please indicate your degree of agreement or disagreement with the following statements.

Purse strings		***Strongly agree (5)***	***Agree (4)***	***Neutral (3)***	***Disagree (2)***	***Strongly disagree (1)***
1.71	The project has received adequate financial support from the sponsoring ministry.					
1.72	The project has received skilled and qualified staffs from the sponsoring ministry.					
1.73	The project has received vehicles and transport support from the sponsoring ministry.					
1.74	The project has received adequate office space, furniture and computers support from the sponsoring ministry.					

To what extent does the project staffs use the following criteria to assess the **Purse strings** of Poverty Reduction Projects?

Purse strings issues		***Strongly agree (5)***	***Agree (4)***	***Neutral (3)***	***Disagree (2)***	***Strongly disagree (1)***
1.75	The project staffs constantly seek adequate financial support from the sponsoring ministry.					
1.76	The key skilled and qualified staffs from the sponsoring ministry are in place.					
1.77	The project always receives vehicles and transport support from the sponsoring ministry.					
1.78	The project always receives adequate office space, furniture and computers support from the sponsoring ministry.					

PART 2: MANAGERIAL QUALITIES OF PROJECT STAFFS

How qualified are the project staffs? Please indicate your degree of agreement or disagreement with the following statements.

Managerial Qualities of Staffs (MQS)		***Strongly agree (5)***	***Agree (4)***	***Neutral (3)***	***Disagree (2)***	***Strongly disagree (1)***
2.01	The project staffs has adequate technical skills.					
2.02	The project staffs has adequate marketing skills.					
2.03	The project staffs has adequate management skills.					
2.04	The project staffs uses participative style of management.					
2.05	The project has a lot of support from senior policy makers.					

To what extent does the project staffs possess the **Managerial Qualities** for Poverty Reduction Projects?

Managerial Qualities issues		***Strongly agree (5)***	***Agree (4)***	***Neutral (3)***	***Disagree (2)***	***Strongly disagree (1)***
2.06	The project staffs demonstrate adequate technical skills.					
2.07	The marketing skills of the project staffs are evident.					
2.08	It is easy to notice management skills of the project staffs.					
2.09	Participative style of management is always used by the project staffs.					
2.10	Senior policy makers enthusiastically support the project staffs.					

PART 3: DEMOGRAPHIC CHARACTERISTICS OF PROJECT TARGET BENEFICIARIES

Please indicate by putting a tick in the appropriate box.

3.01 Estimate the percentage of Gender of target beneficiaries of this project

Male ☐ Female ☐

3.02 Estimate the percentage of age bracket of Project beneficiaries

18-30 years ☐
31-40 years ☐
41-50 years ☐
51 years & above ☐

3.03Estimate percentage of beneficiaries in each level of education

Primary level ☐ Tertiary level/College ☐
Secondary level ☐ University level ☐

3.04 Estimated percentage of beneficiaries in each monthly level of income?

Ksh 0 - 25,000 ☐
Ksh 26,000 - 75,000 ☐
Ksh 76,000 - 150,000 ☐
Ksh 151,000 and above ☐

3.05 What other Demographic Characteristics of Project Target Beneficiaries elements have been taken into consideration by the project?

a) _____
b) _____

PART 4: PERFORMANCE OF POVERTY REDUCTION PROJECTS

How would you assess the performance of the project? Please indicate your degree of agreement or disagreement with the following statements.

Performance of Poverty Reduction Projects (Budget, Time Frame, Quality)		***Strongly agree (5)***	***Agree (4)***	***Neutral (3)***	***Disagree (2)***	***Strongly disagree (1)***
4.01	The project operated (is operating) within the allocated budget and did/does not need extra funds.					
4.02	The project was completed (will be completed) within the expected time frame					
4.03	The products/services offered to the beneficiaries of the project are of very high quality.					

Please fill this section based on information obtained from the project documents. Please note the project objectives shall be listed in order of their priority/importance as stated in the project document. *(e.g. Objective/Priority1: Train 30 women groups on chicken husbandry, Objective/Priority2: Increase Indigenous Chicken population from 1,000 to 10,000 in the County)*

Performance of Poverty Reduction Projects (Scope)				
	Project's stated objectives/activities in order of importance		**Target of Objective/ Activity**	**Actual Achievement of Project**
4.04	Obj 1			
4.05	Obj 2			
4.06	Obj 3			
4.07	Obj 4			
4.08	Obj 5			

Please indicate your degree of agreement or disagreement with the following statements.

Other Project Performance issues		***Strongly agree (5)***	***Agree (4)***	***Neutral (3)***	***Disagree (2)***	***Strongly disagree (1)***
4.09	Number of target beneficiaries reached each project year was/is as per target.					
4.10	Income levels of beneficiaries increased/will increase significantly after the project.					
4.11	The level of education of beneficiaries increased/will increase significantly after the project.					
4.12	Health status of beneficiaries increased/will increase significantly after the project					
4.13	Food and nutritional status of beneficiaries increased/will increase significantly after the project.					

Appendix II (b): Brief Explanation of Variables used in the study

1. Project Performance

Please fill this section based on information obtained from the project documents. Please note the project objectives shall be listed in order of their priority/importance as stated in the project document. (e.g. Objective 1: Train 30 women groups on chicken husbandry, Objective 2: Increase Indigenous Chicken population from 1,000 to 10,000 in the county.)

Performance of Poverty Reduction Projects(PPRP)					
	Project's stated objectives in order of importance		**Target of Objective**	**Actual Achievement of Project**	Objective performance Index **(OPI)**
1.1	Obj 1	Train 30 women groups on chicken husbandry	**30**	**20**	20/30=0.67
1.2	Obj 2	Increase Indigenous Chicken population from 1,000 to 10,000 in the county	**10,000**	**8,500**	8,500/10,000=0.85
1.3	Obj 3	etc	etc	etc	
1.4	Obj 4	etc	etc	etc	
1.5	Obj 5	etc	etc	etc	

Indicator	**Brief Explanation of the Indicators**
Public Policy Marketing(PPMP)(Independent Variable)	
Item	**Brief Explanation**
Product	Tangible products or services being offered by the project.
Price	Actual money or effort needed to be paid or offered by the target beneficiaries.
Place	Distribution channels used to distribute the actual product or method used to provide the services to beneficiaries.
Promotion	Method used to promote products or services of the project.
Publics	Publics refer to both the external and internal groups involved in the project. Different audiences the project needs to address in order to succeed.
Partnership	Organizations within the project area with which partnerships has been formed.
Policy Environment	Policy environment in which the project/programme is operating.
Purse Strings	Funds from Donors, Foundations, governmental grants or

	donations.
Managerial Qualities of Project Staffs (MQS)(Moderating Variable)	
Item	**Brief Explanation**
Technical skills	Skill of staffs managing the project in terms of education, training, experience etc.
Marketing skills	Specific marketing skills of staffs managing the project.
Management skills	Specific management skills of staffs managing the project.
Use of participative style	Specific ability to use participative techniques in managing projects.
Support from senior policy makers	The extent to which the project managers are supported by senior policy makers.
Demographic Characteristics of Project Target Beneficiaries (PCPB)(Moderating Variable)	
Item	**Brief Explanation**
Gender	Gender of the project beneficiaries, male or female.
Age	Age of the target adopter.
Education	Beneficiaries' Level of education.
Income	Income bracket of the target adopter.

Appendix III: Study Population-List of Projects				
	Project Name	**County**	**Project Staffs (Respondents)**	
			Highest Level of Education	**Years in Service**
1	Buildingorganisational capacity in commercialization of Cow Milk value chain in Nairobi City County	Nairobi County	Bachelors	8
2	To establish organizational capacity, for commercialization of Kales value chain in Nairobi City County.	Nairobi County	Masters	7
3	Rearing of improved Dairy Goats	Nairobi County	Bachelors	9
4	Improvement of small scale Irish Potato farming	Nairobi County	Bachelors	15
5	Study to establish the economic viability of Poultry (Broiler) in Nairobi City County	Nairobi County	Bachelors	11
6	Livestock Extension Services in Kĩambu County	Kĩambu	Masters	17
7	Organization of value chain actors for increased sustainable commercialization of dairy cow milk value chain in Kĩambu County	Kĩambu	Masters	21
8	Livestock Disease Control in Sub-County Kĩambu-County	Kĩambu	Bachelors	18
9	Livestock Disease Control in Thika Sub-County	Kĩambu	Bachelors	8
10	Green House development in Kĩambu Sub-County	Kĩambu	Masters	12
11	Green Houses development for Groups	Kĩambu	Bachelors	8
12	Improvement of Horticultural Crops(French Beans)	Kĩambu	Bachelors	21
13	Irrigation development for Carrots	Kĩambu	Bachelors	7
14	Commercialization of Floriculture(Rose Flowers)	Kĩambu	Bachelors	23

15	Improvement of Fodder Crops(Napier Grass)	Kĩambu	Bachelors	18
16	Development of Demonstration Fish Ponds	Kĩambu	Bachelors	30
17	Improvement of Indigenous Coffee	Kĩambu	Bachelors	16
18	Introduction of Mushroom farming	Mũrang'a	Bachelors	9
19	Commercialized Potato Value chain	Mũrang'a	Bachelors	7
20	Development of Mango Plantations	Mũrang'a	Bachelors	15
21	Improvement of Commercial Dairy Cows rearing	Mũrang'a	Bachelors	6
22	Development of Macadamia Nuts farming	Mũrang'a	Bachelors	14
23	Improvement of Cabbage farming	Mũrang'a	Bachelors	4
24	Improvement of banana farming	Mũrang'a	Bachelors	23
25	Development of Small Scale pineapple growing	Mũrang'a	Bachelors	7
26	Promote commercial banana production, value addition and marketing by adopting modern technology in a sustainable environment.	Mũrang'a	Bachelors	9
27	Upgrading French Beans Quality through Global Certification.	Mũrang'a	Bachelors	6
28	Capacity building of indigenous poultry groups on group dynamic	Nyeri	Bachelors	20
29	Accelerating Breeding and Genetic Improvement of the Small Holder dairy Herds through Embryo Transfer Technology.	Nyeri	Bachelors	4
30	A Study to Establish Gaps in the Irish Potato Value Chain Market Information Flow and Linkages among the Actors	Nyeri	Bachelors	25
31	Capacity building of indigenous poultry groups on group dynamic	Nyeri	Bachelors	6

32	Accelerating Breeding and Genetic Improvement of the Small Holder dairy Herds through Embryo Transfer Technology.	Nyeri	Bachelors	14
33	A Study to Establish Gaps in the Irish Potato Value Chain Market Information Flow and Linkages among the Actors	Nyeri	Bachelors	4
34	Improvement of small scale Tea farming	Embu	Bachelors	10
35	Improvement of small scale Indigenous Chicken farming	Embu	Masters	13
36	Rearing of improved Broiler Chicken	Embu	Bachelors	15
37	Improving banana production and developing market linkages through farmer field schools (FFS) in Embu County	Embu	Masters	6
38	Mobilization, Promotion and Registration of local poultry producer groups and Co-operatives	Embu	Masters	4
39	Development of Capsicums farming	Kĩrĩnyaga	Bachelors	25
40	Improvement of Indigenous Pigs rearing	Kĩrĩnyaga	Bachelors	11
41	Improvement of Horticultural Crops(Codget)	Kĩrĩnyaga	Bachelors	13
42	Development of Red Creole farming	Kĩrĩnyaga	Bachelors	5
43	Development of Increased Milk production	Kĩrĩnyaga	Masters	12
44	Introduction of Quail farming	Laikipia	Bachelors	8
45	Development of Black Beans farming	Laikipia	Bachelors	11
46	Upgrading of Horticultural Crops(French Beans)	Laikipia	Bachelors	15
47	Commercialization of Gadam Sorghum	Laikipia	Masters	10
48	Improvement of Beetroot production	Laikipia	Bachelors	22
49	Development of Poultry for local Groups	Nyandarũa	Bachelors	4

50	Improvement of Zero-Grazing Units	Nyandarũa	Bachelors	4
51	Improved sustainable commercialization of Maize value chain in Nyandarua County	Nyandarũa	Bachelors	5
52	Improvement of Kale farming	Nyandarũa	Bachelors	16
53	Improvement of Horticultural Crops(Spinach)	Nyandarũa	Bachelors	21

Source: Primary Data

Appendix IV (a): Summary of Cronbach's Alpha Reliability Coefficients

Variable and Its Indicators	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Policy Marketing(Aggregate)	47.0822	4.777	.965	.643
Product	48.757	5.234	.082	.701
Price	46.9482	5.986	-.336	.724
Place	46.7222	4.230	.703	.629
Promotion	47.0502	3.388	.624	.642
Publics	46.9522	5.058	.330	.682
Partnerships	46.8662	4.856	.608	.658
Policy Environment	46.8842	4.615	.762	.640
Purse Strings	48.1882	5.348	.087	.712
Performance of Projects(Index)	50.3860	5.260	.373	.682
Performance of Projects(Other Issues)	47.1022	4.854	.602	.658
Quality of Staff	46.8682	4.712	.401	.673
Beneficiary Age(31-40)yrs	50.5402	5.231	.341	.683
Beneficiary Age(41-50)yrs	51.2172	5.772	-.371	.705
Beneficiary Age(Over 50)yrs	51.3212	5.741	-.450	.703
Beneficiary Education(Primary)	50.8492	5.718	-.091	.702
Beneficiary Education(Secondary)	50.9742	5.655	.081	.699
Beneficiary Education(College)	51.2162	5.729	-.259	.702
Beneficiary Education(University)	51.2812	5.687	.218	.700
Beneficiary Income(0-25,000)pm	50.4162	5.469	.258	.691
Beneficiary Income(25,001-75,000)pm	51.2842	5.850	-.383	.711
Beneficiary Income(75,001-150,000)pm	51.3002	5.775	-.292	.706
Beneficiary Income(Over 150,00)pm	51.3202	5.720	-.276	.702

Source: Primary data

Table 4.15: One sample t- test for Public Policy Marketing Practices, Managerial Quality of Staffs and Performance of Poverty Reduction Projects

T-Test: One-Sample Statistics for Public Policy Marketing Practices, Managerial Qualities of Staffs and Performance of Projects						
	N	Mean Score	Std. Deviation	Std. Error Mean	t	Sig. (2-tailed) (p-value)
Product	50	4.320	0.2441	0.0345	125.134	0.000
Price	50	4.382	0.2027	0.0287	152.844	0.000
Place	50	4.608	0.4393	0.0621	74.169	0.000
Promotion	50	4.280	0.7557	0.1069	40.050	0.000
Publics	50	4.378	0.3472	0.0491	89.170	0.000
Partnerships	50	4.464	0.2827	0.0400	111.668	0.000
Policy Environment	50	4.446	0.3018	0.0427	104.155	0.000
Purse Strings	50	3.142	0.4204	0.0595	52.843	0.000
Quality of Staffs	50	4.462	0.4485	0.0634	70.343	0.000
Demographic Characteristics of target beneficiaries						
Mean Performance Index of Projects	50	.9442	0.22425	0.03171	29.772	0.000
Other Project Performance Issues	50	4.2280	0.28574	0.04041	104.627	0.000
t-test for equality of means: test value =0 (H_o: there is no difference expected between the means, at $\acute{\alpha}$=0.05, 2-tailed); H_o is rejected if p value $\leq \acute{\alpha}$. Accept H_o otherwise.(i.e.if p> $\acute{\alpha}$)						

Source: Primary Data

Table 4.15: Summary of Descriptive Statistics							
	T-Test: One-Sample Statistics for Public Policy Marketing Practices, Managerial Qualities of Staffs and Performance of Projects						
		N	Mean Score	Std. Deviation	Std. Error Mean	t	Sig. (2-tailed) (p-value)
Public Policy Marketing	Product	50	4.320	0.2441	0.0345	125.134	0.000
	Price	50	4.382	0.2027	0.0287	152.844	0.000
	Place	50	4.608	0.4393	0.0621	74.169	0.000
	Promotion	50	4.280	0.7557	0.1069	40.050	0.000
	Publics	50	4.378	0.3472	0.0491	89.170	0.000
	Partnerships	50	4.464	0.2827	0.0400	111.668	0.000
	Policy Environment	50	4.446	0.3018	0.0427	104.155	0.000
	Purse Strings	50	3.142	0.4204	0.0595	52.843	0.000
Managerial Qualities of Project Staffs	Quality of Staffs	50	4.462	0.4485	0.0634	70.343	0.000
Demographic Characteristics of target beneficiaries	Demographic Characteristics of target beneficiaries						
Performance of Poverty Reduction Projects	Mean Performance Index of Projects	50	.9442	0.22425	0.03171	29.772	0.000
	Other Project Performance Issues	50	4.2280	0.28574	0.04041	104.627	0.000
t-test for equality of means: test value =0 (H_o: there is no difference expected between the means, at $\acute{a}$=0.05, 2-tailed); H_o is rejected if p value ≤ $\acute{a}$. Accept H_o otherwise.(i.e.if p> $\acute{a}$)							

Source: Primary Data

FACTOR ANALYSIS

Appendix IV(b): Factor Analysis for Variables and their Indicators

Appendix IV(b)(i): Rotated Component Matrix[a] for Public Policy Marketing Practices(Aggregate)			
	Component		
	1	2	3
Policy Environment	.991	.096	-.022
Partnerships	.980	-.084	-.176
Place	.857	.347	-.325
Publics	.855	-.427	.169
Promotion	.279	.900	.179
Price	.218	-.899	.143
Purse Strings	-.184	.435	.757
Product	.024	.149	-.626
Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.			
a. Rotation converged in 4 iterations.			

Source: Primary Data

Appendix IV(b)(ii): Rotated Component Matrix[a] for Product dimension of Policy Marketing			
	Component		
	1	2	3
Q1.07	.950	-.078	.002
Q1.03	.848	-.257	.307
Q1.08	.833	.375	-.081
Q1.02	-.676	.524	-.118
Q1.10	.670	.478	-.054
Q1.01	.628	.235	-.399
Q1.04	.087	.920	-.008
Q1.05	-.024	.752	-.320
Q1.09	.430	-.019	.869
Q1.06	-.328	-.259	.829
Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.			
a. Rotation converged in 6 iterations.			

Source: Primary Data

Appendix IV(b)(iii): Rotated Component Matrix[a] for Price dimension of Policy Marketing

	Component			
	1	2	3	4
Q2.02	.937	-.137	-.122	.107
Q2.07	.820	.407	.266	-.015
Q2.04	.696	.135	-.218	-.584
Q2.01	.121	.857	-.162	.357
Q2.10	.574	.728	.087	-.170
Q2.08	.198	-.537	-.106	.338
Q2.09	.052	.072	.908	-.022
Q2.03	-.311	-.237	.807	.377
Q2.05	.360	.438	.517	.018
Q2.06	.001	.060	.114	.912

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 20 iterations.

Source: Primary Data

Appendix IV(b)(iv): Rotated Component Matrix[a] for Place dimension of Policy Marketing

	Component	
	1	2
Q3.05	.936	.166
Q3.09	.930	.172
Q3.03	.891	.087
Q3.06	.862	-.028
Q3.04	.841	.361
Q3.07	.828	.343
Q3.10	.789	.352
Q3.01	.745	.229
Q3.08	.141	.841
Q3.02	.165	.833

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 3 iterations.

Source: Primary Data

Appendix IV(b)(v): Rotated Component Matrix[a] for Promotion dimension of Policy Marketing		
	Component	
	1	2
Q4.08	.952	.087
Q4.01	.924	.204
Q4.04	.879	.396
Q4.09	.833	.507
Q4.07	.693	.601
Q4.03	.563	.559
Q4.05	-.037	.958
Q4.10	.392	.825
Q4.06	.478	.779
Q4.02	.373	.753
Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.		
a. Rotation converged in 3 iterations.		

Source: Primary Data

Appendix IV(b)(vi): Rotated Component Matrix[a] for Publics dimension of Policy Marketing		
	Component	
	1	2
Q5.01	.885	.127
Q5.02	.840	.085
Q5.07	.830	-.116
Q5.10	.760	.308
Q5.09	.707	.623
Q5.03	.639	.357
Q5.06	.122	.919
Q5.04	.033	.909
Q5.08	.152	.890
Q5.05	.661	.702
Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.		
a. Rotation converged in 3 iterations.		

Source: Primary Data

Appendix IV(b)(vii): Rotated Component Matrix[a] for Partnerships dimension of Policy Marketing		
	Component	
	1	2
Q6.01	.907	.244
Q6.03	.904	-.193
Q6.05	.897	.323
Q6.04	.719	-.629
Q6.02	.615	.381
Q6.08	.600	.432
Q6.07	.060	.939
Q6.10	.147	.888
Q6.06	.108	.795
Q6.09	.322	.528
Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.		
a. Rotation converged in 3 iterations.		

Source: Primary Data

Appendix IV(b)(viii): Rotated Component Matrix[a] for Policy Environment dimension of Policy Marketing			
	Component		
	1	2	3
Q7.07	.883	-.305	-.206
Q7.05	.867	-.039	.465
Q7.03	.850	.049	.436
Q7.10	.793	.576	.076
Q7.08	.201	.826	.055
Q7.02	.294	-.723	.556
Q7.09	.633	.717	.133
Q7.06	-.209	.642	.069
Q7.04	.031	-.081	.893
Q7.01	.209	.235	.866
Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.			
a. Rotation converged in 4 iterations.			

Source: Primary Data

Appendix IV(b)(ix): Rotated Component Matrix[a] for Purse Strings dimension of Policy Marketing		
	Component	
	1	2
Q8.04	.980	.086
Q8.07	.973	-.024
Q8.03	.915	.038
Q8.08	.873	.314
Q8.02	.163	.927
Q8.01	.066	-.807
Q8.05	-.075	-.700
Q8.06	.511	.582
Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.		
a. Rotation converged in 3 iterations.		

Source: Primary Data

Appendix IV(b)(x): Component Matrix[a] for Managerial Qualities of Staff	
	Component
	1
Q1.09	.957
Q1.04	.946
Q1.01	.902
Q1.03	.895
Q1.05	.886
Q1.10	.870
Q1.02	.796
Q1.07	.776
Q1.08	.766
Q1.06	.528
Extraction Method: Principal Component Analysis.	
a. 1 componentextracted.	

Source: Primary Data

Appendix IV(b)(xi): Component Matrix[a] for Gender dimension of Demography of Beneficiaries	
	Component
	1
Male	-1.000
Female	1.000
Extraction Method: Principal Component Analysis.	
a. 1 component extracted.	

Source: Primary Data

Appendix IV(b)(xii): Component Matrix[a] for Age dimension of Demography of Beneficiaries		
	Component	
	1	2
Age1	.787	-.570
Age2	-.841	.471
Age3	.832	.458
Age4	.687	.674
Extraction Method: Principal Component Analysis.		
a. 2 components extracted.		

Source: Primary Data

Appendix IV(b)(xiii): Component Matrix[a] for Education dimension of Demography of Beneficiaries	
	Component
	1
Primary	-.878
University	.840
Secondary	.705
College	.698
Extraction Method: Principal Component Analysis.	
a. 1 component extracted.	

Source: Primary Data

Appendix IV(b)(xiv): Component Matrix[a] for Income dimension of Demography of Beneficiaries	
	Component
	1
Income1	-.948
Income2	.920
Income3	.875
Income4	.869
Extraction Method: Principal Component Analysis.	
a. 1 component extracted.	

Source: Primary Data

Appendix IV(b)(xv): Component Matrix[a] for Performance Index dimension of Project Performance	
	Component
	1
Index2.01	.987
Index2.02	.987
Extraction Method: Principal Component Analysis.	
a. 1 components extracted.	

Source: Primary Data

Appendix IV(b)(xvi): Component Matrix[a] for Other performance issues dimension of Project Performance	
	Component
	1
Other2.09	.963
Other2.10	.909
Other2.07	.668
Other2.08	.612
Other2.06	.546
Extraction Method: Principal Component Analysis.	
a. 1 componentextracted.	

Source: Primary Data

Appendix V: Goodness-Of-Fit Analyses

Project Performance (Index) predicted by Policy Marketing (Aggregate)

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.291[a]	.084	.065	.21680	.084	4.429	1	48	.041	1.407

a. Predictors: (Constant), PPMPAggregate

b. Dependent Variable: Mean Performance Index of Projects

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.392	.636		-.616	.541
	PPMPAggregate	.314	.149	.291	2.104	.041

a. Dependent Variable: Mean Performance Index of Projects

Project Performance (Index) predicted by X_1=Product characteristic

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.178[a]	.032	.012	.22296	.032	1.573	1	48	.216	1.347

a. Predictors: (Constant), Product

b. Dependent Variable: Mean Performance Index of Projects

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.237	.565		.420	.676
	Product	.164	.130	.178	1.254	.216

a. Dependent Variable: Mean Performance Index of Projects

Project Performance (Index) predicted by X_2=Price

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.451[a]	.204	.187	.20220	.204	12.273	1	48	.001	1.295

a. Predictors: (Constant), Price

b. Dependent Variable: Mean Performance Index of Projects

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.132	.625		5.010	.000
	Price	-.499	.142	-.451	-3.503	.001

a. Dependent Variable: Mean Performance Index of Projects

Project Performance (Index) predicted by X_3=Place

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.343[a]	.117	.099	.21286	.117	6.387	1	48	.015	1.418

a. Predictors: (Constant), Place

b. Dependent Variable: Mean Performance Index of Projects

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.138	.320		.431	.668
	Place	.175	.069	.343	2.527	.015

a. Dependent Variable: Mean Performance Index of Projects

Project Performance (Index) predicted by X_4=Promotion

Model Summary[b]										
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.529[a]	.280	.265	.19229	.280	18.648	1	48	.000	1.140
a. Predictors: (Constant), Promotion										
b. Dependent Variable: Mean Performance Index of Projects										

Coefficients[a]						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.272	.158		1.724	.091
	Promotion	.157	.036	.529	4.318	.000
a. Dependent Variable: Mean Performance Index of Projects						

Project Performance (Index) predicted by X_5=Publics

Model Summary[b]										
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.192[a]	.037	.017	.22235	.037	1.842	1	48	.181	1.198
a. Predictors: (Constant), Publics										
b. Dependent Variable: Mean Performance Index of Projects										

Coefficients[a]						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.488	.402		3.703	.001
	Publics	-.124	.091	-.192	-1.357	.181
a. Dependent Variable: Mean Performance Index of Projects						

Project Performance (Index) predicted by X_6=Partnership

Model Summary[b]										
				Std. Error of the Estimate	Change Statistics					
Model	R	R Square	Adjusted R Square		R Square Change	F Change	df1	df2	Sig. F Change	Durbin-Watson
1	.091[a]	.008	-.012	.22564	.008	.401	1	48	.530	1.267
a. Predictors: (Constant), Partnerships										
b. Dependent Variable: Mean Performance Index of Projects										

Coefficients[a]						
		Unstandardized Coefficients		Standardized Coefficients		
Model		B	Std. Error	Beta	t	Sig.
1	(Constant)	.622	.510		1.220	.229
	Partnerships	.072	.114	.091	.633	.530
a. Dependent Variable: Mean Performance Index of Projects						

Project Performance (Index) predicted by X_7=Policy Environment

Model Summary[b]										
					Change Statistics					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1	df2	Sig. F Change	Durbin-Watson
1	.147	.022	.001	.22412	.022	1.059	1	48	.309	1.319
a. Predictors: (Constant), Policy Environment										
b. Dependent Variable: Mean Performance Index of Projects										

Coefficients[a]						
		Unstandardized Coefficients		Standardized Coefficients		
Model		B	Std. Error	Beta	t	Sig.
1	(Constant)	.459	.473		.971	.337
	Policy Environment	.109	.106	.147	1.029	.309
a. Dependent Variable: Mean Performance Index of Projects						

Project Performance (Index) predicted by X_8=Purse Strings

Model Summary[b]										
				Std. Error of the Estimate	Change Statistics					
Model	R	R Square	Adjusted R Square		R Square Change	F Change	df1	df2	Sig. F Change	Durbin-Watson
1	.060[a]	.004	-.017	.22617	.004	.175	1	48	.678	1.212
a. Predictors: (Constant), Purse Strings										
b. Dependent Variable: Mean Performance Index of Projects										

Coefficients[a]						
		Unstandardized Coefficients		Standardized Coefficients		
Model		B	Std. Error	Beta	t	Sig.
1	(Constant)	.843	.244		3.462	.001
	Purse Strings	.032	.077	.060	.418	.678
a. Dependent Variable: Mean Performance Index of Projects						

Project Performance (Other Issues) predicted by X_1=Product characteristic

Model Summary[b]										
				Std. Error of the Estimate	Change Statistics					
Model	R	R Square	Adjusted R Square		R Square Change	F Change	df1	df2	Sig. F Change	Durbin - Watson
1	.032	.001	-.020	.28856	.001	.048	1	48	.828	2.344
a. Predictors: (Constant), Product										
b. Dependent Variable: Other Project Performance Issues										

Coefficients[a]						
		Unstandardized Coefficients		Standardized Coefficients		
Model		B	Std. Error	Beta	t	Sig.
1	(Constant)	4.388	.731		6.005	.000
	Product	-.037	.169	-.032	-.219	.828
a. Dependent Variable: Other Project Performance Issues						

Project Performance (Other Issues) predicted by X_2=Price

Model Summary[b]										
					Change Statistics					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1	df2	Sig. F Change	Durbin-Watson
1	.012	.000	-.021	.28868	.000	.007	1	48	.933	2.360
a. Predictors: (Constant), Price										
b. Dependent Variable: Other Project Performance Issues										

Coefficients[a]						
		Unstandardized Coefficients		Standardized Coefficients		
Model		B	Std. Error	Beta	t	Sig.
1	(Constant)	4.304	.892		4.823	.000
	Price	-.017	.203	-.012	-.085	.933
a. Dependent Variable: Other Project Performance Issues						

Project Performance (Other Issues) predicted by X_3=Place

Model Summary[b]										
					Change Statistics					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1	df2	Sig. F Change	Durbin-Watson
1	.161	.026	.006	.28495	.026	1.273	1	48	.265	2.216
a. Predictors: (Constant), Place										
b. Dependent Variable: Other Project Performance Issues										

Coefficients[a]						
		Unstandardized Coefficients		Standardized Coefficients		
Model		B	Std. Error	Beta	t	Sig.
1	(Constant)	3.746	.429		8.735	.000
	Place	.105	.093	.161	1.128	.265
a. Dependent Variable: Other Project Performance Issues						

Project Performance (Other Issues) predicted by X_4=Promotion

Model Summary[b]										
				Std. Error of the Estimate	Change Statistics					
Model	R	R Square	Adjusted R Square		R Square Change	F Change	df1	df2	Sig. F Change	Durbin-Watson
1	.547[a]	.299	.285	.24167	.299	20.500	1	48	.000	2.397
a. Predictors: (Constant), Promotion										
b. Dependent Variable: Other Project Performance Issues										

Coefficients[a]						
		Unstandardized Coefficients		Standardized Coefficients		
Model		B	Std. Error	Beta	t	Sig.
1	(Constant)	3.343	.199		16.839	.000
	Promotion	.207	.046	.547	4.528	.000
a. Dependent Variable: Other Project Performance Issues						

Project Performance (Other Issues) predicted by X_5=Publics

Model Summary[b]										
				Std. Error of the Estimate	Change Statistics					
Model	R	R Square	Adjusted R Square		R Square Change	F Change	df1	df2	Sig. F Change	Durbin-Watson
1	.451	.203	.187	.25772	.203	12.236	1	48	.001	1.931
a. Predictors: (Constant), Publics										
b. Dependent Variable: Other Project Performance Issues										

Coefficients[a]						
		Unstandardized Coefficients		Standardized Coefficients		
Model		B	Std. Error	Beta	t	Sig.
1	(Constant)	2.604	.466		5.591	.000
	Publics	.371	.106	.451	3.498	.001
a. Dependent Variable: Other Project Performance Issues						

Project Performance (Other Issues) predicted by X_6=Partnership

Model Summary[b]										
					Change Statistics					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1	df2	Sig. F Change	Durbin-Watson
1	.250[a]	.063	.043	.27952	.063	3.207	1	48	.080	2.076
a. Predictors: (Constant), Partnerships										
b. Dependent Variable: Other Project Performance Issues										

Coefficients[a]						
		Unstandardized Coefficients		Standardized Coefficients		
Model		B	Std. Error	Beta	t	Sig.
1	(Constant)	3.099	.632		4.904	.000
	Partnerships	.253	.141	.250	1.791	.080
a. Dependent Variable: Other Project Performance Issues						

Project Performance (Other Issues) predicted by X_7=Policy Environment

Model Summary[b]										
					Change Statistics					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1	df2	Sig. F Change	Durbin-Watson
1	.463[a]	.214	.198	.25593	.214	13.078	1	48	.001	1.943
a. Predictors: (Constant), Policy Environment										
b. Dependent Variable: Other Project Performance Issues										

Coefficients[a]						
		Unstandardized Coefficients		Standardized Coefficients		
Model		B	Std. Error	Beta	t	Sig.
1	(Constant)	2.280	.540		4.225	.000
	Policy Environment	.438	.121	.463	3.616	.001
a. Dependent Variable: Other Project Performance Issues						

Project Performance (Other Issues) predicted by X_8=Purse Strings

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.802[a]	.643	.636	.17245	.643	86.531	1	48	.000	3.244

a. Predictors: (Constant), Purse Strings

b. Dependent Variable: Other Project Performance Issues

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.515	.186		13.545	.000
	Purse Strings	.545	.059	.802	9.302	.000

a. Dependent Variable: Other Project Performance Issues

Project Performance (Index) predicted by $\overline{X_9}$= Mean Score of MQS and Policy Marketing (Aggregate)

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.574[a]	.329	.300	.18757	.329	11.519	2	47	.000	1.066

a. Predictors: (Constant), Quality of Staffs, PPMPAggregate

b. Dependent Variable: Mean Performance Index of Projects

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.625	.553		-1.130	.264
	PPMPAggregate	.087	.140	.081	.621	.538
	Quality of Staffs	.269	.065	.537	4.138	.000

a. Dependent Variable: Mean Performance Index of Projects

Project Performance (Index) predicted by $\overline{X_9}$= Mean Score of MQS

Model Summary[b]										
				Std. Error of the Estimate	Change Statistics					Durbin-Watson
Model	R	R Square	Adjusted R Square		R Square Change	F Change	df1	df2	Sig. F Change	
1	.569[a]	.323	.309	.18637	.323	22.946	1	48	.000	1.059
a. Predictors: (Constant), Quality of Staffs										
b. Dependent Variable: Mean Performance Index of Projects										

Coefficients[a]						
		Unstandardized Coefficients		Standardized Coefficients		
Model		B	Std. Error	Beta	t	Sig.
1	(Constant)	-.325	.266		-1.219	.229
	Quality of Staffs	.284	.059	.569	4.790	.000
a. Dependent Variable: Mean Performance Index of Projects						

Project Performance (Other Issues) predicted by $\overline{X_9}$= Mean Score of MQS and Policy Marketing (Aggregate)

Model Summary[b]										
				Std. Error of the Estimate	Change Statistics					Durbin-Watson
Model	R	R Square	Adjusted R Square		R Square Change	F Change	df1	df2	Sig. F Change	
1	.814	.663	.649	.16931	.663	46.280	2	47	.000	2.129
a. Predictors: (Constant), PPMPAggregate, Quality of Staffs										
b. Dependent Variable: Other Project Performance Issues										

Coefficients[a]						
		Unstandardized Coefficients		Standardized Coefficients		
Model		B	Std. Error	Beta	t	Sig.
1	(Constant)	.279	.499		.560	.578
	Quality of Staffs	-.271	.059	-.425	-4.621	.000
	PPMPAggregate	1.214	.127	.880	9.573	.000
a. Dependent Variable: Other Project Performance Issues						

Project Performance (Other Issues) predicted by $\overline{X_9}$= Mean Score of MQS

Model Summary[b]										
				Std. Error	Change Statistics					
Model	R	R Square	Adjusted R Square	of the Estimate	R Square Change	F Change	df1	df2	Sig. F Change	Durbin-Watson
1	.081[a]	.007	-.014	.28776	.007	.315	1	48	.577	2.321
a. Predictors: (Constant), Quality of Staffs										
b. Dependent Variable: Other Project Performance Issues										

Coefficients[a]						
		Unstandardized Coefficients		Standardized Coefficients		
Model		B	Std. Error	Beta	t	Sig.
1	(Constant)	4.457	.411		10.846	.000
	Quality of Staffs	-.051	.092	-.081	-.561	.577
a. Dependent Variable: Other Project Performance Issues						

Project Performance (Index) predicted by $\overline{X_{11}}$=Mean score of DCPB and Policy Marketing (Aggregate)

Model Summary[b]					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.495[a]	.245	.140	.20798	1.398
a. Predictors: (Constant), Policy Marketing(Aggregate), Beneficiary Education(Primary), Beneficiary Age(41-50)yrs, Beneficiary Income(75,001-150,000)pm, Beneficiary (Male), Beneficiary Age(18-30)yrs					
b. Dependent Variable: Performance of Projects(Index)					

Coefficients[a]						
		Unstandardized Coefficients		Standardized Coefficients		
Model		B	Std. Error	Beta	t	Sig.
1	(Constant)	.226	.735		.308	.759
	Beneficiary (Male)	-.709	1.518	-.143	-.467	.643
	Beneficiary Age(18-30)yrs	.475	.379	.446	1.254	.217
	Beneficiary Age(41-50)yrs	-.353	1.206	-.071	-.293	.771
	Beneficiary Education(Primary)	-.781	1.249	-.228	-.625	.535
	Beneficiary Income(75,001-150,000)pm	-1.706	.845	-.461	-2.018	.050
	Policy Marketing(Aggregate)	.340	.172	.315	1.978	.054
a. Dependent Variable: Performance of Projects(Index)						

Appendix VI: Regression Analyses

Regression

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	Beneficiary Income(Over 150,00)pm[a]	.	Enter

a. All requested variables entered.

b. Dependent Variable: Performance of Projects(Index)

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.388[a]	.150	.133	.20884

a. Predictors: (Constant), Beneficiary Income(Over 150,00)pm

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.371	1	.371	8.498	.005[a]
	Residual	2.094	48	.044		
	Total	2.464	49			

a. Predictors: (Constant), Beneficiary Income(Over 150,00)pm

b. Dependent Variable: Performance of Projects(Index)

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.987	.033		29.898	.000
	Beneficiary Income(Over 150,00)pm	-4.305	1.477	-.388	-2.915	.005

a. Dependent Variable: Performance of projects(Index)

Regression

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	Beneficiary Income(75,001-150,000)pm[a]	.	Enter

a. All requested variables entered.

b. Dependent Variable: Performance of Projects(Index)

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.388[a]	.150	.133	.20884

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.371	1	.371	8.498	.005[a]
	Residual	2.094	48	.044		
	Total	2.464	49			

a. Predictors: (Constant), Beneficiary Income(75,001-150,000)pm

b. Dependent Variable: Performance of Projects(Index)

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.987	.033		29.898	.000
	Beneficiary Income(75,001-150,000)pm	-1.435	.492	-.388	-2.915	.005

a. Dependent Variable: Performance of Projects(Index)

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	Beneficiary Income(25,001-75,000)pm[a]	.	Enter

a. All requested variables entered.

b. Dependent Variable: Performance of Projects(Index)

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.374[a]	.140	.122	.21016

a. Predictors: (Constant), Beneficiary Income(25,001-75,000)pm

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.344	1	.344	7.794	.008[a]
	Residual	2.120	48	.044		
	Total	2.464	49			

a. Predictors: (Constant), Beneficiary Income(25,001-75,000)pm

b. Dependent Variable: Performance of Projects(Index)

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.988	.034		29.428	.000
	Beneficiary Income(25,001-75,000)pm	-.947	.339	-.374	-2.792	.008

a. Dependent Variable: Performance of Projects(Index)

Regression

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	Beneficiary Income(0-25,000)pm[a]	.	Enter

a. All requested variables entered.

b. Dependent Variable: Performance of Projects(Index)

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.393[a]	.154	.136	.20839

a. Predictors: (Constant), Beneficiary Income(0-25,000)pm

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.380	1	.380	8.745	.005[a]
	Residual	2.084	48	.043		
	Total	2.464	49			

a. Predictors: (Constant), Beneficiary Income(0-25,000)pm

b. Dependent Variable: Performance of Projects(Index)

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.454	.168		2.696	.010
	Beneficiary Income(0-25,000)pm	.536	.181	.393	2.957	.005

a. Dependent Variable: Performance of Projects(Index)

Regression

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	Beneficiary Education(University)[a]	.	Enter

a. All requested variables entered.

b. Dependent Variable: Performance of Projects(Index)

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.041[a]	.002	-.019	.22639

a. Predictors: (Constant), Beneficiary Education(University)

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.004	1	.004	.082	.776[a]
	Residual	2.460	48	.051		
	Total	2.464	49			

a. Predictors: (Constant), Beneficiary Education(University)

b. Dependent Variable: Performance of Projects(Index)

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.880	.226		3.887	.000
	Beneficiary Education(University)	1.310	4.574	.041	.286	.776

a. Dependent Variable: Performance of Projects(Index)

Regression

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	Beneficiary Education(College)[a]	.	Enter

a. All requested variables entered.

b. Dependent Variable: Performance of Projects(Index)

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.257[a]	.066	.047	.21896

a. Predictors: (Constant), Beneficiary Education(College)

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.163	1	.163	3.399	.071[a]
	Residual	2.301	48	.048		
	Total	2.464	49			

a. Predictors: (Constant), Beneficiary Education(College)

b. Dependent Variable: Performance of Projects(Index)

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.174	.128		9.149	.000
	Beneficiary Education(College)	-2.013	1.092	-.257	-1.844	.071

a. Dependent Variable: Performance of Projects(Index)

Regression

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	Beneficiary Education(Secondary)[a]	.	Enter

a. All requested variables entered.

b. Dependent Variable: Performance of Projects(Index)

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.310[a]	.096	.077	.21540

a. Predictors: (Constant), Beneficiary Education(Secondary)

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.237	1	.237	5.109	.028[a]
	Residual	2.227	48	.046		
	Total	2.464	49			

a. Predictors: (Constant), Beneficiary Education(Secondary)

b. Dependent Variable: Performance of Projects(Index)

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.648	.134		4.824	.000
	Beneficiary Education(Secondary)	.831	.368	.310	2.260	.028

a. Dependent Variable: Performance of Projects(Index)

Regression

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	Beneficiary Education(Primary)[a]	.	Enter

a. All requested variables entered.

b. Dependent Variable: Performance of Projects(Index)

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.289[a]	.083	.064	.21692

a. Predictors: (Constant), Beneficiary Education(Primary)

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.206	1	.206	4.369	.042[a]
	Residual	2.259	48	.047		
	Total	2.464	49			

a. Predictors: (Constant), Beneficiary Education(Primary)

b. Dependent Variable: Performance of Projects(Index)

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.421	.230		6.176	.000
	Beneficiary Education(Primary)	-.991	.474	-.289	-2.090	.042

a. Dependent Variable: Performance of Projects(Index)

Regression

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	Beneficiary Age(Over 50)yrs[a]	.	Enter

a. All requested variables entered.

b. Dependent Variable: Performance of Projects(Index)

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.287[a]	.082	.063	.21708

a. Predictors: (Constant), Beneficiary Age(Over 50)yrs

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.202	1	.202	4.295	.044[a]
	Residual	2.262	48	.047		
	Total	2.464	49			

a. Predictors: (Constant), Beneficiary Age(Over 50)yrs

b. Dependent Variable: Performance of Projects(Index)

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.971	.033		29.197	.000
	Beneficiary Age(Over 50)yrs	-2.938	1.418	-.287	-2.072	.044

a. Dependent Variable: Performance of Projects(Index)

Regression

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	Beneficiary Age(41-50)yrs[a]	.	Enter

a. All requested variables entered.

b. Dependent Variable: Performance of Projects(Index)

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.165[a]	.027	.007	.22346

a. Predictors: (Constant), Beneficiary Age(41-50)yrs

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.067	1	.067	1.351	.251[a]
	Residual	2.397	48	.050		
	Total	2.464	49			

a. Predictors: (Constant), Beneficiary Age(41-50)yrs

b. Dependent Variable: Performance of Projects(Index)

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.037	.086		12.031	.000
	Beneficiary Age(41-50)yrs	-.825	.710	-.165	-1.162	.251

a. Dependent Variable: Performance of Projects(Index)

Regression

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	Beneficiary Age(31-40)yrs[a]	.	Enter

a. All requested variables entered.

b. Dependent Variable: Performance of Projects(Index)

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.326[a]	.106	.088	.21421

a. Predictors: (Constant), Beneficiary Age(31-40)yrs

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.262	1	.262	5.705	.021[a]
	Residual	2.202	48	.046		
	Total	2.464	49			

a. Predictors: (Constant), Beneficiary Age(31-40)yrs

b. Dependent Variable: Performance of Projects(Index)

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.718	.100		7.210	.000
	Beneficiary Age(31-40)yrs	.287	.120	.326	2.389	.021

a. Dependent Variable: Performance of Projects(Index)

Regression

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	Beneficiary Age(18-30)yrs[a]	.	Enter

a. All requested variables entered.

b. Dependent Variable: Performance of Projects(Index)

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.330[a]	.109	.090	.21392

a. Predictors: (Constant), Beneficiary Age(18-30)yrs

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.268	1	.268	5.847	.019[a]
	Residual	2.197	48	.046		
	Total	2.464	49			

a. Predictors: (Constant), Beneficiary Age(18-30)yrs

b. Dependent Variable: Performance of Projects(Index)

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.975	.033		29.693	.000
	Beneficiary Age(18-30)yrs	-.351	.145	-.330	-2.418	.019

a. Dependent Variable: Performance of Projects(Index)

Regression

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	Beneficiary (Male)[a]	.	Enter

a. All requested variables entered.

b. Dependent Variable: Performance of Projects(Index)

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.311[a]	.097	.078	.21536

a. Predictors: (Constant), Beneficiary (Male)

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.238	1	.238	5.131	.028[a]
	Residual	2.226	48	.046		
	Total	2.464	49			

a. Predictors: (Constant), Beneficiary (Male)

b. Dependent Variable: Performance of Projects(Index)

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.602	.292		5.487	.000
	Beneficiary (Male)	-1.537	.678	-.311	-2.265	.028

a. Dependent Variable: Performance of Projects(Index)

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.291[a]	.084	.065	.21680

a. Predictors: (Constant), Policy Marketing(Aggregate)

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.208	1	.208	4.429	.041[a]
	Residual	2.256	48	.047		
	Total	2.464	49			

a. Predictors: (Constant), Policy Marketing(Aggregate)

b. Dependent Variable: Performance of Projects(Index)

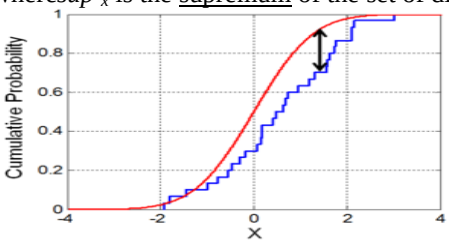
Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.392	.636		-.616	.541
	Policy Marketing(Aggregate)	.314	.149	.291	2.104	.041

a. Dependent Variable: Performance of Projects(Index)

Appendix VII: Explanation of Statistical Terms and Tests

Term	***Explanation***
Standard deviation (SD)- $\sigma = \sqrt{\frac{1}{N}\sum_{i=1}^{N}(x_i - \mu)^2}, \quad \text{where} \quad \mu = \frac{1}{N}\sum_{i=1}^{N} x_i.$	The standard deviation (SD, also represented by the Greek letter sigma σ or *s*) is a measure that is used to quantify the amount of variation or dispersion of a set of data values. A standard deviation close to 0 indicates that the data points tend to be very close to the mean (also called the expected value) of the set, while a high standard deviation indicates that the data points are spread out over a wider range of values. The standard deviation of a random variable, statistical population, data set, or probability distribution is the square root of its variance. *(Retrieved November 1, 2015, from https://en.wikipedia.org/wiki)*
Coefficient of Covariance (CV)- $c_v = \frac{\sigma}{\mu}$	In probability theory and statistics, the coefficient of variation (CV), also known as relative standard deviation (RSD), is a standardized measure of dispersion of a probability distribution or frequency distribution. It is often expressed as a percentage, and is defined as the ratio of the standard deviation σ to the mean μ (or its absolute value, $\left\|\mu\right\|$). *(Retrieved November 1, 2015, from https://en.wikipedia.org/wiki)*
Correlation-	Correlation refers to any statistical inter-relationships between two random variables or two sets of data.

Term/Test	Explanation
Assessment of Normality- One-Sample Kolmogorov-Smirnov(K-S) (Z) Test(2-Tailed)- The empirical distribution function F_n for n observations X_i is defined as; $$F_n(x) = \frac{1}{n}\sum_{i=1}^{n} I_{[-\infty,x]}(X_i)$$ where $I_{[-\infty,x]}(X_i)$ is the indicator function, equal to 1 if $X_i \leq x$ and equal to 0 otherwise. The Kolmogorov–Smirnov statistic for a given cumulative distribution function $F(x)$ is; $$D_n = \sup_x |F_n(x) - F(x)|$$ where sup_x is the supremum of the set of distances.  Kolmogorov–Smirnov statistic. Red line is CDF, blue line is an ECDF, and the black arrow is the K–S statistic.	In statistics, the Kolmogorov–Smirnov test (K–S test or KS test) is a nonparametric test of the equality of continuous, one-dimensional probability distributions that can be used to compare a sample with a reference probability distribution (one-sample K–S test)(eg Normal Distribution), or to compare two samples (two-sample K–S test). The Kolmogorov–Smirnov statistic quantifies a distance between theempirical distribution function of the sample and the cumulative distribution function of the reference distribution, or between the empirical distribution functions of two samples. The null distribution of this statistic is calculated under the null hypothesis that the samples are drawn from the same distribution (in the two-sample case) or that the sample is drawn from the reference distribution (in the one-sample case). In each case, the distributions considered under the null hypothesis are continuous distributions but are otherwise unrestricted.(Ref: Daniel, Wayne W. (1990). *"Kolmogorov–Smirnov one-sample test"*. Applied Nonparametric Statistics (2nd ed.). Boston: PWS-Kent. pp. 319–330.) (Retrieved November 1, 2015, from https://en.wikipedia.org/wiki)

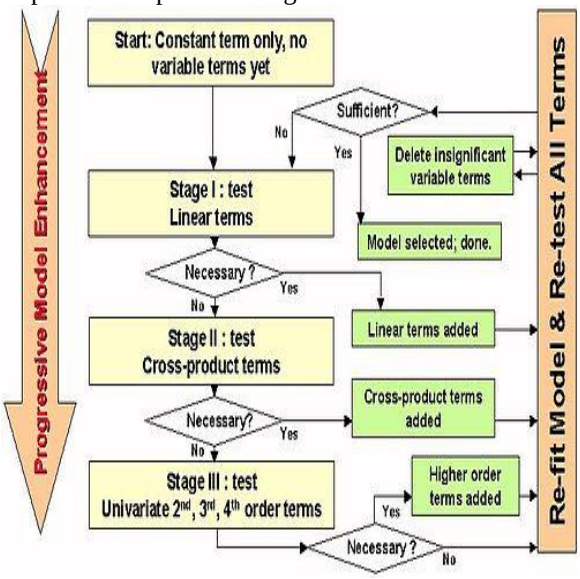
Term/Test	Explanation
Test of Linearity- ANOVA Table	Analysis of variance (ANOVA) is a collection of statistical models, (such as Fishers' F distribution, Students' t distribution etc), used to analyze the differences among group means and their associated procedures such as variation among and between groups. In the ANOVA setting, the observed variance in a particular variable is partitioned into components attributable to different sources of variation. In its simplest form, ANOVA provides a statistical test of whether or not the means of several groups are equal, and therefore generalizes the *t*-test to more than two groups. As doing multiple two-sample t-tests would result in an increased chance of committing a statistical type I error, ANOVAs are useful for comparing (testing) three or more means (groups or variables) for statistical significance. (Ref: *Bailey, R. A.(2008), Design of Comparative Experiments. Cambridge University Press)* (Retrieved November 1, 2015, from https://en.wikipedia.org/wiki)
Sum of Squares (Total Sum of Squares-TSS) $$\mathrm{TSS} = \sum_{i=1}^{n} (y_i - \bar{y})^2$$ where $\bar{y}$ is the overall mean.	It is defined as being the sum, over all observations, of the squared differences of each observation from the overall mean. *(Retrieved November 8, 2015, from https://en.wikipedia.org/wiki)*

Df N-1	In statistics, the number of degrees of freedom is the number of values in the final calculation of a statistic that are free to vary. The number of independent ways by which a dynamic system can move, without violating any constraint imposed on it, is called *number of degrees of freedom*. In other words, the number of degrees of freedom can be defined as the minimum number of independent coordinates that can specify the position of the system completely. In general, the degrees of freedom of an estimate of a parameter are equal to the number of independent scores that go into the estimate minus the number of parameters used as intermediate steps in the estimation of the parameter itself (i.e. the sample variance has *N*-1 degrees of freedom, since it is computed from *N* random scores minus the only 1 parameter estimated as intermediate step, which is the sample mean). ***(Retrieved November 8, 2015, from https://en.wikipedia.org/wiki)***
Mean Square	The value of the mean squared
Fisher's(F):The formula for the one-way **ANOVA** *F*-test statistic is the "explained variance", or "between-group variability" is $F = \frac{\text{explained variance}}{\text{unexplained variance}},$ $F = \frac{\text{between-group variability}}{\text{within-group variability}}.$	The *F*-test in one-way analysis of variance is used to assess whether the expected values of a quantitative variable within several pre-defined groups differ from each other. For example, suppose that a medical trial compares four treatments. The ANOVA *F*-test can be used to assess whether any of the treatments is on average superior, or inferior, to the others versus the null hypothesis that all four treatments yield the same mean response. ***(Retrieved November 8, 2015, from https://en.wikipedia.org/wiki)***
Sig. (Significant)	In statistics, statistical significance (or a statistically significant result) is attained when a *p*-value**is less than** the significance level. The *p*-value is the probability of obtaining at least as extreme results given that the null hypothesis is true whereas the significance or alpha (α) level is the probability of rejecting the null hypothesis given that it is true. Usually significance level is chosen before data collection and is usually set to 0.05 (5%). Other significance levels (e.g., 0.01) may be used, depending on the field of study. ***(Retrieved November 8, 2015, from https://en.wikipedia.org/wiki)***

Term	***Explanation***
Standard deviation (SD)- $\sigma = \sqrt{\frac{1}{N}\sum_{i=1}^{N}(x_i - \mu)^2}, \quad \text{where} \quad \mu = \frac{1}{N}\sum_{i=1}^{N} x_i.$	The standard deviation (SD, also represented by the Greek letter sigma σ or *s*) is a measure that is used to quantify the amount of variation or dispersion of a set of data values. A standard deviation close to 0 indicates that the data points tend to be very close to the mean (also called the expected value) of the set, while a high standard deviation indicates that the data points are spread out over a wider range of values. The standard deviation of a random variable, statistical population, data set, or probability distribution is the square root of its variance. *(Retrieved November 1, 2015, from https://en.wikipedia.org/wiki)*
Coefficient of Covariance (CV)- $c_v = \frac{\sigma}{\mu}$	In probability theory and statistics, the coefficient of variation (CV), also known as relative standard deviation (RSD), is a standardized measure of dispersion of a probability distribution or frequency distribution. It is often expressed as a percentage, and is defined as the ratio of the standard deviation σ to the mean μ (or its absolute value, $\left\|\mu\right\|$). *(Retrieved November 1, 2015, from https://en.wikipedia.org/wiki)*
Correlation-	Correlation refers to any statistical inter-relationships between two random variables or two sets of data.

Term/Test	***Explanation***
Test of Homoscedasticity: Levene (1960) Statistic test for equality of variance was computed using one-way Anova procedure. $W = \frac{(N-k)}{(k-1)} \frac{\sum_{i=1}^{k} N_i (Z_{i\cdot} - Z_{\cdot\cdot})^2}{\sum_{i=1}^{k}\sum_{j=1}^{N_i} (Z_{ij} - Z_{i\cdot})^2},$ where W is the result of the test, k is the number of different groups to which the sampled cases belong, N is the total number of cases in all groups, N_i is the number of cases in the ith group, Y_{ij} is the value of the measured variable for the jth case from the ith group, $Z_{ij} = \begin{cases} \lvert Y_{ij} - \bar{Y}_{i\cdot}\rvert, & \bar{Y}_{i\cdot} \text{ is a mean of i-th group} \\ \lvert Y_{ij} - \tilde{Y}_{i\cdot}\rvert, & \tilde{Y}_{i\cdot} \text{ is a median of i-th group} \end{cases}$	In statistics, Levene's test is an inferential statistic used to assess the equality of variances for a variable calculated for two or more groups. Some common statistical procedures assume that variances of the populations from which different samples are drawn are equal. Levene's test assesses this assumption. It tests the null hypothesis that the population variances are equal (called *homogeneity of variance* or *homoscedasticity*). If the resulting *p*-value of Levene's test is less than some significance level (typically 0.05), the obtained differences in sample variances are unlikely to have occurred based on random sampling from a population with equal variances. Thus, the null hypothesis of equal variances is rejected and it is concluded that there is a difference between the variances in the population. *(Retrieved November 8, 2015, from https://en.wikipedia.org/wiki)*

a) Regression Analysis and Tests of Hypotheses

Term/Test	Explanation
Simple linear regression: $Y=a+ \beta_1X_1 + \varepsilon_1$	Simple linearity refers to the linear correlation among one variable with one dependent variable.
Multiple linear regression: $Y=a+ \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \beta_5X_5 + \beta_6X_6 + \beta_7X_7 + \beta_8X_8 + \varepsilon_1$	Multicollinearity refers to the linear correlation among several variables with one dependent variable
Stepwise multiple linear regression  In this example, necessity and sufficiency are usually determined by F-tests. For additional consideration, when planning an experiment, computer simulation, or scientific survey to collect data for this model, one must keep in mind the number of parameters, P, to estimate and adjust the sample size accordingly. For K variables, $P = 1_{(\text{Start})} + K_{(\text{Stage I})} + (K^2 - K)/2_{(\text{Stage II})} + 3K_{(\text{Stage III})} = 0.5K^2 + 3.5K + 1$. For $K < 17$, an efficientdesign of experiments exists for this type of model, a Box–Behnken design, augmented with positive and negative axial points of length $\min(2, (\text{int}(1.5 + K/4))^{1/2})$, plus point(s) at the origin. There are more efficient designs, requiring fewer runs, even for $K > 16$.	In statistics, **stepwise regression** includes regression models in which the choice of predictive variables is carried out by an automatic procedure. Usually, this takes the form of a sequence of F-tests or t-tests, but other techniques are possible, such as adjusted R-square and others. The frequent practice of fitting the final selected model followed by reporting estimates and confidence intervals without adjusting them to take the model building process into account has led to calls to stop using stepwise model building altogether or to at least make sure model uncertainty is correctly reflected. The main approaches are: **Forward selection**, which involves starting with no variables in the model, testing the addition of each variable using a chosen model comparison criterion, adding the variable (if any) that improves the model the most, and repeating this process until none improves the model. **Backward elimination**, which involves starting with all candidate variables, testing the deletion of each variable using a chosen model comparison criterion, deleting the variable (if any) that improves the model the most by being deleted, and repeating this process until no further improvement is possible. **Bidirectional elimination**, a combination of the above, testing at each step for variables to be included or excluded. **(Retrieved November 8, 2015, from *https://en.wikipedia.org/wiki*)**
The 95 percent confidence level ($\acute{\alpha}$=0.05) Critical value($\acute{\alpha}$=0.05) The threshold value delimiting the regions of acceptance and rejection for the test statistic. **Region of rejection / Critical region** The set of values of the test statistic for which the null hypothesis is rejected.	In statistics, the **p-value** is a function of the observed sample results (a statistic) that is used for testing a statistical hypothesis. More specifically, the p-value is defined as the probability of obtaining a result equal to or "more extreme" than what was actually observed, assuming that the hypothesis under consideration is true. Here, "more extreme" is dependent on the way the hypothesis is tested. Before the test is performed, a threshold value is chosen, called the significance level of the test, traditionally 5% or 1% and denoted as α. **(Retrieved November 8, 2015, from *https://en.wikipedia.org/wiki*)**

a) The Goodness-of-Fit

Correlation Coefficient(R) or r;

Pearson's correlation coefficient when applied to a sample is commonly represented by the letter r and may be referred to as the sample correlation coefficient or the sample Pearson correlation coefficient. If we have one dataset $\{x_1,...,x_n\}$ containing n values and another dataset $\{y_1,...,y_n\}$ containing n values then the formula for r is:

$$r = r_{xy} = \frac{\sum_{i=1}^{n}(x_i - \bar{x})(y_i - \bar{y})}{\sqrt{\sum_{i=1}^{n}(x_i - \bar{x})^2}\sqrt{\sum_{i=1}^{n}(y_i - \bar{y})^2}}$$

where:

n, x_i, y_i are defined as above

$$\bar{x} = \frac{1}{n}\sum_{i=1}^{n} x_i$$

(the sample mean); and analogously for $\bar{y}$

(Retrieved November 8, 2015, from *https://en.wikipedia.org/wiki*)

In statistics, the Pearson product-moment correlation coefficient (sometimes referred to as Pearson's r or just R) is a measure of the linear correlation between two variables X and Y, giving a value between +1 and −1 inclusive, where 1 is total positive correlation, 0 is no correlation, and −1 is total negative correlation. It is widely used in the social sciences as a measure of the degree of linear dependence between two variables.

Rearranging gives us this formula for r:
where:

$$r = r_{xy} = \frac{n\sum x_i y_i - \sum x_i \sum y_i}{\sqrt{n\sum x_i^2 - (\sum x_i)^2}\sqrt{n\sum y_i^2 - (\sum y_i)^2}}.$$

n, x_i, y_i are defined as above

This formula suggests a convenient single-pass algorithm for calculating sample correlations, but, depending on the numbers involved, it can sometimes be numerically unstable.

Coefficient of Determination (R^2):

A data set has n values marked $y_1...y_n$ (collectively known as y_i), each associated with a predicted (or modeled) value $f_1...f_n$ (known as f_i, or sometimes $\hat{y}_i$).

If $\bar{y}$ is the mean of the observed data:

$$\bar{y} = \frac{1}{n}\sum_{i=1}^{n} y_i$$

then the variability of the data set can be measured using three sums of squares formulas:

The total sum of squares (proportional to the variance of the data):

$$SS_{\text{tot}} = \sum_i (y_i - \bar{y})^2,$$

The regression sum of squares, also called the explained sum of squares:

$$SS_{\text{reg}} = \sum_i (f_i - \bar{y})^2,$$

The sum of squares of residuals, also called the residual sum of squares:

$$SS_{\text{res}} = \sum_i (y_i - f_i)^2$$

The notations SS_R and SS_E should be avoided, since in some texts their meaning is reversed to **R**esidual sum of squares and **E**xplained sum of squares, respectively.

The most general definition of the coefficient of determination is

$$R^2 \equiv 1 - \frac{SS_{\text{res}}}{SS_{\text{tot}}}.$$

In statistics, the coefficient of determination denoted R^2 or r^2 and pronounced R squared, is a number that indicates how well data fit a statistical model – sometimes simply a line or a curve. An R^2 of 1 indicates that the regression line perfectly fits the data, while an R^2 of 0 indicates that the line does not fit the data at all. This latter can be because the data is utterly non-linear, or because it is random.

It is a statistic used in the context of statistical models whose main purpose is either the prediction of future outcomes or the testing of hypotheses, on the basis of other related information. It provides a measure of how well observed outcomes are replicated by the model, as the proportion of total variation of outcomes explained by the model.

(Retrieved November 8, 2015, from *https://en.wikipedia.org/wiki*)

Why you should not use R^2 to compare models

R^2 quantifies how well a model fits the data, so it seems as though it would be an easy way to compare models. It sure sounds easy -- pick the model with the larger R^2. The problem with this approach is that there is no penalty for adding more parameters. So the model with more parameters will bend and twist more to come nearer the points, and so almost always has a higher R^2. If you use R^2 as the criteria for picking the best model, you'd almost always pick the model with the most parameters.

(Retrieved November 8, 2015, from http://www.graphpad.com/guides/prism/6/curve-fitting/index.htm?reg_interpreting_the_adjusted_r2.htm

Adjusted (R^2):

The adjusted R^2 accounts for the number of parameters fit. The adjusted R^2 always has a lower value than R2 (unless you are fitting only one parameter). The equations below show why.

$$R^2 = 1 - \frac{SS_{residuals}}{SS_{total}}$$

$$\text{Adjusted } R^2 = 1 - \frac{SS_{residuals} / (n-K)}{SS_{total} / (n-1)}$$

The equations above show how the adjusted R^2 is computed. The sum-of-squares of the residuals from the regression line or curve have n-K degrees of freedom, where n is the number of data points and K is the number of parameters fit by the regression. The total sum-of-squares is the sum of the squares of the distances from a horizontal line through the mean of all Y values. Since it only has one parameter (the mean), the degrees of freedom equals n-1. The adjusted R^2 is larger than the ordinary R^2 whenever K is greater than 1.

Using adjusted R^2 to compare models

A quick and easy way to compare models is to choose the one with the smaller adjusted R^2. Comparing models with adjusted R^2 is not a standard method for comparing nonlinear models (it is standard for multiple linear regressions. If you do compare models by comparing adjusted R^2, make sure that identical data, weighted identically, are used for all fits.

Adjusted R^2 in linear regression

If X and Y are not linearly related at all, the best fit slope is expected to be 0.0. If you analyzed many randomly selected samples, half the samples would have a slope that is positive and half the samples would have a negative slope. But in all these cases, R^2 would be positive (or zero). R^2 can never be negative (unless you constrain the slope or intercept so it is forced to fit worse than a horizontal line). In contrast, the adjusted R^2 can be negative. If you analyzed many randomly selected samples, you'd expect the adjusted R^2 to be positive in half the samples and negative in the other half.

Here is a simple way to think about the distinction. The R^2 quantifies the linear relationship in the sample of data you are analyzing. Even if there is no underlying relationship, there almost certainly is some relationship in that sample. The adjusted R^2 is smaller than R^2 and is your best estimate of the degree of relationship in the underlying population.

(Retrieved November 8, 2015, from http://www.graphpad.com/guides/prism/6/curve-fitting/index.htm?reg_interpreting_the_adjusted_r2.htm

Std. Error of the Estimate;

The formula for the standard error of the estimate is:

$$\sigma_{est} = \sqrt{\frac{\sum (Y-Y')^2}{N}}$$

where N is the number of pairs of (X,Y) points.

The regression line seeks to minimize the sum of the squared errors of prediction. The square root of the average squared error of prediction is used as a measure of the accuracy of prediction. This measure is called the standard error of the estimate and is designated as σ_{est}.

(Retrieved November 9, 2015, from http://www.davidmlane.com/hyperstat/A134205.html)

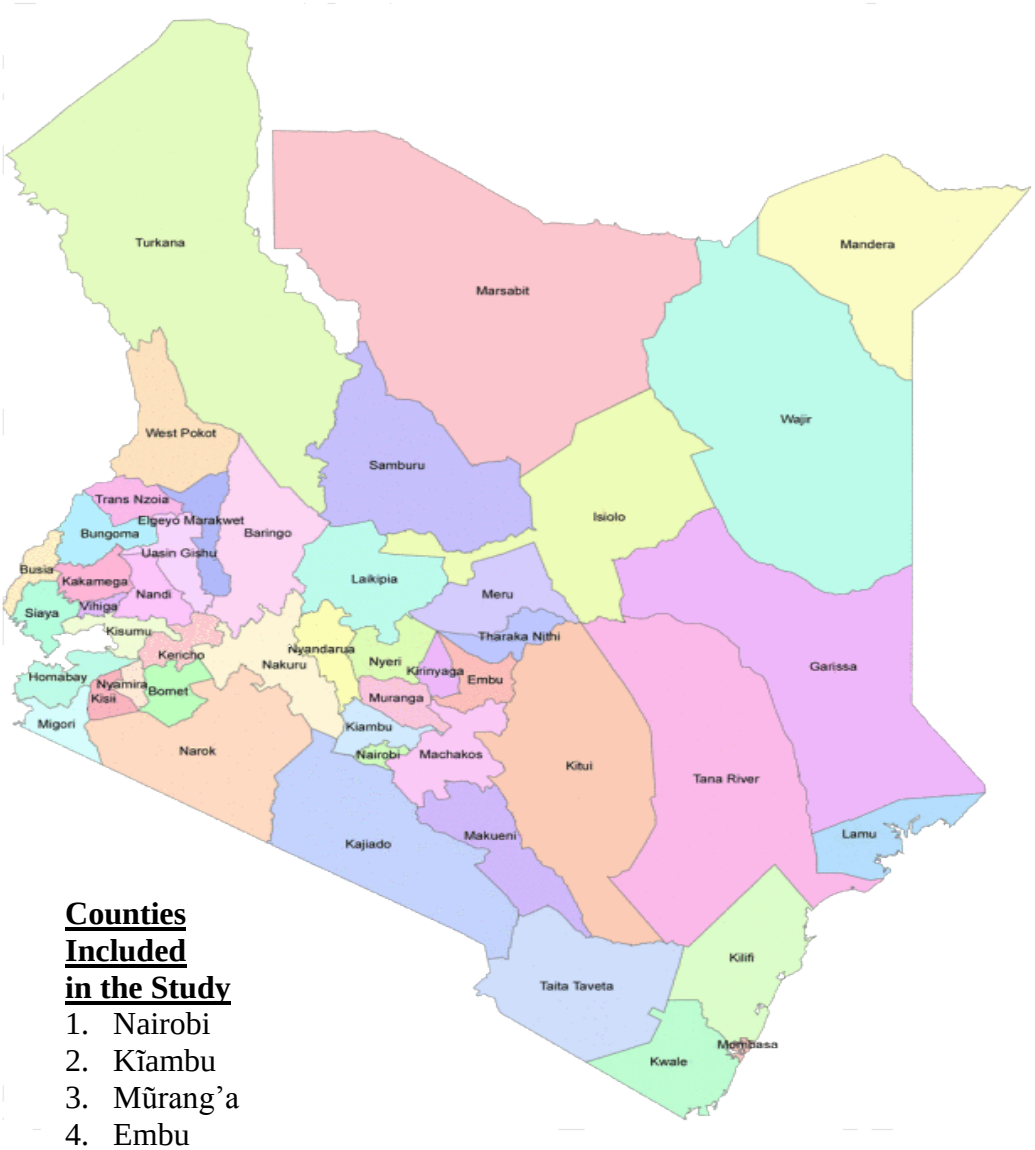
Std. Error of the Estimate - This is also referred to as the root mean squared error. It is the standard deviation of the error term and the square root of the Mean Square for the Residuals in the ANOVA table.

(Retrieved November 9, 2015, from ***http://www.ats.ucla.edu/stat/spss/output/reg_spss.htm***)

(b) The Overall Significance	
Sum of Squares-	**Sum of Squares** - These are the Sum of Squares associated with the three sources of variance, Total, Model and Residual. The Total variance is partitioned into the variance which can be explained by the independent variables (Regression) and the variance which is not explained by the independent variables (Residual). **(Retrieved November 9, 2015, from http://www.ats.ucla.edu/stat/spss/output/reg_spss.htm)**
Df-	**df** - These are the degrees of freedom associated with the sources of variance. The total variance has N-1 degrees of freedom. The Regression degrees of freedom corresponds to the number of coefficients estimated minus 1. **(Retrieved November 9, 2015, from http://www.ats.ucla.edu/stat/spss/output/reg_spss.htm)**
Mean Square-	**Mean Square** - These are the Mean Squares, the Sum of Squares divided by their respective DF.
F and Sig.	**F** and **Sig.** - This is the F-statistic the p-value associated with it. The F-statistic is the Mean Square (Regression) divided by the Mean Square (Residual). The p-value is compared to some alpha level (usually $\acute{\alpha}$=0.05)) in testing the null hypothesis that all of the model coefficients are 0. **(Retrieved November 9, 2015, from http://www.ats.ucla.edu/stat/spss/output/reg_spss.htm)**
(c) The Individual Significance	
Unstandardized Coefficients (Why use Unstandardized instead of Standardized)	By standardizing the variables before running the regression, you have put all of the variables on the same scale, and you can compare the magnitude of the coefficients to see which one has more of an effect. In this study, the variables are in different scales hence Unstandardized.
B The regression equation is presented in many different ways, for example: **Ypredicted = b0 + b1*x1 + b2*x2 + b3*x3 + b4*x4**	**B** - These are the values for the regression equation for predicting the dependent variable from the independent variable. The column of estimates provides the values for b0, b1, b2, b3 and b4 for this equation. **(Retrieved November 9, 2015, from http://www.ats.ucla.edu/stat/spss/output/reg_spss.htm)**
Std. Error	**Std. Error** - These are the standard errors associated with the coefficients.
Standardized Coefficients	
β (beta)	**Beta** - These are the standardized coefficients. These are the coefficients that you would obtain if you standardized all of the variables in the regression, including the dependent and all of the independent variables, and ran the regression. By standardizing the

	variables before running the regression, you have put all of the variables on the same scale, and you can compare the magnitude of the coefficients to see which one has more of an effect. You will also notice that the larger betas are associated with the larger t-values and lower p-values. **(Retrieved November 9, 2015, from http://www.ats.ucla.edu/stat/spss/output/reg_spss.htm)**
T and Sig.	**t** and **Sig**. - These are the t-statistics and their associated 2-tailed p-values used in testing whether a given coefficient is significantly different from zero. Using an alpha of 0.05. **(Retrieved November 9, 2015, from http://www.ats.ucla.edu/stat/spss/output/reg_spss.htm)**
Students's t-statistic: Let $\hat{\beta}$ be an estimator of parameter β in some statistical model. Then a **t-statistic** for this parameter is any quantity of the form $t_{\hat{\beta}} = \frac{\hat{\beta} - \beta_0}{\mathrm{s.e.}(\hat{\beta})}$ where β_0 is a non-random, known constant, and $s.e.(\hat{\beta})$ is the standard error of the estimator $\hat{\beta}$. By default, statistical packages report t-statistic with $\beta_0 = 0$ (these t-statistics are used to test the significance of corresponding regressor). However, when t-statistic is needed to test the hypothesis of the form H_0: $\beta = \beta_0$, then a non-zero β_0 may be used. **(Retrieved November 9, 2015, from *https://en.wikipedia.org/wiki*)**	In statistics, the **t-statistic** is a ratio of the departure of an estimated parameter from its notional value and its standard error. It is used in hypothesis testing, for example in the Student's *t*-test. **(Retrieved November 9, 2015, from http://www.ats.ucla.edu/stat/spss/output/reg_spss.htm)**

Appendix VIII: Map of the Research setting



Counties Included in the Study

1. Nairobi
2. Kĩambu
3. Mũrang'a
4. Embu
5. Kĩrĩnyaga
6. Nyeri
7. Nyandarũa
8. Laikipia

Source:https://www.opendata.go.ke/facet/counties